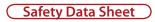
# **Keep Gliding**











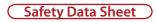




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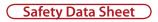




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### DIVYOL ACX 1000 (ANTI SEIZE COMPOUND)

Section 1: Identification of the Substance / Mix	ture			
1.1 Product identifier				
Product name	Divyol ACX 1000 (Anti Seize Com	pound)		
Product description	Anti Seize Compound			
Product type	Grease			
MARPOL Annex-1	****			
1.2 Identified uses				
Distribution of substance	Automotive & Industrial Grease			
Formulation & (re)packing of substance & mixtures	Automotive & Industrial Grease			
Manufacture of substance	Automotive & Industrial Grease			
Functional fluids	Automotive & Industrial Grease			
Section 2: Hazard Identification				
4-Extreme	Health	1		
3-High	Flammability	1		
2-Moderate	Reactivity	0		
1-Slight	Special	-		
Section 3: Compostion / Information on Ingred	ients			
Chemical Name / Ingredients	% by wt.	Hazardous	CAS No.	
Mineral Oil	50 – 65	Yes	64741-88-4, 64742-01-4	
Additive Package	1 – 5	Yes	Proproetary Mixture	
Organic Clay Cooper Powder	4 – 8 15 – 30	Yes Yes	68953-58-2 7782-50-8	
Graphite Powder	0 - 10	Yes	7782-42-5	
Molybdenum Diasulfide	0 – 5	Yes	1317-33-5	
Product / Ingredient name	Clay soaps from natural fatty sub	stances		
Section 4: First Aid Measures				
Inhalation exposure	Remove to fresh air & provide oxy	gen if breathing is difficult. Conta	act physician	
Skin contact		Remove to fresh air & provide oxygen, if breathing is difficult. Contact physician Remove contaminated clothing. Flush skin with water. Wash skin thoroughly with mild soap & water.		
Swallowing or other		al no treatment is necessary unles	s large quantities are ingested.	
Eye contact	Rinse continuously with water for	r several minutes. Get medical atte	ention, if irritation persists.	
Protection first-aiders		Ensure adequate ventilation and cl	heck that a safe and breathing area is	
Section 5: Fire Fighting Measures				
5.1 Extinguishing media				
Unsuitable extinguishing media		oxide. Do not use direct water and d the fire. Use foam simultaneous		
5.2 Special hazards arising from the substance or mix	51 7 71		-	
Hazards from the substance or mixture		containers may rupture and wher	n exposed to heat, creating a highly	
Hazardous thermal decomposition products	osition products Incomplete combustion is likely to give rise to a complex mixture of airborne solid and liquid particulates, gases, including carbon monoxide, H <sub>2</sub> S, SO <sub>x</sub> (sulphur oxides) or sulphuric acid and unidentified organic and inorganic compounds.			
5.3 Advice for firefighters				
Special precautions for firefighters	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.			
Special protective equipment for firefighters for firefighters appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for firefighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.				





6.1 Personal precautions, protective equipment and emergency procedures				
Keep non-involved personnel away from the area of spillage.				
For non-emergency personnel	Alert emergency personnel. Except in case of small spillages, the feasibility of any actions should always be assessed and advised, if possible, by a trained, competent person in charge of managing the emergency. Stop leak if safe to do so. Avoid direct contact with the product. Stay upwind / keep distance from source. In case of large spillages, alert occupants in downwind areas. Eliminate all ignition sources if safe to do so. Spillages of limited amounts of product, especially in the open air when vapours will be usually quickly dispersed, are dynamic situations, which will presumably limit the exposure to dangerous concentrations. Note : Recommended measures are based on the most likely spillage scenarios for this material; however, local conditions (wind, air temperature, wave / current direction and speed) may significantly influence the choice of appropriate actions.			
For emergency responders	For this reason, local experts should be consulted when necessary. Local regulations may also prescribe or limit actions to be taken. Small spillages: Normal antistatic working clothes are usually adequate. Large spillages: Full body suit of chemically resistant and thermal resistant material should be used. Work gloves providing adequate chemical resistance, specifically to aromatic hydrocarbons. Note: Gloves made of PVA are not water-resistant, and are not suitable for emergency use. Safety helmet, antistatic non-skid safety shoes or boots. Goggles and / or face shield, if splashes or contact with eyes is possible or anticipated. Respiratory Protection : A half or full-face respirator with filter(s) for organic vapours (and when applicable for H <sub>2</sub> S) a Self Contained Breathing Apparatus (SCBA) can be used according to the extent of spill and predictable amount of exposure. If the situation cannot be completely assessed, or if an oxygen deficiency is possible, only SCBA's should be used.			
6.2 Environmental precautions	Prevent product from entering sewers, rivers or other bodies of water. If necessary dike the product with dry earth, sand or similar non-combustible materials. In case of soil contamination, remove contaminated soil and treat in accordance with local regulations. In case of small spillages in closed waters (i.e. ports), contain product with floating barriers or other equipment. Collect spilled product by absorbing with specific floating absorbents. If possible, large spillages in open waters should be contained with floating barriers or other mechanical means. If this is not possible, control the spreading of the spillage, and collect the product by skimming or other suitable mechanical means. The use of dispersants should be advised by an expert, and, if required, approved by local authorities.			
6.3 Methods and material for containment and cleaning	l up			
Small spill	Stop leak if without risk. Absorb spilled product with suitable non-combustible materials.			
Large spill	Large spillages may be cautiously covered with foam, if available, to limit vapour cloud formation. Do not use water jet. When inside buildings or confined spaces, ensure adequate ventilation. Transfer collected product and other contaminated materials to suitable containers for recovery or safe disposal.			
6.4 Reference to other sections	See Section 1: For emergency contact information. See Section 8: For information on appropriate personal protective equipment. See Section 13: For additional waste treatment information.			
Section 7: Handling and Storage				
7.1 Advice on general information – hygiene, storage	Obtain special instructions before use. Keep away from heat / sparks / open flames/hot surfaces. No smoking. Use and store only outdoors or in a well-ventilated area. Hazard of slipping on spilt product. Avoid release to the environment.			
7.2 Conditions for safe storage including any incompatibilities	Storage area layout, tank design, equipment and operating procedures must comply with the relevant regional, national or local legislation. Storage installations should be designed with adequate bunds in case of leaks or spills. Cleaning, inspection and maintenance of internal structure of storage tanks must be done only by properly equipped and qualified personnel as defined by national, local or company regulations. Store separately from oxidising agents. Keep only in the original container or in a suitable container for this kind of product. Keep container tightly closed and sealed until ready for use. Do not store in unlabelled containers. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Empty containers may contain harmful, flammable / combustible or explosive residue or vapours. Do not cut, grind, drill, weld, reuse or dispose of containers unless adequate precautions are taken against these hazards.			
	Protect from sunlight.			



Density Solubility (ies)



Section 8: Exposure Controls / Personal Protect	ction		
The list of Identified Uses in Section 1 should be consu	ulted for any available use-specific information provided in the Exposure Scenario(s).		
8.1 Control parameters			
Occupational exposure limits			
Product / Ingredient name	Distillates, mixture of hydrocarbons		
Exposure limits values	AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m <sup>3</sup> 8 hours. Form: mist and fume STEL: 3 mg/m <sup>3</sup> 15 minutes. Form: mist and fume [Air contaminant]. AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m <sup>3</sup> 8 hours. Form: mist and fume STEL: 3 mg/m <sup>3</sup> 15 minutes. Form: mist and fume.		
Recommended monitoring procedures	If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres – Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres – Guide for the application and use of procedures for the assessment of exposure to chemical agents for the performance of procedures for the measurement of chemical agents). Reference to national guidance documents for methods for the determination of hazardous substances will also be required.		
8.2 Exposure control Appropriate engineering controls	Mechanical ventilation and local exhaust will reduce exposure via the air. Use oil resistant material in construction of handling equipment. Store under recommended conditions and if heated, temperature control equipment should be used to avoid overheating.		
Individual protection measures			
Hygiene measures	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Ensure that eyewash stations and safety showers are close to the workstation location. Wash contaminated clothing before reuse.		
Eye / face protection	Recommended: Safety glasses with side shields.		
Skin protection			
Hand protection	4 – 8 hours (breakthrough time): nitrile rubber.		
Body protection	Wear protective clothing if there is a risk of skin contact. Change contaminated clothes at the end of working shift.		
Other skin protection Appropriate footwear and any additional skin protection measures should be selected bas task being performed and the risks involved and should be approved by a specialist before this product.			
Respiratory protection	Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary.		
Environmental exposure control	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptabl levels.		
Section 9: Physical and Chemical Properties			
Appearance	Clear		
Physical state	Semi Synthetic		
Colour	Brownish, Metallic		
Odor	Petroleum odor		
Odour threshold	ur threshold Not available		
Dropping point> 280 °C (ASTM D 2265)			
Flash point> 260 °C (Mineral Oil)			
Evaporation rate Not available			
Flammability (solid, gas) Not available			
Flammability limits in air (lower), % by volume	Not available		
Flammability limits in air (upper), % by volume Not available			
Vapour pressure	Not volatile		



1 – 1.2 kg/L





Solubility (water)		Insoluble in wat	tor		
Partition coefficient (n-octanol/water)		Not available			
Decomposition temperature		No data			
Auto-ignition temperature		Not available			
Worked Penetration at 25°C		220 – 250 (ASTM	M D 217)		
		No data	WID 217)		
Explosive properties		No data			
Oxidising properties DMSO extractable compounds for	r baca ail substanca(s)				
according to IP346		Not available <3 %			
Section 10: Stability and Rea	ctivity				
10.1 Reactivity		No specific test	data related to reactivity availa	able for this product or its ingr	edients.
10.2 Chemical stability			ormal conditions		
10.3 Possibility of hazardous rea	octions	Under normal c	conditions of storage and use, I	nazardous reactions will not o	ccur. Oxidising agent.
10.4 Conditions to avoid		Keep away from	n extreme heat and oxidising a	gents.	
10.5 Incompatible materials		Incomplete con particulates, ga	nbustion is likely to give rise to ses, including carbon monoxic	a complex mixture of airborn le, H <sub>2</sub> S, SO, (sulphur oxides) or	e solid and liquid sulphuric acid and
10.6 Hazardous decomposition	products		ganic and inorganic compound		
SECTION 11: Toxicological In	formation				
11.1 Information on toxicologica	al effects				
Acute toxicity					
Product / ingredient name	Result		Species	Dose	Exposure
5	LC 50 Inhalation due	sts and mists	Rat	>2.18mg/l	4 hours
Distillate (Petroleum), hydro	LD 50 Derr	nal	Rabbit	> 5000 mg/kg	_
treated heavy paraffinic	LD 50 Ora	al	Rat	>15000 mg/kg	_
Irritation / corrosion					
Skin					
		No known significant effects or critical hazards.			
Eye					
Respiratory					
Sensation					
Skin		No known significant effects or critical hazards.			
Respiratory		No. data availata	In the local sector was dealer and an ender		
Mutagenicity		No data available to indicate product or any components present greater than 0.1 % are multigene or genotoxic.			
Carcinogenicity		The base oil(s) i	n this product is based on an s	everely hydrotreated distillate	
Reproductive toxicity		The product should not be regarded as a carcinogen. Contains no ingredient listed as toxic to reproduction.			
Specific target organ toxicity – sin	igle exposure				
Specific target organ toxicity – rep		Not classified			
Aspiration hazard		Aspiration hazard – Category 1			
Information on likely routes of exposure		Not available			
Potential acute health effects					
Eye contact		Eye contact may cause redness and transient pain.			
Inhalation		Inhalation of oil mist or vapours at elevated temperatures may cause respiratory irritation.			
Skin contact		No known significant effects or critical hazards.			
Ingestion			wallowed and enters airways.		
Potential chronic health effects		indy service in the internet	in a chief and chief an ways.		
General		No known signi	ificant effects or critical hazard	ς	
		The base oil(s) in this product is based on an severely hydrotreated distillate. The product should not be			
Carcinogenicity		regarded as a ca		evenely hydrotreated distillate	. The product should not be







Mutagenicity						
Teratogenicity						
Product / ingredient name		No known s	significant effects or critical haza	ards.		
Fertility effects						
Other information Specific hazard		Not availab	٩			
Section 12: Ecological Information		NOT availab				
		Not expect	ad to be barmful to aquatic area	anisms		
12.1 Toxicity 12.2 Persistence and degradability		-	ed to be harmful to aquatic orga ntly biodegradable.	dilisiiis.		
12.3 Bioaccumulative potential			lation is unlikely to be significar	at bacausa of the low water solu	ibility of this product	
12.4 Mobility in soil			ered mobile.	It because of the low water solt	iblinty of this product.	
12.5 Results of PBT & vPvB assessment		Not applica				
	•		water. Spills may form a film or	n water surfaces causing physic	al damage to organisms	
12.6 Other adverse effects			nsfer could also be impaired.	Twater surfaces causing physic	ar damage to organisms.	
Section 13: Disposal Consideration	ns					
The information in this section contains information provided in the Exposure Sc		d guidance. T	he list of Identified Uses in Secti	ion 1 should be consulted for ar	ny available use-specific	
Product Methods of disposal		feasible and authorisatio or waste su qualified w	Where possible (e.g. in the absence of relevant contamination), recycling of used substance is feasible and recommended. This substance can be burned or incinerated, subject to national/local authorisations, relevant contamination limits, safety regulations and air quality legislation. Contaminated or waste substance (not directly recyclable): Disposal can be carried out directly, or by delivery to qualified waste handlers. National legislation may identify a specific organisation, and/or prescribe composition limits and methods for recovery or disposal			
Hazardous waste		Yes				
European waste catalogue (EWC) Waste	Code 13 03 07*	Waste designation.				
Packaging		Mineral-based non-chlorinated insulating and heat transmission oils.				
Methods of disposal		The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.				
Section 14: Transport Information						
International transport regulations						
	ADR / R	ID	ADN	IMO / IMDG Classification	ICAO / IATA Classification	
14.1 UN number	Not regul	ated	Not regulated	Not regulated	Not regulated	
14.2 UN proper shipping name	_		_	_	-	
14.3 Transport hazard class(es)	_		_	-	-	
14.4 Packing group	_		-	-	-	
14.5 Environmental hazards	No		No	No	No	
Additional Information			-	_	-	
14.6 Special precautions for user oils						
14.7 Transport in bulk according to An	nex I of MARPOL 2	73/78 and th	e IBC Code			
Section 15: Regulatory Informatio						
		slation speci	fic for the substance or mixture	e EU Regulation (EC) No. 1907/	(2006 (REACH)	
Annex XIV – List of substances subject to authorisation Annex XIV Substances of very high concern		slation specific for the substance or mixture EU Regulation (EC) No. 1907/2006 (REACH) None of the components are listed				
Annex XVII – Restrictions on the manufa on the market and use of certain danger mixtures and articles.	Not applicable					
International Lists National Inventory	Inventory name					
Australia			Australian Inventory of Chemical Substances (AICS) – Yes			
Canada		Domestic Substances List (DSL) – Yes Non-Domestic Substances List (NDSL) – No				
China		Inventory of Existing Chemical Substances in China (IECSC) – Yes				
Crimiu		inventory 0	a chemical substances	$\frac{1}{1000} = 1000$		







	European Inventory of Existing Commercial Chemical Substances (EINECS) – Yes				
Europe	European List of Notified Chemical Substances (ELINCS) – No				
Japan	Inventory of Existing and New Chemical Substances (ENCS) – Yes				
Korea	Existing Chemicals List (ECL) – Yes				
New Zealand	New Zealand Inventory – Yes				
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS) – Yes				
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory – Yes				
	oly with the inventory requirements administered by the governing country(s) uct are not listed or exempt from listing on the inventory administered by the governing country(s).				
Section 16: Other Information					
Revision comments					
Legend to abbreviations					
ADR	European agreement concerning the international carriage of dangerous good by road.				
RID	Regulations agreement concerning the international carriage of dangerous good by rail.				
IMDG Code	International Maritime Dangerous Goods Code.				
ICAO	International Civil Aviation Organization.				
IATA	International Air Transport Association.				
GHS	Globally Harmonized System of Classification and Labeling of Chemicals.				
CLP	Classification, Labelling and Packaging Regulation [Regulation (EC) No.1272/2008].				
SCBA	Self-Contained Breathing Apparatus.				
REACH	Registration, Evaluation, Authorization and Restriction of Chemicals Regulation [Regulation (EC) No. 1907/2006].				
LC 50	Median lethal concentration.				
LD 50	Median lethal dose.				
РВТ	Persistent, Bio accumulative and Toxic.				

Regulation (EC) no 1907/2006, Annex II as Amended by Commission Regulation (EU) 2015/830

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GANDHAR OIL REFINERY (INDIA) LTD.				
Taloja Plant       Plot No.10, MIDC, Main Road, Taloja, Taluka Panvel, District - Raigad 410208, India.				
Silvassa Plant Plot No. 2, Survey No. 678/1/3, Village Naroli, Near Naroli Check Post, Silvassa, Dadra & Nagar Haveli, Union Territory 396230,				
Emergency / Info Phone No.         Phone: +91-22-40635600 • Fax: +91-22-40635601				
Email info@gandharoil.com				





### **DIVYOL AP3 GREASE (GT)**

Section 1: Identification of the Substance / Mixe	ture				
1.1 Product identifier					
Product name	Divyol AP3 Grease (GT)				
Product description	All Purpose Grease (TACKY)	All Purpose Grease (TACKY)			
Product type	Gel Grease				
MARPOL Annex-1	****				
1.2 Identified uses					
Distribution of substance	Automotive & Industrial Grease				
Formulation & (re)packing of substance & mixtures	Automotive & Industrial Grease				
Manufacture of substance	Automotive & Industrial Grease				
Functional fluids	Automotive & Industrial Grease				
Section 2: Hazard Identification					
4-Extreme	Health	1			
3-High	Flammability	1			
2-Moderate	Reactivity	0			
1-Slight	Special	-			
Section 3: Compostion / Information on Ingred	ients				
Chemical Name / Ingredients	% by wt.	Hazardous	CAS No.		
Mix Fatty Add	10 - 20	No	Proprietary Mixture		
Calcium Hydroxide	1 - 3	Yes	1305-65-8		
Mineral Oil	70 - 85	Yes	68990-65-8, 64741-88-4		
Channels		No	Proprietary Mixture		
Stearate Additives	0-7	No Yes	14807-96-6 Proprietary Mixture		
Product / Ingredient name	Calcium soaps from natural fatty s				
Section 4: First Aid Measures	Calcium soaps normatural fatty s	substances			
Section 4: First Aid Measures         Inhalation exposure       Remove to fresh air & provide oxygen, if breathing is difficult. Contact physician					
Skin contact	Remove contaminated clothing. Flush skin with water. Wash skin thoroughly with mild soap & water. If irritation occurs, call a physician.				
Swallowing or other		Do not induce vomiting. In general no treatment is necessary unless large quantities are ingested.			
Eye contact	Rinse continuously with water for	several minutes. Get medical a	ttention, if irritation persists.		
Protection first-aiders		Disconnecting electrical supply. Ensure adequate ventilation and check that a safe and breathing area is available before entry into confined spaces.			
Section 5: Fire Fighting Measures					
5.1 Extinguishing media					
Unsuitable extinguishing media	Use dry powder, foam, carbon dioxide. Do not use direct water and wet chemicals, or water on the burning product. They may spread the fire. Use foam simultaneously on the surface.				
5.2 Special hazards arising from the substance or mix	ture				
Hazards from the substance or mixture	Flammable liquids in pressurised flammable vapour cloud.	Flammable liquids in pressurised containers may rupture and when exposed to heat, creating a highly flammable vapour cloud.			
Hazardous thermal decomposition products	Incomplete combustion is likely to give rise to a complex mixture of airborne solid and liquid particulates, gases, including carbon monoxide, $H_2S$ , $SO_x$ (sulphur oxides) or sulphuric acid and unidentified organic and inorganic compounds.				
5.3 Advice for firefighters					
Special precautions for firefighters	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.				
Special protective equipment for firefighters for firefighters appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for firefighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.					





6.1 Personal precautions, protective equipment and emergency procedures				
stri ersonal precautions, protective equipment and em	Keep non-involved personnel away from the area of spillage.			
For non-emergency personnel	Alert emergency personnel away from the area of spillage. Alert emergency personnel. Except in case of small spillages, the feasibility of any actions should always be assessed and advised, if possible, by a trained, competent person in charge of managing the emergency. Stop leak if safe to do so. Avoid direct contact with the product. Stay upwind / keep distance from source. In case of large spillages, alert occupants in downwind areas. Eliminate all ignition sources if safe to do so. Spillages of limited amounts of product, especially in the open air when vapours will be usually quickly dispersed, are dynamic situations, which will presumably limit the exposure to dangerous concentrations. Note : Recommended measures are based on the most likely spillage scenarios for this material; however, local conditions (wind, air temperature, wave / current direction and speed) may significantly influence the choice of appropriate actions.			
For emergency responders	For this reason, local experts should be consulted when necessary. Local regulations may also prescribe or limit actions to be taken. Small spillages: Normal antistatic working clothes are usually adequate. Large spillages: Full body suit of chemically resistant and thermal resistant material should be used. Work gloves providing adequate chemical resistance, specifically to aromatic hydrocarbons. Note: Gloves made of PVA are not water-resistant, and are not suitable for emergency use. Safety helmet, antistatic non-skid safety shoes or boots. Goggles and / or face shield, if splashes or contact with eyes is possible or anticipated. Respiratory Protection : A half or full-face respirator with filter(s) for organic vapours (and when applicable for H <sub>2</sub> S) a Self Contained Breathing Apparatus (SCBA) can be used according to the extent of spill and predictable amount of exposure. If the situation cannot be completely assessed, or if an oxygen deficiency is possible, only SCBA's should be used.			
6.2 Environmental precautions	Prevent product from entering sewers, rivers or other bodies of water. If necessary dike the product with dry earth, sand or similar non-combustible materials. In case of soil contamination, remove contaminated soil and treat in accordance with local regulations. In case of small spillages in closed waters (i.e. ports), contain product with floating barriers or other equipment. Collect spilled product by absorbing with specific floating absorbents. If possible, large spillages in open waters should be contained with floating barriers or other mechanical means. If this is not possible, control the spreading of the spillage, and collect the product by skimming or other suitable mechanical means. The use of dispersants should be advised by an expert, and, if required, approved by local authorities.			
6.3 Methods and material for containment and cleaning	up			
Small spill	Stop leak if without risk. Absorb spilled product with suitable non-combustible materials.			
Large spill	Large spillages may be cautiously covered with foam, if available, to limit vapour cloud formation. Do not use water jet. When inside buildings or confined spaces, ensure adequate ventilation. Transfer collected product and other contaminated materials to suitable containers for recovery or safe disposal.			
6.4 Reference to other sections	See Section 1: For emergency contact information. See Section 8: For information on appropriate personal protective equipment. See Section 13: For additional waste treatment information.			
Section 7: Handling and Storage				
7.1 Advice on general information – hygiene, storage	Obtain special instructions before use. Keep away from heat / sparks / open flames/hot surfaces. No smoking. Use and store only outdoors or in a well-ventilated area. Hazard of slipping on spilt product. Avoid release to the environment.			
7.2 Conditions for safe storage including any incompatibilities	Storage area layout, tank design, equipment and operating procedures must comply with the relevant regional, national or local legislation. Storage installations should be designed with adequate bunds in case of leaks or spills. Cleaning, inspection and maintenance of internal structure of storage tanks must be done only by properly equipped and qualified personnel as defined by national, local or company regulations. Store separately from oxidising agents. Keep only in the original container or in a suitable container for this kind of product. Keep container tightly closed and sealed until ready for use. Do not store in unlabelled containers. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Empty containers may contain harmful, flammable / combustible or explosive residue or vapours. Do not cut, grind, drill, weld, reuse or dispose of containers unless adequate precautions are taken against these hazards. Protect from sunlight.			
7.3 Specific end use(s) – Recommendations	Not available			



Density Solubility (ies)



Section 8: Exposure Controls / Personal Protecti	on
-	ed for any available use-specific information provided in the Exposure Scenario(s).
8.1 Control parameters	
Occupational exposure limits	
Product / Ingredient name	Distillates, mixture of hydrocarbons
Exposure limits values	AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m <sup>3</sup> 8 hours. Form: mist and fume STEL: 3 mg/m <sup>3</sup> 15 minutes. Form: mist and fume [Air contaminant]. AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m <sup>3</sup> 8 hours. Form: mist and fume STEL: 3 mg/m <sup>3</sup> 15 minutes. Form: mist and fume.
Recommended monitoring procedures	If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres – Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres – Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres – General requirements for the performance of procedures for the measurement of chemical agents). Reference to national guidance documents for methods for the determination of hazardous substances will also be required.
8.2 Exposure control Appropriate engineering controls	Mechanical ventilation and local exhaust will reduce exposure via the air. Use oil resistant material in construction of handling equipment. Store under recommended conditions and if heated, temperature control equipment should be used to avoid overheating.
Individual protection measures	
Hygiene measures	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Ensure that eyewash stations and safety showers are close to the workstation location. Wash contaminated clothing before reuse.
Eye / face protection	Recommended: Safety glasses with side shields.
Skin protection	
Hand protection	4 – 8 hours (breakthrough time): nitrile rubber.
Body protection	Wear protective clothing if there is a risk of skin contact. Change contaminated clothes at the end of working shift.
Other skin protection	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary.
Environmental exposure control	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.
Section 9: Physical and Chemical Properties	
Appearance	Clear
Physical state	Shiny, Buttery, Texture & Tacky
Colour	Light Yellow
Odor	Petroleum odor
Odour threshold	Not available
Dropping point	> 85 °C (ASTM D 2265)
Flash point	> 175 °C (Mineral Oil)
Evaporation rate	Not available
Flammability (solid, gas)	Not available
Flammability limits in air (lower), % by volume	Not available
Flammability limits in air (upper), % by volume	Not available
Vapour pressure	Not volatile



0.86 – 0.99 kg/L





Solubility (water)		Insoluble in wat	ter		
Partition coefficient (n-octanol/water)		Not available			
, , , , , , , , , , , , , , , , , , ,		No data			
Auto-ignition temperature		Not available			
Worked Penetration at 25°C		220 – 250 (ASTN	A D 217)		
Explosive properties		No data			
Oxidising properties		No data			
DMSO extractable compounds for	r base oil substance(s)	Not available			
according to IP346		<3 %			
Section 10: Stability and Rea	ctivity	1			
10.1 Reactivity		No specific test	data related to reactivity avail	able for this product or its ingr	edients.
10.2 Chemical stability			ormal conditions		
10.3 Possibility of hazardous rea	octions	Under normal c	onditions of storage and use, I	hazardous reactions will not o	ccur. Oxidising agent.
10.4 Conditions to avoid		Keep away from	n extreme heat and oxidising a	igents.	
10.5 Incompatible materials		Incomplete con particulates, ga	nbustion is likely to give rise to ses, including carbon monoxic	a complex mixture of airborn de, H <sub>2</sub> S, SO. (sulphur oxides) or	e solid and liquid sulphuric acid and
10.6 Hazardous decomposition	products		ganic and inorganic compound		
SECTION 11: Toxicological In	formation				
11.1 Information on toxicologica	al effects				
Acute toxicity					
Product / ingredient name	Result		Species	Dose	Exposure
	LC 50 Inhalation due	sts and mists	Rat	>2.18mg/l	4 hours
Distillate (Petroleum), hydro treated heavy paraffinic	LD 50 Derr	nal	Rabbit	> 5000 mg/kg	-
treated neavy paraminic	LD 50 Ora	al	Rat	>15000 mg/kg	-
Irritation / corrosion					
Skin					
Eye		No known significant effects or critical hazards.			
Respiratory					
Sensation					
Skin					
Respiratory		No known significant effects or critical hazards.			
nespiratory		No data available to indicate product or any components present greater than $0.10^{\prime}$ are			
Mutagenicity		No data available to indicate product or any components present greater than 0.1 % are multigene or genotoxic.			
Carcinogenicity			n this product is based on an s		•
Reproductive toxicity		The product should not be regarded as a carcinogen. Contains no ingredient listed as toxic to reproduction.			
Specific target organ toxicity – sin	gle exposure				
Specific target organ toxicity – rep		Not classified			
Aspiration hazard		Aspiration hazard – Category 1			
Information on likely routes of exp	oosure	Not available			
Potential acute health effects					
Eye contact		Eye contact may cause redness and transient pain.			
Inhalation		Inhalation of oil mist or vapours at elevated temperatures may cause respiratory irritation.			
Skin contact			ficant effects or critical hazard		
Ingestion			wallowed and enters airways.		
Potential chronic health effects			transwed and enters an ways.		
General		No known signi	ficant effects or critical bazard	c	
General		No known significant effects or critical hazards. The base oil(s) in this product is based on an severely hydrotreated distillate. The product should not be			
Carcinogenicity		regarded as a ca		everely hydrotreated distillate	. The product should not be







Mutagenicity						
Teratogenicity						
Product / ingredient name		No known s	significant effects or critical haza	ards.		
Fertility effects						
Other information Specific hazard		Not availab	٩			
Section 12: Ecological Information		NOT availab				
		Not expect	ad to be barmful to aquatic area	anisms		
12.1 Toxicity 12.2 Persistence and degradability		-	ed to be harmful to aquatic orga ntly biodegradable.	dilisiiis.		
12.3 Bioaccumulative potential				at bacausa of the low water solu	ibility of this product	
12.4 Mobility in soil		Bioaccumulation is unlikely to be significant because of the low water solubility of this product. Not considered mobile.				
12.5 Results of PBT & vPvB assessment		Not applica				
	•		water. Spills may form a film or	n water surfaces causing physic	al damage to organisms	
12.6 Other adverse effects			nsfer could also be impaired.	i water surfaces causing physic	ar aannage to organisms.	
Section 13: Disposal Consideration	ns					
The information in this section contains information provided in the Exposure So		d guidance. T	he list of Identified Uses in Secti	ion 1 should be consulted for ar	ny available use-specific	
Product Methods of disposal		feasible and authorisatio or waste su qualified w	Where possible (e.g. in the absence of relevant contamination), recycling of used substance is feasible and recommended. This substance can be burned or incinerated, subject to national/local authorisations, relevant contamination limits, safety regulations and air quality legislation. Contaminated or waste substance (not directly recyclable): Disposal can be carried out directly, or by delivery to qualified waste handlers. National legislation may identify a specific organisation, and/or prescribe composition limits and methods for recovery or disposal			
Hazardous waste		Yes				
European waste catalogue (EWC) Waste Code 13 03 07*		Waste designation.				
Packaging		Mineral-based non-chlorinated insulating and heat transmission oils.				
Methods of disposal		The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.				
Section 14: Transport Information						
International transport regulations						
	ADR / R	ID	ADN	IMO / IMDG Classification	ICAO / IATA Classification	
14.1 UN number	Not regul	ated	Not regulated	Not regulated	Not regulated	
14.2 UN proper shipping name	_		-	-	-	
14.3 Transport hazard class(es)	-		-	-	-	
14.4 Packing group	-		-	-	-	
14.5 Environmental hazards	No		No	No	No	
Additional Information	_		-	-	-	
14.6 Special precautions for user oils						
14.7 Transport in bulk according to An	nex I of MARPOL	73/78 and th	e IBC Code			
Section 15: Regulatory Informatio						
15.1 Safety, health and environmental		slation speci	fic for the substance or mixture	e EU Regulation (EC) No. 1907/	(2006 (REACH)	
Annex XIV – List of substances subject to authorisation Annex XIV Substances of very high concern		None of the components are listed				
Annex XVII – Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles.		Not applicable				
International Lists National Inventory		Inventory name				
Australia		Australian Inventory of Chemical Substances (AICS) – Yes				
Canada		Domestic Substances List (DSL) – Yes Non-Domestic Substances List (NDSL) – No				
China		Inventory of Existing Chemical Substances in China (IECSC) – Yes				
China		inventory o	a chisting chemical substances	(12C3C) = 18S		





_	European Inventory of Existing Commercial Chemical Substances (EINECS) – Yes		
Europe	European List of Notified Chemical Substances (ELINCS) – No		
Japan	Inventory of Existing and New Chemical Substances (ENCS) – Yes		
Korea	Existing Chemicals List (ECL) – Yes		
New Zealand	New Zealand Inventory – Yes		
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS) – Yes		
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory – Yes		
	oly with the inventory requirements administered by the governing country(s) uct are not listed or exempt from listing on the inventory administered by the governing country(s).		
Section 16: Other Information			
Revision comments			
Legend to abbreviations			
ADR	European agreement concerning the international carriage of dangerous good by road.		
RID	Regulations agreement concerning the international carriage of dangerous good by rail.		
IMDG Code	International Maritime Dangerous Goods Code.		
ICAO	International Civil Aviation Organization.		
IATA	International Air Transport Association.		
GHS	Globally Harmonized System of Classification and Labeling of Chemicals.		
CLP	Classification, Labelling and Packaging Regulation [Regulation (EC) No.1272/2008].		
SCBA	Self-Contained Breathing Apparatus.		
REACH	Registration, Evaluation, Authorization and Restriction of Chemicals Regulation [Regulation (EC) No. 1907/2006].		
LC 50	Median lethal concentration.		
LD 50	Median lethal dose.		
РВТ	Persistent, Bio accumulative and Toxic.		

Regulation (EC) no 1907/2006, Annex II as Amended by Commission Regulation (EU) 2015/830

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GANDHAR OIL REFINERY (INDIA) LTD.		
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Emergency / Info Phone No.	Phone: +91-22-40635600 • Fax: +91-22-40635601	
Email	info@gandharoil.com	





### DIVYOL CHASIS - 2 / 1 GREASE

Section 1: Identification of the Substance / Mix	ture				
1.1 Product identifier					
Product name	Divyol Chasis – 2 / 1 Grease	Divyol Chasis – 2 / 1 Grease			
Product description	Chasis Grease	Chasis Grease			
Product type	Grease				
MARPOL Annex-1	****				
1.2 Identified uses					
Distribution of substance	Automotive & Industrial Grease				
Formulation & (re)packing of substance & mixtures	Automotive & Industrial Grease				
Manufacture of substance	Automotive & Industrial Grease				
Functional fluids	Automotive & Industrial Grease				
Section 2: Hazard Identification					
4-Extreme	Health	1			
3-High	Flammability	1			
2-Moderate	Reactivity	0			
1-Slight	Special	-			
Section 3: Compostion / Information on Ingred					
Chemical Name / Ingredients	% by wt.	Hazardous	CAS No.		
Mix Fatty Add	10 - 20	No	Proprietary Mixture		
Calcium Hydroxide	1 - 3	Yes	1305-65-8		
Mineral Oil	70 - 85	Yes	68990-65-8, 64741-88-4		
		No	Proprietary Mixture		
Stearate Additives	0-7	No Yes	14807-96-6 Proprietary Mixture		
			Proprietary Mixture		
Product / Ingredient name	Calcium soaps from natural fatty	substances			
Section 4: First Aid Measures					
Inhalation exposure		Remove to fresh air & provide oxygen, if breathing is difficult. Contact physician			
Skin contact		Remove contaminated clothing. Flush skin with water. Wash skin thoroughly with mild soap & water. If irritation occurs, call a physician.			
Swallowing or other	Do not induce vomiting. In general no treatment is necessary unless large quantities are ingested. Get medical advice.				
Eye contact	Rinse continuously with water for	several minutes. Get medical atten	tion, if irritation persists.		
Protection first-aiders	Disconnecting electrical supply. Ensure adequate ventilation and check that a safe and breathing area is available before entry into confined spaces.				
Section 5: Fire Fighting Measures					
5.1 Extinguishing media					
Unsuitable extinguishing media		oxide. Do not use direct water and w d the fire. Use foam simultaneously			
5.2 Special hazards arising from the substance or mix	ture				
Hazards from the substance or mixture	Flammable liquids in pressurised flammable vapour cloud.	containers may rupture and when e	exposed to heat, creating a highly		
Hazardous thermal decomposition products	Incomplete combustion is likely to give rise to a complex mixture of airborne solid and liquid particulates, gases, including carbon monoxide, $H_2S$ , $SO_x$ (sulphur oxides) or sulphuric acid and unidentified organic and inorganic compounds.				
5.3 Advice for firefighters					
Special precautions for firefighters		noving all persons from the vicinity ay personal risk or without suitable t			
Special protective equipment for firefighters	(SCBA) with a full face- piece oper helmets, protective boots and glo	Firefighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face- piece operated in positive pressure mode. Clothing for firefighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.			





6.1 Personal precautions, protective equipment and emergency procedures				
Keep non-involved personnel away from the area of spillage.				
For non-emergency personnel	Alert emergency personnel. Except in case of small spillages, the feasibility of any actions should always be assessed and advised, if possible, by a trained, competent person in charge of managing the emergency. Stop leak if safe to do so. Avoid direct contact with the product. Stay upwind / keep distance from source. In case of large spillages, alert occupants in downwind areas. Eliminate all ignition sources if safe to do so. Spillages of limited amounts of product, especially in the open air when vapours will be usually quickly dispersed, are dynamic situations, which will presumably limit the exposure to dangerous concentrations. Note : Recommended measures are based on the most likely spillage scenarios for this material; however, local conditions (wind, air temperature, wave / current direction and speed) may significantly influence the choice of appropriate actions.			
For emergency responders	For this reason, local experts should be consulted when necessary. Local regulations may also prescribe or limit actions to be taken. Small spillages: Normal antistatic working clothes are usually adequate. Large spillages: Full body suit of chemically resistant and thermal resistant material should be used. Work gloves providing adequate chemical resistance, specifically to aromatic hydrocarbons. Note: Gloves made of PVA are not water-resistant, and are not suitable for emergency use. Safety helmet, antistatic non-skid safety shoes or boots. Goggles and / or face shield, if splashes or contact with eyes is possible or anticipated. Respiratory Protection : A half or full-face respirator with filter(s) for organic vapours (and when applicable for H <sub>2</sub> S) a Self Contained Breathing Apparatus (SCBA) can be used according to the extent of spill and predictable amount of exposure. If the situation cannot be completely assessed, or if an oxygen deficiency is possible, only SCBA's should be used.			
6.2 Environmental precautions	Prevent product from entering sewers, rivers or other bodies of water. If necessary dike the product with dry earth, sand or similar non-combustible materials. In case of soil contamination, remove contaminated soil and treat in accordance with local regulations. In case of small spillages in closed waters (i.e. ports), contain product with floating barriers or other equipment. Collect spilled product by absorbing with specific floating absorbents. If possible, large spillages in open waters should be contained with floating barriers or other mechanical means. If this is not possible, control the spreading of the spillage, and collect the product by skimming or other suitable mechanical means. The use of dispersants should be advised by an expert, and, if required, approved by local authorities.			
6.3 Methods and material for containment and cleaning	l up			
Small spill	Stop leak if without risk. Absorb spilled product with suitable non-combustible materials.			
Large spill	Large spillages may be cautiously covered with foam, if available, to limit vapour cloud formation. Do not use water jet. When inside buildings or confined spaces, ensure adequate ventilation. Transfer collected product and other contaminated materials to suitable containers for recovery or safe disposal.			
6.4 Reference to other sections	See Section 1: For emergency contact information. See Section 8: For information on appropriate personal protective equipment. See Section 13: For additional waste treatment information.			
Section 7: Handling and Storage				
7.1 Advice on general information – hygiene, storage	Obtain special instructions before use. Keep away from heat / sparks / open flames/hot surfaces. No smoking. Use and store only outdoors or in a well-ventilated area. Hazard of slipping on spilt product. Avoid release to the environment.			
7.2 Conditions for safe storage including any incompatibilities	Storage area layout, tank design, equipment and operating procedures must comply with the relevant regional, national or local legislation. Storage installations should be designed with adequate bunds in case of leaks or spills. Cleaning, inspection and maintenance of internal structure of storage tanks must be done only by properly equipped and qualified personnel as defined by national, local or company regulations. Store separately from oxidising agents. Keep only in the original container or in a suitable container for this kind of product. Keep container tightly closed and sealed until ready for use. Do not store in unlabelled containers. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Empty containers may contain harmful, flammable / combustible or explosive residue or vapours. Do not cut, grind, drill, weld, reuse or dispose of containers unless adequate precautions are taken against these hazards.			
	Protect from sunlight.			



Density Solubility (ies)



Section 8: Exposure Controls / Personal Protect	tion
The list of Identified Uses in Section 1 should be consu	Ited for any available use-specific information provided in the Exposure Scenario(s).
8.1 Control parameters	
Occupational exposure limits	
Product / Ingredient name	Distillates, mixture of hydrocarbons
Exposure limits values	AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m <sup>3</sup> 8 hours. Form: mist and fume STEL: 3 mg/m <sup>3</sup> 15 minutes. Form: mist and fume [Air contaminant]. AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m <sup>3</sup> 8 hours. Form: mist and fume STEL: 3 mg/m <sup>3</sup> 15 minutes. Form: mist and fume.
Recommended monitoring procedures	If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres – Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres – Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres – General requirements for the performance of procedures for the measurement of chemical agents). Reference to national guidance documents for methods for the determination of hazardous substances will also be required.
8.2 Exposure control Appropriate engineering controls	Mechanical ventilation and local exhaust will reduce exposure via the air. Use oil resistant material in construction of handling equipment. Store under recommended conditions and if heated, temperature control equipment should be used to avoid overheating.
Individual protection measures	
Hygiene measures	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Ensure that eyewash stations and safety showers are close to the workstation location. Wash contaminated clothing before reuse.
Eye / face protection	Recommended: Safety glasses with side shields.
Skin protection	
Hand protection	4 – 8 hours (breakthrough time): nitrile rubber.
Body protection	Wear protective clothing if there is a risk of skin contact. Change contaminated clothes at the end of working shift.
Other skin protection	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary.
Environmental exposure control	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.
Section 9: Physical and Chemical Properties	
Appearance	Clear
Physical state	Shiny & Tacky
Colour	Greenish Brown
Odor	Petroleum odor
Odour threshold	Not available
Dropping point	> 90 °C (ASTM D 566)
Flash point	> 175 °C (Mineral Oil)
Evaporation rate	Not available
Flammability (solid, gas)	Not available
Flammability limits in air (lower), % by volume	Not available
Flammability limits in air (upper), % by volume	Not available
Vapour pressure	Not volatile



0.860 – 0.990 kg/L





Solubility (water)		Insoluble in wat	tor		
Partition coefficient (n-octanol/water)		Not available			
Decomposition temperature		Not available			
		Not available			
Worked Penetration at 25°C		265 – 340 (ASTM	A D 217)		
Explosive properties		No data	vi U Z I / )		
· · ·		No data			
Oxidising properties DMSO extractable compounds for	(hace oil substance(s)				
according to IP346		Not available <3 %			
Section 10: Stability and Rea	ctivity	1			
10.1 Reactivity		No specific test	data related to reactivity availa	able for this product or its ingr	edients.
10.2 Chemical stability		Stable under no	ormal conditions		
10.3 Possibility of hazardous rea	ctions	Under normal c	onditions of storage and use, I	nazardous reactions will not o	ccur. Oxidising agent.
10.4 Conditions to avoid		Keep away from	n extreme heat and oxidising a	gents.	
10.5 Incompatible materials		Incomplete con particulates, ga	nbustion is likely to give rise to ses, including carbon monoxic	a complex mixture of airborn le, H <sub>2</sub> S, SO, (sulphur oxides) or	e solid and liquid sulphuric acid and
10.6 Hazardous decomposition	products		ganic and inorganic compound		
SECTION 11: Toxicological In	formation				
11.1 Information on toxicologica	al effects				
Acute toxicity					
Product / ingredient name	Result		Species	Dose	Exposure
	LC 50 Inhalation due	sts and mists	Rat	>2.18mg/l	4 hours
Distillate (Petroleum), hydro	LD 50 Derr	mal	Rabbit	> 5000 mg/kg	_
treated heavy paraffinic	LD 50 Or	al	Rat	>15000 mg/kg	_
Irritation / corrosion					
Skin					
Eye		No known significant effects or critical hazards.			
Respiratory					
Sensation					
Skin					
Respiratory		No known significant effects or critical hazards.			
		No data availab	le to indicate product or any o	omponents present greater th	an 0.1 % are
Mutagenicity		No data available to indicate product or any components present greater than 0.1 % are multigene or genotoxic.			
Carcinogenicity			n this product is based on an s		
Reproductive toxicity		The product should not be regarded as a carcinogen. Contains no ingredient listed as toxic to reproduction.			
Specific target organ toxicity – sin	gle exposure	Not classified			
Specific target organ toxicity – rep	beated exposure	Not classified			
Aspiration hazard		Aspiration hazard – Category 1			
Information on likely routes of exp	oosure	Not available			
Potential acute health effects					
Eye contact		Eye contact may cause redness and transient pain.			
Inhalation		Inhalation of oil mist or vapours at elevated temperatures may cause respiratory irritation.			
Skin contact			ficant effects or critical hazard		
Ingestion		May be fatal if swallowed and enters airways.			
Potential chronic health effects					
General		No known siani	ficant effects or critical hazard	S.	
Carcinogenicity		The base oil(s) in this product is based on an severely hydrotreated distillate. The product should not be regarded as a carcinogen.			
		- J	5		







Mutagenicity						
Teratogenicity						
Product / ingredient name		No known s	significant effects or critical haza	ards.		
Fertility effects						
Other information Specific hazard		Not availab	٩			
Section 12: Ecological Information		NOT availab				
		Not expect	ad to be barmful to aquatic area	anisms		
12.1 Toxicity 12.2 Persistence and degradability		-	ed to be harmful to aquatic orga ntly biodegradable.	dilisiiis.		
12.3 Bioaccumulative potential				at bacausa of the low water solu	ibility of this product	
12.4 Mobility in soil		Bioaccumulation is unlikely to be significant because of the low water solubility of this product. Not considered mobile.				
12.5 Results of PBT & vPvB assessment		Not applica				
	•		water. Spills may form a film or	n water surfaces causing physic	al damage to organisms	
12.6 Other adverse effects			nsfer could also be impaired.	i water surfaces causing physic	ar aannage to organisms.	
Section 13: Disposal Consideration	ns					
The information in this section contains information provided in the Exposure So		d guidance. T	he list of Identified Uses in Secti	ion 1 should be consulted for ar	ny available use-specific	
Product Methods of disposal		feasible and authorisatio or waste su qualified w	Where possible (e.g. in the absence of relevant contamination), recycling of used substance is feasible and recommended. This substance can be burned or incinerated, subject to national/local authorisations, relevant contamination limits, safety regulations and air quality legislation. Contaminated or waste substance (not directly recyclable): Disposal can be carried out directly, or by delivery to qualified waste handlers. National legislation may identify a specific organisation, and/or prescribe composition limits and methods for recovery or disposal			
Hazardous waste		Yes				
European waste catalogue (EWC) Waste Code 13 03 07*		Waste designation.				
Packaging		Mineral-based non-chlorinated insulating and heat transmission oils.				
Methods of disposal		The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.				
Section 14: Transport Information						
International transport regulations						
	ADR / R	ID	ADN	IMO / IMDG Classification	ICAO / IATA Classification	
14.1 UN number	Not regul	ated	Not regulated	Not regulated	Not regulated	
14.2 UN proper shipping name	_		-	-	-	
14.3 Transport hazard class(es)	-		-	-	-	
14.4 Packing group	-		-	-	-	
14.5 Environmental hazards	No		No	No	No	
Additional Information	_		-	-	-	
14.6 Special precautions for user oils						
14.7 Transport in bulk according to An	nex I of MARPOL	73/78 and th	e IBC Code			
Section 15: Regulatory Informatio						
15.1 Safety, health and environmental		slation speci	fic for the substance or mixture	e EU Regulation (EC) No. 1907/	(2006 (REACH)	
Annex XIV – List of substances subject to authorisation Annex XIV Substances of very high concern		None of the components are listed				
Annex XVII – Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles.		Not applicable				
International Lists National Inventory		Inventory name				
Australia		Australian Inventory of Chemical Substances (AICS) – Yes				
Canada		Domestic Substances List (DSL) – Yes Non-Domestic Substances List (NDSL) – No				
China		Inventory of Existing Chemical Substances in China (IECSC) – Yes				
China		inventory o	a chisting chemical substances	(12C3C) = 18S		







_	European Inventory of Existing Commercial Chemical Substances (EINECS) – Yes
Europe	European List of Notified Chemical Substances (ELINCS) – No
Japan	Inventory of Existing and New Chemical Substances (ENCS) – Yes
Korea	Existing Chemicals List (ECL) – Yes
New Zealand	New Zealand Inventory – Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS) – Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory – Yes
	oly with the inventory requirements administered by the governing country(s) uct are not listed or exempt from listing on the inventory administered by the governing country(s).
Section 16: Other Information	
Revision comments	
Legend to abbreviations	
ADR	European agreement concerning the international carriage of dangerous good by road.
RID	Regulations agreement concerning the international carriage of dangerous good by rail.
IMDG Code	International Maritime Dangerous Goods Code.
ICAO	International Civil Aviation Organization.
IATA	International Air Transport Association.
GHS	Globally Harmonized System of Classification and Labeling of Chemicals.
CLP	Classification, Labelling and Packaging Regulation [Regulation (EC) No.1272/2008].
SCBA	Self-Contained Breathing Apparatus.
REACH	Registration, Evaluation, Authorization and Restriction of Chemicals Regulation [Regulation (EC) No. 1907/2006].
LC 50	Median lethal concentration.
LD 50	Median lethal dose.
PBT	Persistent, Bio accumulative and Toxic.

Regulation (EC) no 1907/2006, Annex II as Amended by Commission Regulation (EU) 2015/830

Disclaimer: Information contained in this material data sheet is believed to be reliable, but no representation, guarantee or warranties of any kind made as to its accuracy, suitability for a particular application or results to be obtained from them. It is up to the manufacturer / seller to ensure that the information content in the material data sheet is relevant to the product manufactured / handled or sold by, as the case may be. GANDHAR makes no warranties expressed or implied in respect of the adequacy of this document for any particular purpose.

GANDHAR OIL REFINERY (INDIA) LTD.		
Taloja Plant	Plot No.10, MIDC, Main Road, Taloja, Taluka Panvel, District - Raigad 410208, India.	
Silvassa Plant	Plot No. 2, Survey No. 678/1/3, Village Naroli, Near Naroli Check Post, Silvassa, Dadra & Nagar Haveli, Union Territory 396230, India.	
Emergency / Info Phone No.	Phone: +91-22-40635600 • Fax: +91-22-40635601	
Email	info@gandharoil.com	





### **DIVYOL CHASIS – 3 GREASE**

Section 1: Identification of the Substance / Mix	ture						
1.1 Product identifier							
Product name	Divyol Chasis – 3 Grease						
Product description	Chasis Grease	·					
Product type	Grease						
MARPOL Annex-1	****						
1.2 Identified uses							
Distribution of substance	Automotive & Industrial Grease						
Formulation & (re)packing of substance & mixtures	Automotive & Industrial Grease						
Manufacture of substance	Automotive & Industrial Grease						
Functional fluids	Automotive & Industrial Grease						
Section 2: Hazard Identification							
4-Extreme	Health	1					
3-High	Flammability	1					
2-Moderate	Reactivity	0					
1-Slight	Special	-					
Section 3: Compostion / Information on Ingred	· ·						
Chemical Name / Ingredients	% by wt.	Hazardous	CAS No.				
Mix Fatty Add	10 - 20	No	Proprietary Mixture				
Calcium Hydroxide	1 - 3	Yes	1305-65-8				
Mineral Oil	70 - 85	Yes	68990-65-8, 64741-88-4				
		No	Proprietary Mixture				
Stearate Additives	0 - 7 0 - 2	No Yes	14807-96-6 Proprietary Mixture				
	1						
Product / Ingredient name Calcium soaps from natural fatty substances							
Section 4: First Aid Measures							
Inhalation exposure		Remove to fresh air & provide oxygen, if breathing is difficult. Contact physician					
Skin contact	If irritation occurs, call a physician	Remove contaminated clothing. Flush skin with water. Wash skin thoroughly with mild soap & water. If irritation occurs, call a physician.					
Swallowing or other	Do not induce vomiting. In gene Get medical advice.						
Eye contact	Rinse continuously with water fo	r several minutes. Get medical atter	ntion, if irritation persists.				
Protection first-aiders	Disconnecting electrical supply. Ensure adequate ventilation and check that a safe and breathing area is available before entry into confined spaces.						
Section 5: Fire Fighting Measures							
5.1 Extinguishing media							
Unsuitable extinguishing media		oxide. Do not use direct water and v ad the fire. Use foam simultaneously					
5.2 Special hazards arising from the substance or mix	xture						
Hazards from the substance or mixture	Flammable liquids in pressurised flammable vapour cloud.	Flammable liquids in pressurised containers may rupture and when exposed to heat, creating a highly flammable vapour cloud.					
Hazardous thermal decomposition products	Incomplete combustion is likely to give rise to a complex mixture of airborne solid and liquid particulates, gases, including carbon monoxide, $H_2S$ , $SO_x$ (sulphur oxides) or sulphuric acid and unidentified organic and inorganic compounds.						
5.3 Advice for firefighters							
Special precautions for firefighters		Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.					
Special protective equipment for firefighters	(SCBA) with a full face- piece ope helmets, protective boots and gl	Firefighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face- piece operated in positive pressure mode. Clothing for firefighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.					





6.1 Personal precautions, protective equipment and emergency procedures					
Keep non-involved personnel away from the area of spillage.					
For non-emergency personnel	Alert emergency personnel. Except in case of small spillages, the feasibility of any actions should always be assessed and advised, if possible, by a trained, competent person in charge of managing the emergency. Stop leak if safe to do so. Avoid direct contact with the product. Stay upwind / keep distance from source. In case of large spillages, alert occupants in downwind areas. Eliminate all ignition sources if safe to do so. Spillages of limited amounts of product, especially in the open air when vapours will be usually quickly dispersed, are dynamic situations, which will presumably limit the exposure to dangerous concentrations. Note : Recommended measures are based on the most likely spillage scenarios for this material; however, local conditions (wind, air temperature, wave / current direction and speed) may significantly influence the choice of appropriate actions.				
For emergency responders	For this reason, local experts should be consulted when necessary. Local regulations may also prescribe or limit actions to be taken. Small spillages: Normal antistatic working clothes are usually adequate. Large spillages: Full body suit of chemically resistant and thermal resistant material should be used. Work gloves providing adequate chemical resistance, specifically to aromatic hydrocarbons. Note: Gloves made of PVA are not water-resistant, and are not suitable for emergency use. Safety helmet, antistatic non-skid safety shoes or boots. Goggles and / or face shield, if splashes or contact with eyes is possible or anticipated. Respiratory Protection : A half or full-face respirator with filter(s) for organic vapours (and when applicable for H <sub>2</sub> S) a Self Contained Breathing Apparatus (SCBA) can be used according to the extent of spill and predictable amount of exposure. If the situation cannot be completely assessed, or if an oxygen deficiency is possible, only SCBA's should be used.				
6.2 Environmental precautions	Prevent product from entering sewers, rivers or other bodies of water. If necessary dike the product with dry earth, sand or similar non-combustible materials. In case of soil contamination, remove contaminated soil and treat in accordance with local regulations. In case of small spillages in closed waters (i.e. ports), contain product with floating barriers or other equipment. Collect spilled product by absorbing with specific floating absorbents. If possible, large spillages in open waters should be contained with floating barriers or other mechanical means. If this is not possible, control the spreading of the spillage, and collect the product by skimming or other suitable mechanical means. The use of dispersants should be advised by an expert, and, if required, approved by local authorities.				
6.3 Methods and material for containment and cleaning	l up				
Small spill	Stop leak if without risk. Absorb spilled product with suitable non-combustible materials.				
Large spill	Large spillages may be cautiously covered with foam, if available, to limit vapour cloud formation. Do not use water jet. When inside buildings or confined spaces, ensure adequate ventilation. Transfer collected product and other contaminated materials to suitable containers for recovery or safe disposal.				
6.4 Reference to other sections	See Section 1: For emergency contact information. See Section 8: For information on appropriate personal protective equipment. See Section 13: For additional waste treatment information.				
Section 7: Handling and Storage					
7.1 Advice on general information – hygiene, storage	Obtain special instructions before use. Keep away from heat / sparks / open flames/hot surfaces. No smoking. Use and store only outdoors or in a well-ventilated area. Hazard of slipping on spilt product. Avoid release to the environment.				
7.2 Conditions for safe storage including any incompatibilities	Storage area layout, tank design, equipment and operating procedures must comply with the relevant regional, national or local legislation. Storage installations should be designed with adequate bunds in case of leaks or spills. Cleaning, inspection and maintenance of internal structure of storage tanks must be done only by properly equipped and qualified personnel as defined by national, local or company regulations. Store separately from oxidising agents. Keep only in the original container or in a suitable container for this kind of product. Keep container tightly closed and sealed until ready for use. Do not store in unlabelled containers. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Empty containers may contain harmful, flammable / combustible or explosive residue or vapours. Do not cut, grind, drill, weld, reuse or dispose of containers unless adequate precautions are taken against these hazards.				
	Protect from sunlight.				



Density Solubility (ies)



Section 8: Exposure Controls / Personal Protect	tion
The list of Identified Uses in Section 1 should be consu	Ited for any available use-specific information provided in the Exposure Scenario(s).
8.1 Control parameters	
Occupational exposure limits	
Product / Ingredient name	Distillates, mixture of hydrocarbons
Exposure limits values	AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m <sup>3</sup> 8 hours. Form: mist and fume STEL: 3 mg/m <sup>3</sup> 15 minutes. Form: mist and fume [Air contaminant]. AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m <sup>3</sup> 8 hours. Form: mist and fume STEL: 3 mg/m <sup>3</sup> 15 minutes. Form: mist and fume.
Recommended monitoring procedures	If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres – Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres – Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres – General requirements for the performance of procedures for the measurement of chemical agents). Reference to national guidance documents for methods for the determination of hazardous substances will also be required.
8.2 Exposure control Appropriate engineering controls	Mechanical ventilation and local exhaust will reduce exposure via the air. Use oil resistant material in construction of handling equipment. Store under recommended conditions and if heated, temperature control equipment should be used to avoid overheating.
Individual protection measures	
Hygiene measures	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Ensure that eyewash stations and safety showers are close to the workstation location. Wash contaminated clothing before reuse.
Eye / face protection	Recommended: Safety glasses with side shields.
Skin protection	
Hand protection	4 – 8 hours (breakthrough time): nitrile rubber.
Body protection	Wear protective clothing if there is a risk of skin contact. Change contaminated clothes at the end of working shift.
Other skin protection	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary.
Environmental exposure control	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.
Section 9: Physical and Chemical Properties	
Appearance	Clear
Physical state	Shiny & Tacky
Colour	Greenish Brown
Odor	Petroleum odor
Odour threshold	Not available
Dropping point	> 90 °C (ASTM D 566)
Flash point	> 175 °C (Mineral Oil)
Evaporation rate	Not available
Flammability (solid, gas)	Not available
Flammability limits in air (lower), % by volume	Not available
Flammability limits in air (upper), % by volume	Not available
Vapour pressure	Not volatile



0.860 – 0.990 kg/L





Solubility (water)		Insoluble in wat	ter			
Partition coefficient (n-octanol/water)		Not available				
Decomposition temperature		No data				
Auto-ignition temperature		Not available				
Worked Penetration at 25°C		220 – 250 (ASTN	A D 217)			
Explosive properties		No data				
Oxidising properties		No data				
DMSO extractable compounds for	r base oil substance(s)	Not available				
according to IP346		<3 %				
Section 10: Stability and Rea	ctivity	1				
10.1 Reactivity		No specific test	data related to reactivity avail	able for this product or its ingr	edients.	
10.2 Chemical stability			ormal conditions			
10.3 Possibility of hazardous rea	octions	Under normal c	onditions of storage and use, I	hazardous reactions will not o	ccur. Oxidising agent.	
10.4 Conditions to avoid		Keep away from	n extreme heat and oxidising a	igents.		
10.5 Incompatible materials		Incomplete con particulates, ga	nbustion is likely to give rise to ses, including carbon monoxic	a complex mixture of airborn de, H <sub>2</sub> S, SO. (sulphur oxides) or	e solid and liquid sulphuric acid and	
10.6 Hazardous decomposition	products		ganic and inorganic compound			
SECTION 11: Toxicological In	formation					
11.1 Information on toxicologica	al effects					
Acute toxicity						
Product / ingredient name	Result		Species	Dose	Exposure	
	LC 50 Inhalation dusts and mists		Rat	>2.18mg/l	4 hours	
Distillate (Petroleum), hydro treated heavy paraffinic	LD 50 Dermal		Rabbit	> 5000 mg/kg	-	
treated neavy paraminic	LD 50 Ora	al	Rat	>15000 mg/kg	-	
Irritation / corrosion						
Skin						
Eye		No known significant effects or critical hazards.				
Respiratory						
Sensation						
Skin						
Respiratory		No known significant effects or critical hazards.				
nespiratory		No data availab	le to indicate product or any c	omponents present greater th	an 0.1% are	
Mutagenicity		No data available to indicate product or any components present greater than 0.1 % are multigene or genotoxic.				
Carcinogenicity			n this product is based on an s		•	
Reproductive toxicity			ould not be regarded as a carc redient listed as toxic to repro	5		
Specific target organ toxicity – sin	gle exposure					
Specific target organ toxicity – rep		Not classified				
Aspiration hazard		Aspiration haza	rd – Category 1			
Information on likely routes of exp	oosure	Not available				
Potential acute health effects						
Eye contact		Eye contact may cause redness and transient pain.				
· · · · · · · · · · · · · · · · · · ·			halation of oil mist or vapours at elevated temperatures may cause respiratory irritation.			
			ficant effects or critical hazard			
Ingestion May be fatal if swallowed and enters airways.						
Potential chronic health effects			transwed and enters an ways.			
General		No known signi	ficant effects or critical bazard	c		
General		No known significant effects or critical hazards. The base oil(s) in this product is based on an severely hydrotreated distillate. The product should not be				
Carcinogenicity		regarded as a ca		everely hydrotreated distillate	. The product should not be	







Mutagenicity							
,	eratogenicity		significant effects or critical haz	ards.			
Product / ingredient name							
Fertility effects							
Other information Specific hazard		Not availab	le				
Section 12: Ecological Information							
12.1 Toxicity			ed to be harmful to aquatic org	anisms.			
12.2 Persistence and degradability			ntly biodegradable.				
12.3 Bioaccumulative potential				nt because of the low water solu	bility of this product.		
12.4 Mobility in soil		Not considered mobile.					
12.5 Results of PBT & vPvB assessment	:	Not applica					
12.6 Other adverse effects			n water. Spills may form a film of nsfer could also be impaired.	n water surfaces causing physica	al damage to organisms.		
Section 13: Disposal Consideration							
The information in this section contains information provided in the Exposure So	generic advice and enario(s).	d guidance. T	he list of Identified Uses in Sect	ion 1 should be consulted for ar	ny available use-specific		
Product Methods of disposal Where possible (e.g. in the absence of relevant contamination), recycling of used substance is feasible and recommended. This substance can be burned or incinerated, subject to national/lo authorisations, relevant contamination limits, safety regulations and air quality legislation. Cont or waste substance (not directly recyclable): Disposal can be carried out directly, or by delivery t qualified waste handlers. National legislation may identify a specific organisation, and/or prescrict organisation limits and methods for recovery or disposal					subject to national/local ality legislation. Contaminated rectly, or by delivery to		
Hazardous waste		Yes					
European waste catalogue (EWC) Waste	Code 13 03 07*	Waste designation.					
Packaging		Mineral-based non-chlorinated insulating and heat transmission oils.					
Methods of disposal		The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.					
Section 14: Transport Information							
International transport regulations							
	ADR / R	ID	ADN	IMO / IMDG Classification	ICAO / IATA Classification		
14.1 UN number	Not regul	ated	Not regulated	Not regulated	Not regulated		
14.2 UN proper shipping name	_		_	_	_		
14.3 Transport hazard class(es)	_		-	_	_		
14.4 Packing group	_		-	_	_		
14.5 Environmental hazards	No		No	No	No		
Additional Information	_		-	-	-		
14.6 Special precautions for user oils							
14.7 Transport in bulk according to An	nex   of MARPOL	73/78 and th	e IBC Code				
Section 15: Regulatory Informatio							
		slation speci	fic for the substance or mixture	e EU Regulation (EC) No. 1907/	2006 (REACH)		
Annex XIV – List of substances subject to Annex XIV Substances of very high concern	islation specific for the substance or mixture EU Regulation (EC) No. 1907/2006 (REACH) None of the components are listed						
Annex XVII – Restrictions on the manufa on the market and use of certain danger mixtures and articles.	Not applicable						
International Lists National Inventory	ernational Lists National Inventory Inventory name						
Australia	Australian Inventory of Chemical Substances (AICS) – Yes						
Canada	Domestic Substances List (DSL) – Yes Non-Domestic Substances List (NDSL) – No						
China			f Existing Chemical Substances				
		inventory o	. Easting chemical substances				







	European Inventory of Existing Commercial Chemical Substances (EINECS) – Yes
Europe	European List of Notified Chemical Substances (ELINCS) – No
Japan	Inventory of Existing and New Chemical Substances (ENCS) – Yes
Korea	Existing Chemicals List (ECL) – Yes
New Zealand	New Zealand Inventory – Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS) – Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory – Yes
	oly with the inventory requirements administered by the governing country(s) uct are not listed or exempt from listing on the inventory administered by the governing country(s).
Section 16: Other Information	
Revision comments	
Legend to abbreviations	
ADR	European agreement concerning the international carriage of dangerous good by road.
RID	Regulations agreement concerning the international carriage of dangerous good by rail.
IMDG Code	International Maritime Dangerous Goods Code.
ICAO	International Civil Aviation Organization.
IATA	International Air Transport Association.
GHS	Globally Harmonized System of Classification and Labeling of Chemicals.
CLP	Classification, Labelling and Packaging Regulation [Regulation (EC) No.1272/2008].
SCBA	Self-Contained Breathing Apparatus.
REACH	Registration, Evaluation, Authorization and Restriction of Chemicals Regulation [Regulation (EC) No. 1907/2006].
LC 50	Median lethal concentration.
LD 50	Median lethal dose.
РВТ	Persistent, Bio accumulative and Toxic.

Regulation (EC) no 1907/2006, Annex II as Amended by Commission Regulation (EU) 2015/830

Disclaimer: Information contained in this material data sheet is believed to be reliable, but no representation, guarantee or warranties of any kind made as to its accuracy, suitability for a particular application or results to be obtained from them. It is up to the manufacturer / seller to ensure that the information content in the material data sheet is relevant to the product manufactured / handled or sold by, as the case may be. GANDHAR makes no warranties expressed or implied in respect of the adequacy of this document for any particular purpose.

GANDHAR OIL REFINERY (INDIA) LTD.				
Taloja Plant	Plot No.10, MIDC, Main Road, Taloja, Taluka Panvel, District - Raigad 410208, India.			
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Emergency / Info Phone No.	Phone: +91-22-40635600 • Fax: +91-22-40635601			
Email	info@gandharoil.com			





### DIVYOL EPX / EP - 1 GREASE

Section 1: Identification of the Substance / Mix	ture				
1.1 Product identifier					
Product name	Divyol EPX / EP –	Divyol EPX / EP – 1 Grease			
Product description	Extreme Pressure	e Grease			
Product type	Grease				
MARPOL Annex-1	****				
1.2 Identified uses					
Distribution of substance	Automotive & Inc	dustrial Grease			
Formulation & (re)packing of substance & mixtures	Automotive & Inc	dustrial Grease			
Manufacture of substance	Automotive & Inc				
Functional fluids	Automotive & Inc				
	Automotive & Inc	uustrial Grease			
Section 2: Hazard Identification					
4-Extreme	Health		1		
3-High	Flammability		1		
2-Moderate	Reactivity		0		
1-Slight	Special		-		
Section 3: Compostion / Information on Ingred	ients				
Chemical Name / Ingredients	% by wt.	Hazardous		CAS No.	
Lithium Hydroxide	0.4 - 2	Yes		1310-66-3	
Mineral Oil	82 - 95	Yes		64742-52-5, 64741-88-4, 64742-54-7, 64742-01-4	
12 HSA	4 - 10	No		106-14-9	
HCO Additioner	1-5	No		8001-78-3	
Additives Zinc dialkyldithiophosphate	0 - 3	Yes Yes		Proprietary Mixture 68457-79-4	
Additives	0-2	Yes		68511-50-2	
	Lithium soaps from natural fatty substances				
Product / Ingredient name	Lithium soaps fro	om natural fatty s	ubstar	nces	
Section 4: First Aid Measures					
Inhalation exposure		Remove to fresh air & provide oxygen, if breathing is difficult. Contact physician			
Skin contact		Remove contaminated clothing. Flush skin with water. Wash skin thoroughly with mild soap & water. If irritation occurs, call a physician.			
Swallowing or other		Do not induce vomiting. In general no treatment is necessary unless large quantities are ingested. Get medical advice.			
Eye contact	Rinse continuous	Rinse continuously with water for several minutes. Get medical attention, if irritation persists.			
Protection first-aiders		Disconnecting electrical supply. Ensure adequate ventilation and check that a safe and breathing area is available before entry into confined spaces.			
Section 5: Fire Fighting Measures					
5.1 Extinguishing media					
Unsuitable extinguishing media				Do not use direct water and wet chemicals, or water on the ire. Use foam simultaneously on the surface.	
5.2 Special hazards arising from the substance or mix	51				
Hazards from the substance or mixture			contaii	ners may rupture and when exposed to heat, creating a highly	
Hazardous thermal decomposition products	Incomplete com particulates, gase	Incomplete combustion is likely to give rise to a complex mixture of airborne solid and liquid particulates, gases, including carbon monoxide, H <sub>2</sub> S, SO <sub>x</sub> (sulphur oxides) or sulphuric acid and unidentified organic and inorganic compounds.			
5.3 Advice for firefighters					
Special precautions for firefighters	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.				
Special protective equipment for firefighters	Firefighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face- piece operated in positive pressure mode. Clothing for firefighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.				





6.1 Personal precautions, protective equipment and emergency procedures					
Keep non-involved personnel away from the area of spillage.					
For non-emergency personnel	Alert emergency personnel. Except in case of small spillages, the feasibility of any actions should always be assessed and advised, if possible, by a trained, competent person in charge of managing the emergency. Stop leak if safe to do so. Avoid direct contact with the product. Stay upwind / keep distance from source. In case of large spillages, alert occupants in downwind areas. Eliminate all ignition sources if safe to do so. Spillages of limited amounts of product, especially in the open air when vapours will be usually quickly dispersed, are dynamic situations, which will presumably limit the exposure to dangerous concentrations. Note : Recommended measures are based on the most likely spillage scenarios for this material; however, local conditions (wind, air temperature, wave / current direction and speed) may significantly influence the choice of appropriate actions.				
For emergency responders	For this reason, local experts should be consulted when necessary. Local regulations may also prescribe or limit actions to be taken. Small spillages: Normal antistatic working clothes are usually adequate. Large spillages: Full body suit of chemically resistant and thermal resistant material should be used. Work gloves providing adequate chemical resistance, specifically to aromatic hydrocarbons. Note: Gloves made of PVA are not water-resistant, and are not suitable for emergency use. Safety helmet, antistatic non-skid safety shoes or boots. Goggles and / or face shield, if splashes or contact with eyes is possible or anticipated. Respiratory Protection : A half or full-face respirator with filter(s) for organic vapours (and when applicable for H <sub>2</sub> S) a Self Contained Breathing Apparatus (SCBA) can be used according to the extent of spill and predictable amount of exposure. If the situation cannot be completely assessed, or if an oxygen deficiency is possible, only SCBA's should be used.				
6.2 Environmental precautions	Prevent product from entering sewers, rivers or other bodies of water. If necessary dike the product with dry earth, sand or similar non-combustible materials. In case of soil contamination, remove contaminated soil and treat in accordance with local regulations. In case of small spillages in closed waters (i.e. ports), contain product with floating barriers or other equipment. Collect spilled product by absorbing with specific floating absorbents. If possible, large spillages in open waters should be contained with floating barriers or other mechanical means. If this is not possible, control the spreading of the spillage, and collect the product by skimming or other suitable mechanical means. The use of dispersants should be advised by an expert, and, if required, approved by local authorities.				
6.3 Methods and material for containment and cleaning	l up				
Small spill	Stop leak if without risk. Absorb spilled product with suitable non-combustible materials.				
Large spill	Large spillages may be cautiously covered with foam, if available, to limit vapour cloud formation. Do not use water jet. When inside buildings or confined spaces, ensure adequate ventilation. Transfer collected product and other contaminated materials to suitable containers for recovery or safe disposal.				
6.4 Reference to other sections	See Section 1: For emergency contact information. See Section 8: For information on appropriate personal protective equipment. See Section 13: For additional waste treatment information.				
Section 7: Handling and Storage					
7.1 Advice on general information – hygiene, storage	Obtain special instructions before use. Keep away from heat / sparks / open flames/hot surfaces. No smoking. Use and store only outdoors or in a well-ventilated area. Hazard of slipping on spilt product. Avoid release to the environment.				
7.2 Conditions for safe storage including any incompatibilities	Storage area layout, tank design, equipment and operating procedures must comply with the relevant regional, national or local legislation. Storage installations should be designed with adequate bunds in case of leaks or spills. Cleaning, inspection and maintenance of internal structure of storage tanks must be done only by properly equipped and qualified personnel as defined by national, local or company regulations. Store separately from oxidising agents. Keep only in the original container or in a suitable container for this kind of product. Keep container tightly closed and sealed until ready for use. Do not store in unlabelled containers. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Empty containers may contain harmful, flammable / combustible or explosive residue or vapours. Do not cut, grind, drill, weld, reuse or dispose of containers unless adequate precautions are taken against these hazards.				
	Protect from sunlight.				



Density Solubility (ies)



Section 8: Exposure Controls / Personal Protect	ction
The list of Identified Uses in Section 1 should be const	ulted for any available use-specific information provided in the Exposure Scenario(s).
8.1 Control parameters	
Occupational exposure limits	
Product / Ingredient name	Distillates, mixture of hydrocarbons
Exposure limits values	AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m <sup>3</sup> 8 hours. Form: mist and fume STEL: 3 mg/m <sup>3</sup> 15 minutes. Form: mist and fume [Air contaminant]. AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m <sup>3</sup> 8 hours. Form: mist and fume STEL: 3 mg/m <sup>3</sup> 15 minutes. Form: mist and fume.
Recommended monitoring procedures	If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres – Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres – Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres – General requirements for the performance of procedures for the measurement of chemical agents). Reference to national guidance documents for methods for the determination of hazardous substances will also be required.
8.2 Exposure control Appropriate engineering controls	Mechanical ventilation and local exhaust will reduce exposure via the air. Use oil resistant material in construction of handling equipment. Store under recommended conditions and if heated, temperature control equipment should be used to avoid overheating.
Individual protection measures	
Hygiene measures	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Ensure that eyewash stations and safety showers are close to the workstation location. Wash contaminated clothing before reuse.
Eye / face protection	Recommended: Safety glasses with side shields.
Skin protection	
Hand protection	4 – 8 hours (breakthrough time): nitrile rubber.
Body protection	Wear protective clothing if there is a risk of skin contact. Change contaminated clothes at the end of working shift.
Other skin protection	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary.
Environmental exposure control	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.
Section 9: Physical and Chemical Properties	
Appearance	Clear
Physical state	Smooth & Butterly
Colour	Yellow / Amber
Odor	Petroleum odor
Odour threshold	Not available
Dropping point	> 180 °C (ASTM D 566)
Flash point	> 205 °C (Mineral Oil)
Evaporation rate	Not available
Flammability (solid, gas)	Not available
Flammability limits in air (lower), % by volume	Not available
Flammability limits in air (upper), % by volume	Not available
Vapour pressure	Not volatile



0.88 – 0.95 kg/L





Solubility (water)		Insoluble in wa	ter			
Partition coefficient (n-octanol/water)		Not available				
Decomposition temperature		No data				
Auto-ignition temperature		Not available				
Worked Penetration at 25°C		310 – 340 (ASTI	M D 217)			
Explosive properties		No data				
Oxidising properties		No data				
DMSO extractable compounds for according to IP346	r base oil substance(s)	Not available <3 %				
Section 10: Stability and Rea	ctivity					
10.1 Reactivity		No specific test	data related to reactivity avail	able for this product or its ingr	edients.	
10.2 Chemical stability			ormal conditions			
10.3 Possibility of hazardous rea	octions	Under normal c	conditions of storage and use, l	hazardous reactions will not o	ccur. Oxidising agent.	
10.4 Conditions to avoid		Keep away from	n extreme heat and oxidising a	igents.		
10.5 Incompatible materials			nbustion is likely to give rise to ses, including carbon monoxic			
10.6 Hazardous decomposition	products		ganic and inorganic compound		,	
SECTION 11: Toxicological In	formation					
11.1 Information on toxicologica	al effects					
Acute toxicity						
Product / ingredient name	Result		Species	Dose	Exposure	
	LC 50 Inhalation due	sts and mists	Rat	>2.18mg/l	4 hours	
Distillate (Petroleum), hydro	LD 50 Derr	nal	Rabbit	> 5000 mg/kg	_	
treated heavy paraffinic	LD 50 Ora	al	Rat	>15000 mg/kg	-	
Irritation / corrosion						
Skin						
Eye		No known significant effects or critical hazards.				
Respiratory		אס אווטאוו שישוווגמות כורכנש טו כוונוגמו וומצמועט.				
Sensation						
Skin						
Respiratory		No known significant effects or critical hazards.				
Mutagenicity		No data available to indicate product or any components present greater than 0.1 % are multigene or genotoxic.				
Carcinogenicity		3 3	in this product is based on an s	overely hydrotreated distillate		
			ould not be regarded as a carc			
Reproductive toxicity			gredient listed as toxic to repro	5		
Specific target organ toxicity – sin		Not classified				
Specific target organ toxicity – rep	beated exposure	A				
Aspiration hazard		Aspiration hazard – Category 1				
Information on likely routes of exp	oosure	Not available				
Potential acute health effects		For and the				
Eye contact     Eye contact may cause redness and transient pain.						
			nhalation of oil mist or vapours at elevated temperatures may cause respiratory irritation.			
Skin contact         No known significant effects or critical hazards.						
Ingestion		May be fatal if s	wallowed and enters airways.			
Potential chronic health effects						
General			ificant effects or critical hazard			
Carcinogenicity		The base oil(s) in this product is based on an severely hydrotreated distillate. The product should not be regarded as a carcinogen.				







Mutagenicity							
,	eratogenicity		significant effects or critical haz	ards.			
Product / ingredient name							
Fertility effects							
Other information Specific hazard		Not availab	le				
Section 12: Ecological Information							
12.1 Toxicity			ed to be harmful to aquatic org	anisms.			
12.2 Persistence and degradability			ntly biodegradable.				
12.3 Bioaccumulative potential				nt because of the low water solu	bility of this product.		
12.4 Mobility in soil		Not considered mobile.					
12.5 Results of PBT & vPvB assessment	:	Not applica					
12.6 Other adverse effects			n water. Spills may form a film of nsfer could also be impaired.	n water surfaces causing physica	al damage to organisms.		
Section 13: Disposal Consideration							
The information in this section contains information provided in the Exposure So	generic advice and enario(s).	d guidance. T	he list of Identified Uses in Sect	ion 1 should be consulted for ar	ny available use-specific		
Product Methods of disposal Where possible (e.g. in the absence of relevant contamination), recycling of used substance is feasible and recommended. This substance can be burned or incinerated, subject to national/lo authorisations, relevant contamination limits, safety regulations and air quality legislation. Cont or waste substance (not directly recyclable): Disposal can be carried out directly, or by delivery t qualified waste handlers. National legislation may identify a specific organisation, and/or prescrict organisation limits and methods for recovery or disposal					subject to national/local ality legislation. Contaminated rectly, or by delivery to		
Hazardous waste		Yes					
European waste catalogue (EWC) Waste	Code 13 03 07*	Waste designation.					
Packaging		Mineral-based non-chlorinated insulating and heat transmission oils.					
Methods of disposal		The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.					
Section 14: Transport Information							
International transport regulations							
	ADR / R	ID	ADN	IMO / IMDG Classification	ICAO / IATA Classification		
14.1 UN number	Not regul	ated	Not regulated	Not regulated	Not regulated		
14.2 UN proper shipping name	_		_	_	_		
14.3 Transport hazard class(es)	_		-	_	_		
14.4 Packing group	_		-	_	_		
14.5 Environmental hazards	No		No	No	No		
Additional Information	_		-	-	-		
14.6 Special precautions for user oils							
14.7 Transport in bulk according to An	nex   of MARPOL	73/78 and th	e IBC Code				
Section 15: Regulatory Informatio							
		slation speci	fic for the substance or mixture	e EU Regulation (EC) No. 1907/	2006 (REACH)		
Annex XIV – List of substances subject to Annex XIV Substances of very high concern	islation specific for the substance or mixture EU Regulation (EC) No. 1907/2006 (REACH) None of the components are listed						
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Australia	Australian Inventory of Chemical Substances (AICS) – Yes						
Canada	Domestic Substances List (DSL) – Yes Non-Domestic Substances List (NDSL) – No						
China			f Existing Chemical Substances				
		inventory o	. Easting chemical substances				







-	European Inventory of Existing Commercial Chemical Substances (EINECS) – Yes			
Europe	European List of Notified Chemical Substances (ELINCS) – No			
Japan	Inventory of Existing and New Chemical Substances (ENCS) – Yes			
Korea	Existing Chemicals List (ECL) – Yes			
New Zealand	New Zealand Inventory – Yes			
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS) – Yes			
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory – Yes			
*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s) A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).				
Section 16: Other Information				
Revision comments				
Legend to abbreviations				
ADR	European agreement concerning the international carriage of dangerous good by road.			
RID	Regulations agreement concerning the international carriage of dangerous good by rail.			
IMDG Code	International Maritime Dangerous Goods Code.			
ICAO	International Civil Aviation Organization.			
IATA	International Air Transport Association.			
GHS	Globally Harmonized System of Classification and Labeling of Chemicals.			
CLP	Classification, Labelling and Packaging Regulation [Regulation (EC) No.1272/2008].			
SCBA	Self-Contained Breathing Apparatus.			
REACH	Registration, Evaluation, Authorization and Restriction of Chemicals Regulation [Regulation (EC) No. 1907/2006].			
LC 50	Median lethal concentration.			
LD 50	Median lethal dose.			
РВТ	Persistent, Bio accumulative and Toxic.			

Regulation (EC) no 1907/2006, Annex II as Amended by Commission Regulation (EU) 2015/830

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Email	info@gandharoil.com	





### **DIVYOL EPX 0 GREASE**

Section 1: Identification of the Substance / Mixture							
1.1 Product identifier							
Product name	Divyol EPX 0 Grea	Divyol EPX 0 Grease					
Product description	Extreme Pressure	Extreme Pressure Grease					
Product type	Grease	Grease					
MARPOL Annex-1	****						
1.2 Identified uses							
Distribution of substance	Automotive & Inc	dustrial Grease					
Formulation & (re)packing of substance & mixtures		Automotive & Industrial Grease					
Manufacture of substance							
		Automotive & Industrial Grease					
Functional fluids     Automotive & Industrial Grease							
Section 2: Hazard Identification							
4-Extreme	Health		1				
3-High	Flammability		1				
2-Moderate	Reactivity		0	0			
1-Slight	Special		-				
Section 3: Compostion / Information on Ingredients							
Chemical Name / Ingredients	% by wt.	Hazardous		CAS No.			
Lithium Hydroxide	02 - 1.5	Yes		1310-66-3			
Mineral Oil	88 - 98	Yes		64742-52-5, 64741-88-4, 64742-54-7, 64742-01-4			
12 HSA	1-5	No		106-14-9			
HCO Additives	0 - 4	No Yes		8001-78-3 68511-50-2			
Mix Additives	0 - 25	Yes		Proprietary Mixture			
Zinc dialkyldithiophosphate	0 - 1.5	Yes		68457-79-4			
Product / Ingredient name	Lithium soaps inc	om natural fatty su	JDSLa	inces			
Section 4: First Aid Measures		· • · · ·					
Inhalation exposure		Remove to fresh air & provide oxygen, if breathing is difficult. Contact physician					
Skin contact		Remove contaminated clothing. Flush skin with water. Wash skin thoroughly with mild soap & water. If irritation occurs, call a physician.					
Swallowing or other		Do not induce vomiting. In general no treatment is necessary unless large quantities are ingested. Get medical advice.					
Eye contact	Rinse continuous	Rinse continuously with water for several minutes. Get medical attention, if irritation persists.					
Protection first-aiders		Disconnecting electrical supply. Ensure adequate ventilation and check that a safe and breathing area is available before entry into confined spaces.					
Section 5: Fire Fighting Measures							
5.1 Extinguishing media							
Unsuitable extinguishing media		Use dry powder, foam, carbon dioxide. Do not use direct water and wet chemicals, or water on the burning product. They may spread the fire. Use foam simultaneously on the surface.					
5.2 Special hazards arising from the substance or mixing	ture						
Hazards from the substance or mixture		Flammable liquids in pressurised containers may rupture and when exposed to heat, creating a highly flammable vapour cloud.					
Hazardous thermal decomposition products	particulates, gase	Incomplete combustion is likely to give rise to a complex mixture of airborne solid and liquid particulates, gases, including carbon monoxide, H <sub>2</sub> S, SO <sub>x</sub> (sulphur oxides) or sulphuric acid and unidentified organic and inorganic compounds.					
5.3 Advice for firefighters							
Special precautions for firefighters		Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.					
Special protective equipment for firefighters	Firefighters shou (SCBA) with a full helmets, protecti	Firefighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face- piece operated in positive pressure mode. Clothing for firefighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.					





6.1. Personal precautions, protective equipment and emergency procedures					
6.1 Personal precautions, protective equipment and emergency procedures					
For non-emergency personnel	Keep non-involved personnel away from the area of spillage. Alert emergency personnel. Except in case of small spillages, the feasibility of any actions should always be assessed and advised, if possible, by a trained, competent person in charge of managing the emergency. Stop leak if safe to do so. Avoid direct contact with the product. Stay upwind / keep distance from source. In case of large spillages, alert occupants in downwind areas. Eliminate all ignition sources if safe to do so. Spillages of limited amounts of product, especially in the open air when vapours will be usually quickly dispersed, are dynamic situations, which will presumably limit the exposure to dangerous concentrations. Note : Recommended measures are based on the most likely spillage scenarios for this material; however, local conditions (wind, air temperature, wave / current direction and speed) may significantly influence the choice of appropriate actions.				
For emergency responders	For this reason, local experts should be consulted when necessary. Local regulations may also prescribe or limit actions to be taken. Small spillages: Normal antistatic working clothes are usually adequate. Large spillages: Full body suit of chemically resistant and thermal resistant material should be used. Work gloves providing adequate chemical resistance, specifically to aromatic hydrocarbons. Note: Gloves made of PVA are not water-resistant, and are not suitable for emergency use. Safety helmet, antistatic non-skid safety shoes or boots. Goggles and / or face shield, if splashes or contact with eyes is possible or anticipated. Respiratory Protection : A half or full-face respirator with filter(s) for organic vapours (and when applicable for H <sub>2</sub> S) a Self Contained Breathing Apparatus (SCBA) can be used according to the extent of spill and predictable amount of exposure. If the situation cannot be completely assessed, or if an oxygen deficiency is possible, only SCBA's should be used.				
6.2 Environmental precautions	Prevent product from entering sewers, rivers or other bodies of water. If necessary dike the product with dry earth, sand or similar non-combustible materials. In case of soil contamination, remove contaminated soil and treat in accordance with local regulations. In case of small spillages in closed waters (i.e. ports), contain product with floating barriers or other equipment. Collect spilled product by absorbing with specific floating absorbents. If possible, large spillages in open waters should be contained with floating barriers or other mechanical means. If this is not possible, control the spreading of the spillage, and collect the product by skimming or other suitable mechanical means. The use of dispersants should be advised by an expert, and, if required, approved by local authorities.				
6.3 Methods and material for containment and cleaning	up				
Small spill	Stop leak if without risk. Absorb spilled product with suitable non-combustible materials.				
Large spill	Large spillages may be cautiously covered with foam, if available non-compositive inactination. Do not use water jet. When inside buildings or confined spaces, ensure adequate ventilation. Transfer collected product and other contaminated materials to suitable containers for recovery or safe disposal.				
6.4 Reference to other sections	See Section 1: For emergency contact information. See Section 8: For information on appropriate personal protective equipment. See Section 13: For additional waste treatment information.				
Section 7: Handling and Storage					
7.1 Advice on general information – hygiene, storage	Obtain special instructions before use. Keep away from heat / sparks / open flames/hot surfaces. No smoking. Use and store only outdoors or in a well-ventilated area. Hazard of slipping on spilt product. Avoid release to the environment.				
7.2 Conditions for safe storage including any incompatibilities	Storage area layout, tank design, equipment and operating procedures must comply with the relevant regional, national or local legislation. Storage installations should be designed with adequate bunds in case of leaks or spills. Cleaning, inspection and maintenance of internal structure of storage tanks must be done only by properly equipped and qualified personnel as defined by national, local or company regulations. Store separately from oxidising agents. Keep only in the original container or in a suitable container for this kind of product. Keep container tightly closed and sealed until ready for use. Do not store in unlabelled containers. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Empty containers may contain harmful, flammable / combustible or explosive residue or vapours. Do not cut, grind, drill, weld, reuse or dispose of containers unless adequate precautions are taken against these hazards. Protect from sunlight.				
7.3 Specific end use(s) – Recommendations	Not available				



Density Solubility (ies)



Section 8: Exposure Controls / Personal Protect	tion	
The list of Identified Uses in Section 1 should be consu	ulted for any available use-specific information provided in the Exposure Scenario(s).	
8.1 Control parameters		
Occupational exposure limits		
Product / Ingredient name	Distillates, mixture of hydrocarbons	
Exposure limits values	AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m <sup>3</sup> 8 hours. Form: mist and fume STEL: 3 mg/m <sup>3</sup> 15 minutes. Form: mist and fume [Air contaminant]. AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m <sup>3</sup> 8 hours. Form: mist and fume STEL: 3 mg/m <sup>3</sup> 15 minutes. Form: mist and fume.	
Recommended monitoring procedures	If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres – Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres – Guide for the application and use of procedures for the assessment of exposure to chemical agents for the performance of procedures for the measurement of chemical agents). Reference to national guidance documents for methods for the determination of hazardous substances will also be required.	
8.2 Exposure control Appropriate engineering controls	Mechanical ventilation and local exhaust will reduce exposure via the air. Use oil resistant material in construction of handling equipment. Store under recommended conditions and if heated, temperature control equipment should be used to avoid overheating.	
Individual protection measures		
Hygiene measures	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Ensure that eyewash stations and safety showers are close to the workstation location. Wash contaminated clothing before reuse.	
Eye / face protection	Recommended: Safety glasses with side shields.	
Skin protection		
Hand protection	4 – 8 hours (breakthrough time): nitrile rubber.	
Body protection	Wear protective clothing if there is a risk of skin contact. Change contaminated clothes at the end of working shift.	
Other skin protection	Appropriate footwear and any additional skin protection measures should be selected based on th task being performed and the risks involved and should be approved by a specialist before handlin this product.	
Respiratory protection	Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary.	
Environmental exposure control	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.	
Section 9: Physical and Chemical Properties		
Appearance	Clear	
Physical state	Semifluid & Smooth	
Colour	Yellow / Amber	
Odor	Petroleum odor	
Odour threshold	Not available	
Dropping point	> 180 °C (ASTM D 2265)	
Flash point	> 205 °C (Mineral Oil)	
Evaporation rate	Not available	
Flammability (solid, gas)	Not available	
Flammability limits in air (lower), % by volume	Not available	
Flammability limits in air (upper), % by volume	Not available	
Vapour pressure	Not volatile	



0.880 – 0.950 kg/L





Solubility (water)		Insoluble in wa	ter			
Partition coefficient (n-octanol/water)		Not available				
, , ,		No data				
Auto-ignition temperature		Not available				
Worked Penetration at 25°C		355 – 385 (ASTI	M D 217)			
Explosive properties		No data				
Oxidising properties		No data				
DMSO extractable compounds fo	r base oil substance(s)	Not available				
according to IP346		<3 %				
Section 10: Stability and Rea	ctivity	1				
10.1 Reactivity		No specific test	data related to reactivity avail	able for this product or its ingr	redients.	
10.2 Chemical stability			ormal conditions			
10.3 Possibility of hazardous rea	actions	Under normal c	conditions of storage and use,	hazardous reactions will not o	ccur. Oxidising agent.	
10.4 Conditions to avoid		Keep away fron	n extreme heat and oxidising a	agents.		
10.5 Incompatible materials		Incomplete con particulates, ga	nbustion is likely to give rise to ses, including carbon monoxic	o a complex mixture of airborn de, H₂S, SO <sub>x</sub> (sulphur oxides) or	e solid and liquid sulphuric acid and	
10.6 Hazardous decomposition	products		ganic and inorganic compound			
SECTION 11: Toxicological In	formation					
11.1 Information on toxicologica	al effects					
Acute toxicity						
Product / ingredient name	Result		Species	Dose	Exposure	
	LC 50 Inhalation due	sts and mists	Rat	>2.18mg/l	4 hours	
Distillate (Petroleum), hydro	LD 50 Derr	mal	Rabbit	> 5000 mg/kg	-	
treated heavy paraffinic	LD 50 Or	al	Rat	>15000 mg/kg	-	
Irritation / corrosion	1		·			
Skin						
Eye		No known significant effects or critical hazards.				
Respiratory						
Sensation						
Skin						
Respiratory		No known significant effects or critical hazards.				
Mutagenicity		No data available to indicate product or any components present greater than 0.1 % are				
		multigene or ge		an an an ha ba ada an		
Carcinogenicity			•	severely hydrotreated distillate		
Reproductive toxicity			ould not be regarded as a carc predient listed as toxic to repro	5		
Specific target organ toxicity – sin		Not classified				
Specific target organ toxicity – rep	peated exposure	NOT CLASSIFIED				
Aspiration hazard		Aspiration hazard – Category 1				
Information on likely routes of exp	posure	Not available				
Potential acute health effects						
Eye contact		Eye contact may cause redness and transient pain.				
Inhalation		Inhalation of oil mist or vapours at elevated temperatures may cause respiratory irritation.				
Skin contact		No known sign	ificant effects or critical hazard	ls.		
Ingestion		May be fatal if s	wallowed and enters airways.			
Potential chronic health effects						
General		No known significant effects or critical hazards.				
Carcinogenicity		The base oil(s) in this product is based on an severely hydrotreated distillate. The product should not be regarded as a carcinogen.				







Mutagenicity						
Teratogenicity						
Product / ingredient name		No known s	significant effects or critical haza	ards.		
Fertility effects						
Other information Specific hazard		Not availab	٩			
Section 12: Ecological Information		NOT availab				
12.1 Toxicity		Not expect	ad to be barmful to aquatic area	anisms		
-		-	Not expected to be harmful to aquatic organisms.			
12.2 Persistence and degradability 12.3 Bioaccumulative potential		Not inherently biodegradable. Bioaccumulation is unlikely to be significant because of the low water solubility of this product.				
12.4 Mobility in soil		Not considered mobile.				
12.5 Results of PBT & vPvB assessment		Not applica				
	•		water. Spills may form a film or	n water surfaces causing physic	al damage to organisms	
12.6 Other adverse effects			nsfer could also be impaired.	i water surfaces causing physic	ar admage to organisms.	
Section 13: Disposal Consideration	ns					
The information in this section contains information provided in the Exposure So		d guidance. T	he list of Identified Uses in Secti	ion 1 should be consulted for ar	ny available use-specific	
Product Methods of disposal		Where possible (e.g. in the absence of relevant contamination), recycling of used substance is feasible and recommended. This substance can be burned or incinerated, subject to national/local authorisations, relevant contamination limits, safety regulations and air quality legislation. Contaminated or waste substance (not directly recyclable): Disposal can be carried out directly, or by delivery to qualified waste handlers. National legislation may identify a specific organisation, and/or prescribe composition limits and methods for recovery or disposal				
Hazardous waste		Yes				
European waste catalogue (EWC) Waste	Code 13 03 07*	Waste designation.				
Packaging		Mineral-based non-chlorinated insulating and heat transmission oils.				
Methods of disposal		The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.				
Section 14: Transport Information						
International transport regulations						
	ADR / R	ID	ADN	IMO / IMDG Classification	ICAO / IATA Classification	
14.1 UN number	Not regul	ated	Not regulated	Not regulated	Not regulated	
14.2 UN proper shipping name	_		-	-	-	
14.3 Transport hazard class(es)	-		-	-	-	
14.4 Packing group	-		-	-	-	
14.5 Environmental hazards	No		No	No	No	
Additional Information	_		-	-	-	
14.6 Special precautions for user oils						
14.7 Transport in bulk according to An	nex I of MARPOL	73/78 and th	e IBC Code			
Section 15: Regulatory Informatio						
15.1 Safety, health and environmental		slation speci	fic for the substance or mixture	e EU Regulation (EC) No. 1907/	(2006 (REACH)	
Annex XIV – List of substances subject to authorisation Annex XIV Substances of very high concern		None of the components are listed				
Annex XVII – Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles.		Not applicable				
International Lists National Inventory		Inventory name				
Australia		Australian I	nventory of Chemical Substanc	es (AICS) – Yes		
Canada		Domestic Substances List (DSL) – Yes Non-Domestic Substances List (NDSL) – No				
China		Inventory of Existing Chemical Substances in China (IECSC) – Yes				
China						







_	European Inventory of Existing Commercial Chemical Substances (EINECS) – Yes			
Europe	European List of Notified Chemical Substances (ELINCS) – No			
Japan	Inventory of Existing and New Chemical Substances (ENCS) – Yes			
Korea	Existing Chemicals List (ECL) – Yes			
New Zealand	New Zealand Inventory – Yes			
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS) – Yes			
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory – Yes			
	oly with the inventory requirements administered by the governing country(s) uct are not listed or exempt from listing on the inventory administered by the governing country(s).			
Section 16: Other Information				
Revision comments				
Legend to abbreviations				
ADR	European agreement concerning the international carriage of dangerous good by road.			
RID	Regulations agreement concerning the international carriage of dangerous good by rail.			
IMDG Code	International Maritime Dangerous Goods Code.			
ICAO	International Civil Aviation Organization.			
IATA	International Air Transport Association.			
GHS	Globally Harmonized System of Classification and Labeling of Chemicals.			
CLP	Classification, Labelling and Packaging Regulation [Regulation (EC) No.1272/2008].			
SCBA	Self-Contained Breathing Apparatus.			
REACH	Registration, Evaluation, Authorization and Restriction of Chemicals Regulation [Regulation (EC) No. 1907/2006].			
LC 50	Median lethal concentration.			
LD 50	Median lethal dose.			
PBT	Persistent, Bio accumulative and Toxic.			

GANDHAR OIL REFINERY (INDIA) LTD.				
Taloja Plant         Plot No.10, MIDC, Main Road, Taloja, Taluka Panvel, District - Raigad 410208, India.				
Silvassa Plant	ot No. 2, Survey No. 678/1/3, Village Naroli, Near Naroli Check Post, Silvassa, Dadra & Nagar Haveli, Union Territory 396230, India.			
Emergency / Info Phone No.	Phone: +91-22-40635600 • Fax: +91-22-40635601			
Email	info@gandharoil.com			





## **DIVYOL EPX 00 GREASE**

Section 1: Identification of the Substance / Mixt	ure				
1.1 Product identifier					
Product name	Divvol EPX 00 Gr	Divyol EPX 00 Grease			
Product description		Extreme Pressure Grease			
Product type	Grease				
MARPOL Annex-1	****				
1.2 Identified uses					
Distribution of substance	Automotive & Ind				
Formulation & (re)packing of substance & mixtures	Automotive & Ind	dustrial Grease			
Manufacture of substance	Automotive & Ind	dustrial Grease			
Functional fluids	Automotive & Ind	dustrial Grease			
Section 2: Hazard Identification					
4-Extreme	Health		1		
3-High	Flammability		1		
2-Moderate	Reactivity		0		
1-Slight	Special		_		
Section 3: Compostion / Information on Ingredi					
				CACH	
Chemical Name / Ingredients Lithium Hydroxide	% by wt. 02 - 1.5	Hazardous Yes		CAS No. 1310-66-3	
Mineral Oil	88 - 98	Yes		64742-52-5, 64741-88-4, 64742-54-7, 64742-01-4	
12 HSA	1 - 5	No		106-14-9	
НСО	0 - 4	No		8001-78-3	
Additives	0 - 2	Yes		68511-50-2	
Mix Additives	0 - 25	Yes		Proprietary Mixture	
Zinc dialkyldithiophosphate	0 - 1.5	Yes		68457-79-4	
Product / Ingredient name	Lithium soaps fro	om natural fatty su	ubsta	ances	
Section 4: First Aid Measures					
Inhalation exposure	Remove to fresh	air & provide oxyo	gen,	if breathing is difficult. Contact physician	
Skin contact	Remove contami	Remove contaminated clothing. Flush skin with water. Wash skin thoroughly with mild soap & water. If irritation occurs, call a physician.			
Swallowing or other	Do not induce vo Get medical advi		l no	treatment is necessary unless large quantities are ingested.	
Eye contact	Rinse continuous	sly with water for	seve	ral minutes. Get medical attention, if irritation persists.	
Protection first-aiders		ectrical supply. Er entry into confine		e adequate ventilation and check that a safe and breathing area is aces.	
Section 5: Fire Fighting Measures					
5.1 Extinguishing media					
Unsuitable extinguishing media				Do not use direct water and wet chemicals, or water on the fire. Use foam simultaneously on the surface.	
5.2 Special hazards arising from the substance or mix	<b>e</b> .			-	
Hazards from the substance or mixture			onta	ainers may rupture and when exposed to heat, creating a highly	
Hazardous thermal decomposition products	particulates, gase	Incomplete combustion is likely to give rise to a complex mixture of airborne solid and liquid particulates, gases, including carbon monoxide, $H_2S$ , $SO_x$ (sulphur oxides) or sulphuric acid and unidentified organic and inorganic compounds.			
5.3 Advice for firefighters					
Special precautions for firefighters	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.				
Special protective equipment for firefighters	Firefighters shou (SCBA) with a full helmets, protecti	Action shall be taken involving any personal risk or without suitable training. Firefighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face- piece operated in positive pressure mode. Clothing for firefighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.			





6.1 Personal precautions, protective equipment and em	ergency procedures
processie equipment and em	Keep non-involved personnel away from the area of spillage.
For non-emergency personnel	Alert emergency personnel. Except in case of small spillages, the feasibility of any actions should always be assessed and advised, if possible, by a trained, competent person in charge of managing the emergency. Stop leak if safe to do so. Avoid direct contact with the product. Stay upwind / keep distance from source. In case of large spillages, alert occupants in downwind areas. Eliminate all ignition sources if safe to do so. Spillages of limited amounts of product, especially in the open air when vapours will be usually quickly dispersed, are dynamic situations, which will presumably limit the exposure to dangerous concentrations. Note : Recommended measures are based on the most likely spillage scenarios for this material; however, local conditions (wind, air temperature, wave / current direction and speed) may significantly influence the choice of appropriate actions.
For emergency responders	For this reason, local experts should be consulted when necessary. Local regulations may also prescribe or limit actions to be taken. Small spillages: Normal antistatic working clothes are usually adequate. Large spillages: Full body suit of chemically resistant and thermal resistant material should be used. Work gloves providing adequate chemical resistance, specifically to aromatic hydrocarbons. Note: Gloves made of PVA are not water-resistant, and are not suitable for emergency use. Safety helmet, antistatic non-skid safety shoes or boots. Goggles and / or face shield, if splashes or contact with eyes is possible or anticipated. Respiratory Protection : A half or full-face respirator with filter(s) for organic vapours (and when applicable for H <sub>2</sub> S) a Self Contained Breathing Apparatus (SCBA) can be used according to the extent of spill and predictable amount of exposure. If the situation cannot be completely assessed, or if an oxygen deficiency is possible, only SCBA's should be used.
6.2 Environmental precautions	Prevent product from entering sewers, rivers or other bodies of water. If necessary dike the product with dry earth, sand or similar non-combustible materials. In case of soil contamination, remove contaminated soil and treat in accordance with local regulations. In case of small spillages in closed waters (i.e. ports), contain product with floating barriers or other equipment. Collect spilled product by absorbing with specific floating absorbents. If possible, large spillages in open waters should be contained with floating barriers or other mechanical means. If this is not possible, control the spreading of the spillage, and collect the product by skimming or other suitable mechanical means. The use of dispersants should be advised by an expert, and, if required, approved by local authorities.
6.3 Methods and material for containment and cleaning	l up
Small spill	Stop leak if without risk. Absorb spilled product with suitable non-combustible materials.
Large spill	Large spillages may be cautiously covered with foam, if available, to limit vapour cloud formation. Do not use water jet. When inside buildings or confined spaces, ensure adequate ventilation. Transfer collected product and other contaminated materials to suitable containers for recovery or safe disposal.
6.4 Reference to other sections	See Section 1: For emergency contact information. See Section 8: For information on appropriate personal protective equipment. See Section 13: For additional waste treatment information.
Section 7: Handling and Storage	
7.1 Advice on general information – hygiene, storage	Obtain special instructions before use. Keep away from heat / sparks / open flames/hot surfaces. No smoking. Use and store only outdoors or in a well-ventilated area. Hazard of slipping on spilt product. Avoid release to the environment.
7.2 Conditions for safe storage including any incompatibilities	Storage area layout, tank design, equipment and operating procedures must comply with the relevant regional, national or local legislation. Storage installations should be designed with adequate bunds in case of leaks or spills. Cleaning, inspection and maintenance of internal structure of storage tanks must be done only by properly equipped and qualified personnel as defined by national, local or company regulations. Store separately from oxidising agents. Keep only in the original container or in a suitable container for this kind of product. Keep container tightly closed and sealed until ready for use. Do not store in unlabelled containers. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Empty containers may contain harmful, flammable / combustible or explosive residue or vapours. Do not cut, grind, drill, weld, reuse or dispose of containers unless adequate precautions are taken against these hazards.
	Protect from sunlight.



Density Solubility (ies)



Section 8: Exposure Controls / Personal Protect	ction	
The list of Identified Uses in Section 1 should be consu	ulted for any available use-specific information provided in the Exposure Scenario(s).	
8.1 Control parameters		
Occupational exposure limits		
Product / Ingredient name	Distillates, mixture of hydrocarbons	
Exposure limits values	AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m <sup>3</sup> 8 hours. Form: mist and fume STEL: 3 mg/m <sup>3</sup> 15 minutes. Form: mist and fume [Air contaminant]. AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m <sup>3</sup> 8 hours. Form: mist and fume STEL: 3 mg/m <sup>3</sup> 15 minutes. Form: mist and fume.	
Recommended monitoring procedures	If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres – Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres – Guide for the application and use of procedures for the assessment of exposure to chemical agents for the performance of procedures for the measurement of chemical agents). Reference to national guidance documents for methods for the determination of hazardous substances will also be required.	
8.2 Exposure control Appropriate engineering controls	Mechanical ventilation and local exhaust will reduce exposure via the air. Use oil resistant material in construction of handling equipment. Store under recommended conditions and if heated, temperature control equipment should be used to avoid overheating.	
Individual protection measures		
Hygiene measures	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Ensure that eyewash stations and safety showers are close to the workstation location. Wash contaminated clothing before reuse.	
Eye / face protection	Recommended: Safety glasses with side shields.	
Skin protection		
Hand protection	4 – 8 hours (breakthrough time): nitrile rubber.	
Body protection	Wear protective clothing if there is a risk of skin contact. Change contaminated clothes at the end of working shift.	
Other skin protection	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handlin this product.	
Respiratory protection	Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary.	
Environmental exposure control	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.	
Section 9: Physical and Chemical Properties		
Appearance	Clear	
Physical state	Semifluid & Smooth	
Colour	Yellow / Amber	
Odor	Petroleum odor	
Odour threshold	Not available	
Dropping point	> 170 °C (ASTM D 2265)	
Flash point	> 205 °C (Mineral Oil)	
Evaporation rate	Not available	
Flammability (solid, gas)	Not available	
Flammability limits in air (lower), % by volume	Not available	
Flammability limits in air (upper), % by volume	Not available	
Vapour pressure	Not volatile	



0.880 – 0.950 kg/L





Solubility (water)		Insoluble in wa	ter			
Partition coefficient (n-octanol/water)		Not available				
· · · · · · · · · · · · · · · · · · ·		No data				
Auto-ignition temperature		Not available				
Worked Penetration at 25°C		400 – 430 (ASTI	M D 217)			
Explosive properties		No data				
Oxidising properties		No data				
DMSO extractable compounds fo	r base oil substance(s)	Not available				
according to IP346		<3 %				
Section 10: Stability and Rea	ictivity					
10.1 Reactivity			data related to reactivity availa	able for this product or its ingr	redients.	
10.2 Chemical stability			ormal conditions			
10.3 Possibility of hazardous rea	actions		conditions of storage and use, I		ccur. Oxidising agent.	
10.4 Conditions to avoid		Keep away from	n extreme heat and oxidising a	gents.		
10.5 Incompatible materials			nbustion is likely to give rise to ses, including carbon monoxic			
10.6 Hazardous decomposition	products	unidentified or	ganic and inorganic compound	ds.		
SECTION 11: Toxicological In	formation					
11.1 Information on toxicologica	al effects					
Acute toxicity						
Product / ingredient name	Result		Species	Dose	Exposure	
	LC 50 Inhalation due	sts and mists	Rat	>2.18mg/l	4 hours	
Distillate (Petroleum), hydro treated heavy paraffinic	LD 50 Derr	mal	Rabbit	> 5000 mg/kg	-	
treated heavy paraminic	LD 50 Ora	al	Rat	>15000 mg/kg	-	
Irritation / corrosion			·			
Skin						
Eye		No known significant effects or critical hazards.				
Respiratory						
Sensation						
Skin		No known significant effects or critical hazards.				
Respiratory						
		No data available to indicate product or any components present greater than 0.1 % are				
Mutagenicity		multigene or ge	enotoxic.			
Carcinogenicity			n this product is based on an s		l	
Reproductive toxicity		The product should not be regarded as a carcinogen. Contains no ingredient listed as toxic to reproduction.				
Specific target organ toxicity – sir	igle exposure	Not classified				
Specific target organ toxicity – rep	peated exposure	Not classified				
Aspiration hazard		Aspiration hazard – Category 1				
Information on likely routes of ex	posure	Not available				
Potential acute health effects						
Eye contact		Eye contact may cause redness and transient pain.				
Inhalation		Inhalation of oi	I mist or vapours at elevated te	emperatures may cause respira	atory irritation.	
Skin contact			ificant effects or critical hazard			
Ingestion			wallowed and enters airways.			
Potential chronic health effects						
General		No known significant effects or critical hazards.				
Carcinogenicity		The base oil(s) in this product is based on an severely hydrotreated distillate. The product should not be regarded as a carcinogen.				
		- Jan Lea ab a e				







Mutagenicity						
eratogenicity		No known s	significant effects or critical haz	ards.		
Product / ingredient name						
Fertility effects		Not such the la	1-			
Other information Specific hazard		Not availab	le			
Section 12: Ecological Information						
12.1 Toxicity		Not expected to be harmful to aquatic organisms.				
12.2 Persistence and degradability		Not inherently biodegradable. Bioaccumulation is unlikely to be significant because of the low water solubility of this product.				
12.3 Bioaccumulative potential				nt because of the low water solu	bility of this product.	
12.4 Mobility in soil			ered mobile.			
12.5 Results of PBT & vPvB assessment	:	Not applica				
12.6 Other adverse effects			n water. Spills may form a film of nsfer could also be impaired.	n water surfaces causing physica	al damage to organisms.	
Section 13: Disposal Consideration						
The information in this section contains information provided in the Exposure So	generic advice and enario(s).	d guidance. T	he list of Identified Uses in Sect	ion 1 should be consulted for ar	ny available use-specific	
Product Methods of disposal         Where possible (e.g. in the absence of relevant contamination), recycling of use feasible and recommended. This substance can be burned or incinerated, subject authorisations, relevant contamination limits, safety regulations and air quality or waste substance (not directly recyclable): Disposal can be carried out directly qualified waste handlers. National legislation may identify a specific organisatio composition limits and methods for recovery or disposal			subject to national/local ality legislation. Contaminated rectly, or by delivery to			
Hazardous waste		Yes				
European waste catalogue (EWC) Waste Code 13 03 07*		Waste designation.				
Packaging		Mineral-based non-chlorinated insulating and heat transmission oils.				
Methods of disposal	Methods of disposal		The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.			
Section 14: Transport Information						
International transport regulations						
	ADR / R	ID	ADN	IMO / IMDG Classification	ICAO / IATA Classification	
14.1 UN number	Not regul	ated	Not regulated	Not regulated	Not regulated	
14.2 UN proper shipping name	_		_	_	_	
14.3 Transport hazard class(es)	_		-	_	_	
14.4 Packing group	_		-	_	_	
14.5 Environmental hazards	No		No	No	No	
Additional Information	_		-	-	-	
14.6 Special precautions for user oils						
14.7 Transport in bulk according to An	nex   of MARPOL	73/78 and th	e IBC Code			
Section 15: Regulatory Informatio						
15.1 Safety, health and environmental		slation speci	fic for the substance or mixture	e EU Regulation (EC) No. 1907/	2006 (REACH)	
Annex XIV – List of substances subject to authorisation Annex XIV Substances of very high concern		None of the components are listed				
Annex XVII – Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles.		Not applicable				
International Lists National Inventory		Inventory name				
Australia		Australian Inventory of Chemical Substances (AICS) – Yes				
Canada		Domestic Substances List (DSL) – Yes Non-Domestic Substances List (NDSL) – No				
China		Inventory of Existing Chemical Substances in China (IECSC) – Yes				
		inventory o	. Easting chemical substances			







_	European Inventory of Existing Commercial Chemical Substances (EINECS) – Yes			
Europe	European List of Notified Chemical Substances (ELINCS) – No			
Japan	Inventory of Existing and New Chemical Substances (ENCS) – Yes			
Korea	Existing Chemicals List (ECL) – Yes			
New Zealand	New Zealand Inventory – Yes			
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS) – Yes			
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory – Yes			
	oly with the inventory requirements administered by the governing country(s) uct are not listed or exempt from listing on the inventory administered by the governing country(s).			
Section 16: Other Information				
Revision comments				
Legend to abbreviations				
ADR	European agreement concerning the international carriage of dangerous good by road.			
RID	Regulations agreement concerning the international carriage of dangerous good by rail.			
IMDG Code	International Maritime Dangerous Goods Code.			
ICAO	International Civil Aviation Organization.			
IATA	International Air Transport Association.			
GHS	Globally Harmonized System of Classification and Labeling of Chemicals.			
CLP	Classification, Labelling and Packaging Regulation [Regulation (EC) No.1272/2008].			
SCBA	Self-Contained Breathing Apparatus.			
REACH	Registration, Evaluation, Authorization and Restriction of Chemicals Regulation [Regulation (EC) No. 1907/2006].			
LC 50	Median lethal concentration.			
LD 50	Median lethal dose.			
PBT	Persistent, Bio accumulative and Toxic.			

GANDHAR OIL REFINERY (INDIA) LTD.				
Taloja Plant         Plot No.10, MIDC, Main Road, Taloja, Taluka Panvel, District - Raigad 410208, India.				
Silvassa Plant	ot No. 2, Survey No. 678/1/3, Village Naroli, Near Naroli Check Post, Silvassa, Dadra & Nagar Haveli, Union Territory 396230, India.			
Emergency / Info Phone No.	Phone: +91-22-40635600 • Fax: +91-22-40635601			
Email	info@gandharoil.com			





## **DIVYOL EPX 000 GREASE**

Section 1: Identification of the Substance / Mixe	ture				
1.1 Product identifier					
Product name	uct name Divyol EPX 000 Grease				
Product description	Extreme Pressure				
Product type	Grease				
MARPOL Annex-1	****				
1.2 Identified uses					
	Automotive & Inc				
Distribution of substance					
Formulation & (re)packing of substance & mixtures	Automotive & Ind				
Manufacture of substance	Automotive & Ind				
Functional fluids	Automotive & Ind	dustrial Grease			
Section 2: Hazard Identification					
4-Extreme	Health		1		
3-High	Flammability		1		
2-Moderate	Reactivity		0		
1-Slight	Special		-		
Section 3: Compostion / Information on Ingred					
Chemical Name / Ingredients	% by wt.	Hazardous		CAS No.	
Lithium Hydroxide	0.2 - 1.5	Yes		1310-66-3	
Mineral Oil	88 - 98	Yes		64742-52-5, 64741-88-4, 64742-54-7, 64742-01-4	
12 HSA	1 - 5	No		106-14-9	
НСО	0 - 4	No		8001-78-3	
Additives	0 - 2	Yes		68511-50-2	
Mix Additives	0 - 25	Yes		Proprietary Mixture	
Zinc dialkyldithiophosphate	0 - 1.5	Yes		68457-79-4	
Product / Ingredient name	Lithium soaps fro	om natural fatty su	ubsta	ances	
Section 4: First Aid Measures					
Inhalation exposure	Remove to fresh	Remove to fresh air & provide oxygen, if breathing is difficult. Contact physician			
Skin contact		Remove contaminated clothing. Flush skin with water. Wash skin thoroughly with mild soap & water. If irritation occurs, call a physician.			
Swallowing or other		Do not induce vomiting. In general no treatment is necessary unless large quantities are ingested. Get medical advice.			
Eye contact	Rinse continuous	sly with water for	seve	ral minutes. Get medical attention, if irritation persists.	
Protection first-aiders		Disconnecting electrical supply. Ensure adequate ventilation and check that a safe and breathing area is available before entry into confined spaces.			
Section 5: Fire Fighting Measures					
5.1 Extinguishing media					
Unsuitable extinguishing media				Do not use direct water and wet chemicals, or water on the fire. Use foam simultaneously on the surface.	
5.2 Special hazards arising from the substance or mix					
Hazards from the substance or mixture			onta	ainers may rupture and when exposed to heat, creating a highly	
Hazardous thermal decomposition products	particulates, gase	Incomplete combustion is likely to give rise to a complex mixture of airborne solid and liquid particulates, gases, including carbon monoxide, H <sub>2</sub> S, SO <sub>x</sub> (sulphur oxides) or sulphuric acid and unidentified organic and inorganic compounds.			
5.3 Advice for firefighters					
Special precautions for firefighters	Promotivi isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No				
Special protective equipment for firefighters	Firefighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face- piece operated in positive pressure mode. Clothing for firefighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.				





For non-emergency personnel	Keep non-involved personnel away from the area of spillage. Alert emergency personnel. Except in case of small spillages, the feasibility of any actions should always be assessed and advised, if possible, by a trained, competent person in charge of managing the emergency. Stop leak if safe to do so. Avoid direct contact with the product. Stay upwind / keep distance from source. In case of large spillages, alert occupants in downwind areas. Eliminate all ignition sources if safe to do so. Spillages of limited amounts of product, especially in the open air when vapours will be usually quickly dispersed, are dynamic situations, which will presumably limit the exposure to dangerous concentrations. Note : Recommended measures are based on the most likely spillage scenarios for this material; however, local conditions (wind, air temperature, wave / current direction and speed) may significantly influence the choice of appropriate actions.
For emergency responders	For this reason, local experts should be consulted when necessary. Local regulations may also prescribe or limit actions to be taken. Small spillages: Normal antistatic working clothes are usually adequate. Large spillages: Full body suit of chemically resistant and thermal resistant material should be used. Work gloves providing adequate chemical resistance, specifically to aromatic hydrocarbons. Note: Gloves made of PVA are not water-resistant, and are not suitable for emergency use. Safety helmet, antistatic non-skid safety shoes or boots. Goggles and / or face shield, if splashes or contact with eyes is possible or anticipated. Respiratory Protection : A half or full-face respirator with filter(s) for organic vapours (and when applicable for H <sub>2</sub> S) a Self Contained Breathing Apparatus (SCBA) can be used according to the extent of spill and predictable amount of exposure. If the situation cannot be completely assessed, or if an oxygen deficiency is possible, only SCBA's should be used.
6.2 Environmental precautions	Prevent product from entering sewers, rivers or other bodies of water. If necessary dike the product with dry earth, sand or similar non-combustible materials. In case of soil contamination, remove contaminated soil and treat in accordance with local regulations. In case of small spillages in closed waters (i.e. ports), contain product with floating barriers or other equipment. Collect spilled product by absorbing with specific floating absorbents. If possible, large spillages in open waters should be contained with floating barriers or other mechanical means. If this is not possible, control the spreading of the spillage, and collect the product by skimming or other suitable mechanical means. The use of dispersants should be advised by an expert, and, if required, approved by local authorities.
6.3 Methods and material for containment and cleaning	
Small spill	Stop leak if without risk. Absorb spilled product with suitable non-combustible materials.
Large spill	Large spillages may be cautiously covered with foam, if available, to limit vapour cloud formation. Do not use water jet. When inside buildings or confined spaces, ensure adequate ventilation. Transfer collected product and other contaminated materials to suitable containers for recovery or safe disposal.
6.4 Reference to other sections	See Section 1: For emergency contact information. See Section 8: For information on appropriate personal protective equipment. See Section 13: For additional waste treatment information.
Section 7: Handling and Storage	
7.1 Advice on general information – hygiene, storage	Obtain special instructions before use. Keep away from heat / sparks / open flames/hot surfaces. No smoking. Use and store only outdoors or in a well-ventilated area. Hazard of slipping on spilt product. Avoid release to the environment.
7.2 Conditions for safe storage including any incompatibilities	Storage area layout, tank design, equipment and operating procedures must comply with the relevant regional, national or local legislation. Storage installations should be designed with adequate bunds in case of leaks or spills. Cleaning, inspection and maintenance of internal structure of storage tanks must be done only by properly equipped and qualified personnel as defined by national, local or company regulations. Store separately from oxidising agents. Keep only in the original container or in a suitable container for this kind of product. Keep container tightly closed and sealed until ready for use. Do not store in unlabelled containers. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Empty containers may contain harmful, flammable / combustible or explosive residue or vapours. Do not cut, grind, drill, weld, reuse or dispose of containers unless adequate precautions are taken against these hazards. Protect from sunlight.
7.3 Specific end use(s) – Recommendations	Not available
Section 8: Exposure Controls / Personal Protection	ו
The list of Identified Uses in Section 1 should be consulted	for any available use-specific information provided in the Exposure Scenario(s).

The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).





8.1 Control parameters	
Occupational exposure limits	
Product / Ingredient name	Distillates, mixture of hydrocarbons
Exposure limits values	AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m <sup>3</sup> 8 hours. Form: mist and fume STEL: 3 mg/m <sup>3</sup> 15 minutes. Form: mist and fume [Air contaminant]. AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m <sup>3</sup> 8 hours. Form: mist and fume STEL: 3 mg/m <sup>3</sup> 15 minutes. Form: mist and fume.
Recommended monitoring procedures	If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres – Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres – Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres – General requirements for the performance of procedures for the measurement of chemical agents). Reference to national guidance documents for methods for the determination of hazardous substances will also be required.
8.2 Exposure control Appropriate engineering controls	Mechanical ventilation and local exhaust will reduce exposure via the air. Use oil resistant material in construction of handling equipment. Store under recommended conditions and if heated, temperature control equipment should be used to avoid overheating.
Individual protection measures	
Hygiene measures	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Ensure that eyewash stations and safety showers are close to the workstation location. Wash contaminated clothing before reuse.
Eye / face protection	Recommended: Safety glasses with side shields.
Skin protection	
Hand protection	4 – 8 hours (breakthrough time): nitrile rubber.
Body protection	Wear protective clothing if there is a risk of skin contact. Change contaminated clothes at the end of working shift.
Other skin protection	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary.
Environmental exposure control	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.
Section 9: Physical and Chemical Properties	
Appearance	Clear
Physical state	Semifluid & Smooth
Colour	Yellow / Amber
Odor	Petroleum odor
Odour threshold	Not available
Dropping point	> 160 °C (ASTM D 2265)
Flash point	> 205 °C (Mineral Oil)
Evaporation rate	Not available
Flammability (solid, gas)	Not available
Flammability limits in air (lower), % by volume	Not available
Flammability limits in air (upper), % by volume	Not available
Vapour pressure	Not volatile
Density Solubility (ies)	0.880 – 0.950 kg/L
Solubility (water)	Insoluble in water
Partition coefficient (n-octanol/water)	Not available







Decomposition temperature		No data					
Auto-ignition temperature		Not available					
5		Not available 455 – 475 (ASTM D 217)					
Worked Penetration at 25°C		No data	WID 217)				
Explosive properties Oxidising properties		No data					
DMSO extractable compounds for	r basa ail substanca(s)	Not available					
according to IP346		<3 %					
Section 10: Stability and Rea	ctivity	1					
10.1 Reactivity			No specific test data related to reactivity available for this product or its ingredients.				
10.2 Chemical stability			ormal conditions				
10.3 Possibility of hazardous rea	actions			nazardous reactions will not oc	cur. Oxidising agent.		
10.4 Conditions to avoid		Keep away fron	n extreme heat and oxidising a	gents.			
10.5 Incompatible materials		Incomplete cor	nbustion is likely to give rise to	a complex mixture of airborne	solid and liquid		
10.6 Hazardous decomposition	products		ses, including carbon monoxic ganic and inorganic compound	le, H <sub>2</sub> S, SO <sub>x</sub> (sulphur oxides) or s ds.	sulphuric acid and		
SECTION 11: Toxicological In	formation						
11.1 Information on toxicologica	al effects						
Acute toxicity							
Product / ingredient name	Result		Species	Dose	Exposure		
	LC 50 Inhalation due	sts and mists	Rat	>2.18mg/l	4 hours		
Distillate (Petroleum), hydro	LD 50 Derr	nal	Rabbit	> 5000 mg/kg	_		
treated heavy paraffinic	LD 50 Ora	al	Rat	>15000 mg/kg	_		
Irritation / corrosion							
Skin							
Eye		No known sign	ificant effects or critical bazard	c			
Respiratory		No known significant effects or critical hazards.					
Sensation							
Skin							
		No known significant effects or critical hazards.					
Respiratory Mutagenicity		No data available to indicate product or any components present greater than 0.1 % are					
Canaina a caniaitu		multigene or genotoxic. The base oil(s) in this product is based on an severely hydrotreated distillate.					
Carcinogenicity			•				
Reproductive toxicity			ould not be regarded as a carci predient listed as toxic to repro				
Specific target organ toxicity – sin	5 1	Not classified					
Specific target organ toxicity – rep	peated exposure						
Aspiration hazard			rd – Category 1				
Information on likely routes of exp	posure	Not available					
Potential acute health effects							
Eye contact	Eye contact ma	Eye contact may cause redness and transient pain.					
Inhalation		Inhalation of oil mist or vapours at elevated temperatures may cause respiratory irritation.					
Skin contact		No known significant effects or critical hazards.					
Ingestion		May be fatal if swallowed and enters airways.					
Potential chronic health effects							
General		No known significant effects or critical hazards.					
Carcinogenicity		The base oil(s) in this product is based on an severely hydrotreated distillate. The product should not be regarded as a carcinogen.					







Intratagenicity increase of the second seco	Mutagenicity									
<form>          Product, rignedient name         Not available           fertility effects         Not available           Other information Specific hazards         Not available           Section 12: Ecological Information         Not available           12.1 Toxicity         Not expected to be harmful to aquatic organisms.           12.2 Fersitence and degradability         Not inherently biodegradable.           12.3 Bioaccumulative potential         Not aplicable           12.4 Mobility in soil         Not considered mobile.           12.5 Eaclust of PBT &amp; VP&amp; assessmet         Not aplicable           12.6 Other adverse effects         Not aplicable           Toxing the considered mobile.         Not applicable           12.6 Section 13: Disposit Considered and softward and guidance. The list of fertified Ubes in Section 13: should be consulted or any available use specific information provided in the Exposure Section 13: should be consulted or any available use specific information provided in the Exposure Section 13: should be consulted or any available use specific or available in any distributions, relevant contamination, recycling or available in any distributions, relevant contamination, recycling or available in any distributions and alrecut por your available use specific or available in the specific or any available use specific or available in any distribution is available in the specific or any available use specintany or any available use specific or any availa</form>	,	· ·		No known significant effects or critical hazards.						
<form>          Internation Specific hazard         Net available           Other information Specific hazard         Not available           12.1 Toxicity         Not expected to be harmful to aquatic organisms.           12.2 Presistence and degradability in all         Not inherently biologengradability.           12.3 Bioaccumulative potential         Bioaccumulation is unikely to be significant because of the low water solubility of this product.           12.5 Reutis OFPE a/Vba assessment         Not applicable           12.6 Toxicity OFPE a/Vba assessment         Wore possible (on in the abnerso of relevant containition), expecting or evaluable use specific torganisms.           Product Methods of disposal         Wore possible (on in the abnerso of relevant containition), expecting or evaluable use specific organisms.           Product Methods of disposal         Were possible (on in the abnerso of relevant containition), expecting or evaluable use specific organisms.           Notardiplicable         Notar evaluable         Notar evaluable or evaluable.           Reading Methods of disposal         Were possible (on in the abnerso of relevant containition), expecting assessment or unatificable and recommended. This substance on the unrend or information organities and recomaninated particity aspectific organisation organid eva</form>	<u> </u>		No known s							
Other Information Specific hazard         Net available           Section 12: Ecological Information         Not expected to be harmful to aquatic organisms.           12: Parsistence and degradability         Not expected to be harmful to aquatic organisms.           12: A Mobility in soil         Not considered mobile.           12: A Mobility in soil         Not considered mobile. </td <td></td> <td></td> <td colspan="5"></td>										
Section 12: Ecological Information         Not expected to be harmful ta aquatic organisms.           12.1 Toxidity         Not expected to be harmful ta aquatic organisms.           12.3 Brostneer and degradability         Not expected to be harmful ta aquatic organisms.           12.4 Mobility notel         Not considered mobile.           12.4 Mobility notel         Not considered mobile.           12.5 Results of PBT & VP& assessment         Not applicable           12.6 Other adverse effects         Not applicable           Section 13: Disposal Considerations         The information in this section or talnes generic adverse and guidance. The list of identified Uses in Section 1 should be consulted for any available use specific information provided in the Exposure Scenario(s).           Product Methods of disposal         Where possible leg, in the absence of relevant contamination, recycling of used substance is freasible and recommended. This substance can be burned or innormated autification used substance is composition limits, and recommended. This substance can be burned or innormated autification and used substance is composition limits and methods for recovery or disposal           Hazardous waste         Vos           European waste catalogue (EWC) Wiste Code 13 03 07°         Woste designation.           Not interaction or landifit involution guided waste dusted where very disposal         Incomention involution guided waste should be avoided or minimised where very called.           14.1 UN number         Not /// NO Classification         ICA			Not availab	Not available						
12.1 privation     Not expected to be harmful to aquatic organisms.       12.2 Prestance and legand bill.     Not anotal-construction is unlikely to be significant to be assue of the low water sub-likely of this product.       12.4 Obtaining the point of the sub-sub-sub-sub-sub-sub-sub-sub-sub-sub-	•	1								
12.2 Persistence and degradability       Not inherently biodegradable.         12.3 Bioaccumulative potential       Bioaccumulation is unlikely to be significant because of the low water solubility of this product.         12.4 Mobility is and       Not considered mobile.         12.5 Results of PBT & vPvB assessment       Not applicable         Insoluble in water. Spills may form a film on water surfaces causing physical damage to organisms. Oxygen transfer could also be impaired.         Section 13: Disposal Considerations       Where possible (eg. in the absence of relevant contamination) recycling of used substance is feasible and recommended. This substance can be burned or indirected, subject to national/local authorisation, relevant contamination limits, stering contamination, and/or prescribe composition limits and methods for recovery or disposal         Product Methods of disposal       Where possible (eg. in the absence of relevant contamination) intrescriber qualified vasates bandles. National legislation may available use-specific composition limits and methods for recovery or disposal         Hazardous waste       Yes         European waste catalogue (EWC) Waste Code 13 03 07*       Waste designation.         Rethods of disposal       The egeneration of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Inclineration or landfill should only be considered when recycled. Inclineration or landfill should only be considered when recycled. Inclineration or landfill should only be considered when recycled. Inclineration or landfill should only be considered when recycled. Inclineration or landfill should only be considered										
12.3 Bracum Jative potential       Not considered mobile.         12.4 Mobility in soil of PT 4 vVP assesmet       Not applicable         12.6 Guites of PT 4 vVP assesmet.       Not applicable.         12.6 Guites of PT 4 vVP assesmet.       Not applicable.         2.6 Guites of PT 4 vVP assesmet.       Not applicable.         2.6 Guites of PT 4 vVP assesmet.       Not applicable.         3.6 Guites adverse effects.       Not applicable.         3.7 Guites adverse effects.       VP recorded also be impaired.         3.7 Guites adverse effects.       VP averse visite (e.g. in the absence of relevant containtation, recycling of used subtance is feasible and commended. This subtance (and incinerated subject to notanillog) adverse subtance is differentiable. National legislation may identify a space and ar quality legislation. Containtand or averse subtance is differentiable. National legislation may identify a space and ar quality legislation. Containtand or averse subtance is differentiable. National legislation may identify a space and ar quality legislation. Containtand or averse subtance is differentiable. National legislation may identify a space and ar quality legislation. Containtand or averse subtance is differentiable. National legislation may identify a space and ar quality legislation.         Product Methods of disposal       Methods in recovery or classification may identify a space.         Readaging       V       Methods on the considered when recycling of used subtance is frequence on visite and edite space and ar quality legislation. Containtand incintrecycling or used subtance is incinerate subject or us	· · · · · · · · · · · · · · · · · · ·		•							
12.4 Mobility in soil       Not considered mobile.         12.5 Results of PRT & VPR assessment       Not applicable         12.6 Other adverse effects       Unsoluble in water. Spills may form a film on water surfaces causing physical damage to organisms. Oxygen transfer could also be impaired.         Section 13: Disposal Considerations       The information in this section contains generic advice and guidance. The list of identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).         Product Methods of disposal       Where possible (e.g. in the absence of relevant contamination limits, adjett regulations, and ang inquality (edjatic). Contaminatolo in guidance. The dist handles. Nationary local disposal authorisation. Intervational legislation may identify a specific organisation. Contaminator in limits, adjett hengiles. National legislation may identify a specific organisation. Contaminator limits. adjett hengiles. National legislation may identify a specific organisation. Contaminator limits and methods for recovery or disposal         Hazardous waste       Yes         European waste catalogue (EWC) Waste Code 13 03 07*       Waste disignation.         Rescaging       Mineral-based non-chlorinated insulting and heat transmission ells.         The generation of waste shalld be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landiti should only be considered when recycling is not faesible.         Section 13: Transport Information       -       -         14.1 UN number       ADR /R I/D       ADN				, ,						
12.6 Other adverse effects     Nonludie in water. Splits may form a fitm on water surfaces causing physical damage to organisms. Nongen transfer could also be impaired.       Section 13: Disposal Considerations:       Section 13: Disposal Considerations:       Section 13: Disposal Considerations:       The information in this section contains generic advices undividual and be impaired.       Section 13: Disposal Considerations:       The information in this section contains generic advices on tabulation of relevant contamination intervices. Job et or tabulations and arguality legislation.       Note the providual disposal on the commendo of this substance contations and arguality legislation.       Product Methods of disposal       Yes       European waste catalogue (KPC) Waste Code 13 03 07*       Waste designation.       Recidention of waste should be avoided or minimised wherever possible. Waste packaging should be recided when recycling in feasible.       Recidention tabuscent colspan="4">Colspan="4"       Colspan= 4										
Application adverse energy       Oxygen transfer could also be impaired.         Section 13: Disposal Considerations       Oxygen transfer could also be impaired.         Section 13: Disposal Considerations       Oxygen transfer could also be impaired.         Section 13: Disposal Considerations       Oxygen transfer could also be impaired.         The information in this section contains generic advice and year optimized in the Exposure Scenario(s).       Where possible (e.g. in the absence of relevant contamination finits, sefery regulations and ar quality explaisation. Contamination finits, sefery regulations and ar quality explaisation. Contamination finits, sefery regulations and ar quality explaisation. Contaminated the finits, sefery regulations and ar quality explaisation. Contaminated the finits, sefery regulations and ar quality explaisation. Contaminated the finits, sefery regulations and ar quality explaisation. The quarter of the explashes on orchorinated insulating and heat transmission and ar quality explaisation. The quarter operation of vaste existion may identify a specific organisation, and/or prescribe composition limits and methods for recovery or disposal         Macadous waste       Yes       The generation of vaste existion or shating and heat transmission oils.         Methods of disposal       Mineral-based non-chlorinated insulating and heat transmission oils.       The generation of vaste existion or the existing explaisation.         Methods of disposal       ADR / RD       ADN       IMO / IMDG Classification       ICAO / IATA Classification         14.1 UN number       ADR / RD       ADN       IMO / IMDG C	12.5 Results of PBT & vPvB assessment	:	Not applica	ble						
The information in this section contains generic advice and substance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario().       Where possible (e.g. in the absence of relevant contamination intervated, subject to national/local authorisation, relevant contamination limits, safety regulations and air quality legislation. Contaminated in this, safety regulations and air quality legislation. Contaminated or qualified wase handlens. National legislation may identify a specific organisation, and/or preservice or wase substance (not directly recyclable): Disposal can be carried out directly, or by delivery to qualified wase handlens. National legislation may identify a specific organisation, and/or preservice or wases catalogue (EWC) Wase Code 13 03 07       Yes         European wase catalogue (EWC) Wase Code 13 03 07       Waste designation.       Mineral-based non-chlorinated insulating and heat transmission oils.         Nethods of disposal       Yes       The generation of waste should be avoided or minimission where repossible. Waste packaging should be considered when recyclable.         Nethods of disposal       ADR / IND       ADN       IMO / IMDG Classification       ICAO / IATA Classification         14.1 UN number       ADR / IND       ADN       IMO / IMDG Classification       ICAO / IATA Classification         14.2 UN proper shipping name       -       -       -       -         14.3 Transport hazard class(es)       -       0       -       -       -         14.4 Packing group       -       <	12.6 Other adverse effects				n water surfaces causing physica	al damage to organisms.				
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	China									







_	European Inventory of Existing Commercial Chemical Substances (EINECS) – Yes			
Europe	European List of Notified Chemical Substances (ELINCS) – No			
Japan	Inventory of Existing and New Chemical Substances (ENCS) – Yes			
Korea	Existing Chemicals List (ECL) – Yes			
New Zealand	New Zealand Inventory – Yes			
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS) – Yes			
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory – Yes			
	oly with the inventory requirements administered by the governing country(s) uct are not listed or exempt from listing on the inventory administered by the governing country(s).			
Section 16: Other Information				
Revision comments				
Legend to abbreviations				
ADR	European agreement concerning the international carriage of dangerous good by road.			
RID	Regulations agreement concerning the international carriage of dangerous good by rail.			
IMDG Code	International Maritime Dangerous Goods Code.			
ICAO	International Civil Aviation Organization.			
IATA	International Air Transport Association.			
GHS	Globally Harmonized System of Classification and Labeling of Chemicals.			
CLP	Classification, Labelling and Packaging Regulation [Regulation (EC) No.1272/2008].			
SCBA	Self-Contained Breathing Apparatus.			
REACH	Registration, Evaluation, Authorization and Restriction of Chemicals Regulation [Regulation (EC) No. 1907/2006].			
LC 50	Median lethal concentration.			
LD 50	Median lethal dose.			
PBT	Persistent, Bio accumulative and Toxic.			

GANDHAR OIL REFINERY (INDIA) LTD.				
Taloja Plant	Plot No.10, MIDC, Main Road, Taloja, Taluka Panvel, District - Raigad 410208, India.			
Silvassa Plant	Plot No. 2, Survey No. 678/1/3, Village Naroli, Near Naroli Check Post, Silvassa, Dadra & Nagar Haveli, Union Territory 396230, India.			
Emergency / Info Phone No.	Phone: +91-22-40635600 • Fax: +91-22-40635601			
Email	info@gandharoil.com			





## DIVYOL EPX - 2 (C) GREASE

Section 1: Identification of the Substance / Mixe	ture					
1.1 Product identifier						
Product name	Divvol EPX – 2 (C	Divyol EPX – 2 (C) Grease				
Product description	Extreme Pressure					
Product type	Grease	0.0000				
MARPOL Annex-1	****					
1.2 Identified uses						
Distribution of substance	Automotive & In	dustrial Crosso				
Formulation & (re)packing of substance & mixtures	Automotive & Inc					
Manufacture of substance	Automotive & Inc					
Functional fluids	Automotive & Inc	dustrial Grease				
Section 2: Hazard Identification						
4-Extreme	Health		1			
3-High	Flammability		1			
2-Moderate	Reactivity		0			
1-Slight	Special		-			
Section 3: Compostion / Information on Ingred	ients					
Chemical Name / Ingredients	% by wt.	Hazardous	CAS No.			
Lithium Hydroxide	0.5 - 22	Yes	1310-66-3			
Mineral Oil	82 - 90	Yes	64741-88-4, 64742-01-4, Proprietary Mixture, 64742-52-5			
12 HSA	4 - 10	No	106-14-9			
НСО	2 - 6	No	8001-78-3			
Zinc dialkyldithiophosphate	0 - 2	Yes	68457-79-4			
Additives	0 - 2	Yes	Proprietary Mixture			
Sulphurised Oil	0 - 4	No	72102-30-8			
Bitumen	0-2 No 8052-42-4					
Product / Ingredient name	Lithium soaps fro	om natural fatty su	ubstances			
Section 4: First Aid Measures						
Inhalation exposure Remove to fresh air & provide oxygen, if breathing is difficult. Contact physician						
Skin contact		Remove contaminated clothing. Flush skin with water. Wash skin thoroughly with mild soap & water. If irritation occurs, call a physician.				
Swallowing or other		Do not induce vomiting. In general no treatment is necessary unless large quantities are ingested. Get medical advice.				
Eye contact	Rinse continuous	sly with water for	several minutes. Get medical attention, if irritation persists.			
Protection first-aiders		Disconnecting electrical supply. Ensure adequate ventilation and check that a safe and breathing area is available before entry into confined spaces.				
Section 5: Fire Fighting Measures						
5.1 Extinguishing media						
Unsuitable extinguishing media			xide. Do not use direct water and wet chemicals, or water on the I the fire. Use foam simultaneously on the surface.			
5.2 Special hazards arising from the substance or mix						
Hazards from the substance or mixture		Flammable liquids in pressurised containers may rupture and when exposed to heat, creating a highly flammable vapour cloud.				
Hazardous thermal decomposition products	particulates, gase	Incomplete combustion is likely to give rise to a complex mixture of airborne solid and liquid particulates, gases, including carbon monoxide, $H_2S$ , $SO_x$ (sulphur oxides) or sulphuric acid and unidentified organic and inorganic compounds.				
5.3 Advice for firefighters						
Special precautions for firefighters		Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.				
Special protective equipment for firefighters	(SCBA) with a ful helmets, protect	Firefighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face- piece operated in positive pressure mode. Clothing for firefighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.				





6.1 Personal precautions, protective equipment and emergency procedures						
Keep non-involved personnel away from the area of spillage.						
For non-emergency personnel	Alert emergency personnel. Except in case of small spillages, the feasibility of any actions should always be assessed and advised, if possible, by a trained, competent person in charge of managing the emergency. Stop leak if safe to do so. Avoid direct contact with the product. Stay upwind / keep distance from source. In case of large spillages, alert occupants in downwind areas. Eliminate all ignition sources if safe to do so. Spillages of limited amounts of product, especially in the open air when vapours will be usually quickly dispersed, are dynamic situations, which will presumably limit the exposure to dangerous concentrations. Note : Recommended measures are based on the most likely spillage scenarios for this material; however, local conditions (wind, air temperature, wave / current direction and speed) may significantly influence the choice of appropriate actions.					
For emergency responders	For this reason, local experts should be consulted when necessary. Local regulations may also prescribe or limit actions to be taken. Small spillages: Normal antistatic working clothes are usually adequate. Large spillages: Full body suit of chemically resistant and thermal resistant material should be used. Work gloves providing adequate chemical resistance, specifically to aromatic hydrocarbons. Note: Gloves made of PVA are not water-resistant, and are not suitable for emergency use. Safety helmet, antistatic non-skid safety shoes or boots. Goggles and / or face shield, if splashes or contact with eyes is possible or anticipated. Respiratory Protection : A half or full-face respirator with filter(s) for organic vapours (and when applicable for H <sub>2</sub> S) a Self Contained Breathing Apparatus (SCBA) can be used according to the extent of spill and predictable amount of exposure. If the situation cannot be completely assessed, or if an oxygen deficiency is possible, only SCBA's should be used.					
6.2 Environmental precautions	Prevent product from entering sewers, rivers or other bodies of water. If necessary dike the product with dry earth, sand or similar non-combustible materials. In case of soil contamination, remove contaminated soil and treat in accordance with local regulations. In case of small spillages in closed waters (i.e. ports), contain product with floating barriers or other equipment. Collect spilled product by absorbing with specific floating absorbents. If possible, large spillages in open waters should be contained with floating barriers or other mechanical means. If this is not possible, control the spreading of the spillage, and collect the product by skimming or other suitable mechanical means. The use of dispersants should be advised by an expert, and, if required, approved by local authorities.					
6.3 Methods and material for containment and cleaning	l up					
Small spill	Stop leak if without risk. Absorb spilled product with suitable non-combustible materials.					
Large spill	Large spillages may be cautiously covered with foam, if available, to limit vapour cloud formation. Do not use water jet. When inside buildings or confined spaces, ensure adequate ventilation. Transfer collected product and other contaminated materials to suitable containers for recovery or safe disposal.					
6.4 Reference to other sections	See Section 1: For emergency contact information. See Section 8: For information on appropriate personal protective equipment. See Section 13: For additional waste treatment information.					
Section 7: Handling and Storage						
7.1 Advice on general information – hygiene, storage	Obtain special instructions before use. Keep away from heat / sparks / open flames/hot surfaces. No smoking. Use and store only outdoors or in a well-ventilated area. Hazard of slipping on spilt product. Avoid release to the environment.					
7.2 Conditions for safe storage including any incompatibilities	Storage area layout, tank design, equipment and operating procedures must comply with the relevant regional, national or local legislation. Storage installations should be designed with adequate bunds in case of leaks or spills. Cleaning, inspection and maintenance of internal structure of storage tanks must be done only by properly equipped and qualified personnel as defined by national, local or company regulations. Store separately from oxidising agents. Keep only in the original container or in a suitable container for this kind of product. Keep container tightly closed and sealed until ready for use. Do not store in unlabelled containers. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Empty containers may contain harmful, flammable / combustible or explosive residue or vapours. Do not cut, grind, drill, weld, reuse or dispose of containers unless adequate precautions are taken against these hazards.					
	Protect from sunlight.					



Vapour pressure Density Solubility (ies)



Section 8: Exposure Controls / Personal Protection	n
The list of Identified Uses in Section 1 should be consulte	d for any available use-specific information provided in the Exposure Scenario(s).
8.1 Control parameters	
Occupational exposure limits	
Product / Ingredient name	Distillates, mixture of hydrocarbons
Exposure limits values	AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m <sup>3</sup> 8 hours. Form: mist and fume STEL: 3 mg/m <sup>3</sup> 15 minutes. Form: mist and fume [Air contaminant]. AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m <sup>3</sup> 8 hours. Form: mist and fume STEL: 3 mg/m <sup>3</sup> 15 minutes. Form: mist and fume.
Recommended monitoring procedures	If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres – Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres – Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres – General requirements for the performance of procedures for the measurement of chemical agents). Reference to national guidance documents for methods for the determination of hazardous substances will also be required.
8.2 Exposure control Appropriate engineering controls	Mechanical ventilation and local exhaust will reduce exposure via the air. Use oil resistant material in construction of handling equipment. Store under recommended conditions and if heated, temperature control equipment should be used to avoid overheating.
Individual protection measures	
Hygiene measures	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Ensure that eyewash stations and safety showers are close to the workstation location. Wash contaminated clothing before reuse.
Eye / face protection	Recommended: Safety glasses with side shields.
Skin protection	
Hand protection	4 – 8 hours (breakthrough time): nitrile rubber.
Body protection	Wear protective clothing if there is a risk of skin contact. Change contaminated clothes at the end of working shift.
Other skin protection	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary.
Environmental exposure control	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.
Section 9: Physical and Chemical Properties	
Appearance	Clear
	Smooth & Homogeneous
Physical state	
Physical state Colour	Dark Brown
Colour	Dark Brown
Colour Odor	Dark Brown       Petroleum odor
Colour Odor Odour threshold	Dark Brown     Petroleum odor     Not available
Colour Odor Odour threshold Dropping point	Dark Brown         Petroleum odor         Not available         > 180 °C (ASTM D 566)
Colour Odor Odour threshold Dropping point Flash point	Dark Brown         Petroleum odor         Not available         > 180 °C (ASTM D 566)         > 210 °C (Mineral Oil)
Colour Odor Odour threshold Dropping point Flash point Evaporation rate	Dark Brown         Petroleum odor         Not available         > 180 °C (ASTM D 566)         > 210 °C (Mineral Oil)         Not available
Colour Odor Odour threshold Dropping point Flash point Evaporation rate Flammability (solid, gas)	Dark Brown         Petroleum odor         Not available         > 180 °C (ASTM D 566)         > 210 °C (Mineral Oil)         Not available         Not available



Not volatile

0.88 – 0.95 kg/L





Solubility (water)		Insoluble in wat	ter			
Partition coefficient (n-octanol/water)		Not available				
Decomposition temperature		No data				
Auto-ignition temperature	Not available					
Worked Penetration at 25°C	265 – 295 (ASTN	4 D 566)				
Explosive properties		No data	10 500)			
Oxidising properties		No data				
DMSO extractable compounds for	r baco oil substanco(s)	Not available				
according to IP346		<3 %				
Section 10: Stability and Reactivity						
10.1 Reactivity		No specific test	data related to reactivity avail	able for this product or its ing	redients.	
10.2 Chemical stability		Stable under no	ormal conditions			
10.3 Possibility of hazardous rea	octions	Under normal c	onditions of storage and use, I	nazardous reactions will not o	ccur. Oxidising agent.	
10.4 Conditions to avoid		Keep away from	n extreme heat and oxidising a	gents.		
10.5 Incompatible materials		Incomplete con particulates, gas	nbustion is likely to give rise to ses, including carbon monoxic	a complex mixture of airborn le, H <sub>2</sub> S, SO (sulphur oxides) or	e solid and liquid sulphuric acid and	
10.6 Hazardous decomposition	products		ganic and inorganic compound			
SECTION 11: Toxicological In	formation					
11.1 Information on toxicologica	al effects					
Acute toxicity						
Product / ingredient name	Result		Species	Dose	Exposure	
	LC 50 Inhalation due	sts and mists	Rat	>2.18mg/l	4 hours	
Distillate (Petroleum), hydro	LD 50 Dermal		Rabbit	> 5000 mg/kg	_	
treated heavy paraffinic	LD 50 Ora	al	Rat	>15000 mg/kg	-	
Irritation / corrosion						
Skin						
		No known significant effects or critical hazards.				
Eye						
Respiratory						
Sensation						
Skin		No known significant effects or critical hazards.				
Respiratory						
Mutagenicity		No data available to indicate product or any components present greater than 0.1 % are multigene or genotoxic.				
Carcinogenicity		The base oil(s) i	n this product is based on an s	everely hydrotreated distillate	<u>.</u>	
Reproductive toxicity		The product should not be regarded as a carcinogen. Contains no ingredient listed as toxic to reproduction.				
Specific target organ toxicity – sin	gle exposure					
Specific target organ toxicity – rep		Not classified				
Aspiration hazard		Aspiration haza	rd – Category 1			
Information on likely routes of exp	oosure	Not available				
Potential acute health effects						
			Eye contact may cause redness and transient pain.			
		Inhalation of oil mist or vapours at elevated temperatures may cause respiratory irritation.				
Skin contact		ficant effects or critical hazard				
			3.			
Ingestion		may be latal II S	wallowed and enters airways.			
Potential chronic health effects		No known -: -:	General official and and and the second	-		
General		No known significant effects or critical hazards. The base oil(s) in this product is based on an severely hydrotreated distillate. The product should not be				
Carcinogenicity		The base oil(s) is regarded as a ca		everely hydrotreated distillate	e. The product should not be	







Mutagenicity						
Teratogenicity		No known s	significant effects or critical haz	ards.		
Product / ingredient name						
Fertility effects						
Other information Specific hazard		Not availab	le			
Section 12: Ecological Information						
12.1 Toxicity		Not expected to be harmful to aquatic organisms.				
12.2 Persistence and degradability		Not inherently biodegradable.				
12.3 Bioaccumulative potential		Bioaccumulation is unlikely to be significant because of the low water solubility of this product.				
	2.4 Mobility in soil     Not considered mobile.					
12.5 Results of PBT & vPvB assessment	:	Not applica				
12.6 Other adverse effects			n water. Spills may form a film of nsfer could also be impaired.	n water surfaces causing physica	al damage to organisms.	
Section 13: Disposal Consideration						
The information in this section contains information provided in the Exposure So	generic advice and enario(s).	d guidance. T	he list of Identified Uses in Sect	ion 1 should be consulted for ar	ny available use-specific	
Product Methods of disposal		feasible and authorisatio or waste su qualified w	d recommended. This substance ons, relevant contamination lim bstance (not directly recyclable	vant contamination), recycling o e can be burned or incinerated, its, safety regulations and air qu ): Disposal can be carried out di on may identify a specific organ ery or disposal	subject to national/local ality legislation. Contaminated rectly, or by delivery to	
Hazardous waste		Yes				
European waste catalogue (EWC) Waste	Code 13 03 07*	Waste designation.				
Packaging		Mineral-ba	sed non-chlorinated insulating	and heat transmission oils.		
Methods of disposal				d or minimised wherever possib y be considered when recycling	1 3 3	
Section 14: Transport Information						
International transport regulations						
	ADR / R	ID	ADN	IMO / IMDG Classification	ICAO / IATA Classification	
14.1 UN number	Not regul	ated	Not regulated	Not regulated	Not regulated	
14.2 UN proper shipping name	_		_	_	_	
14.3 Transport hazard class(es)	_		-	_	_	
14.4 Packing group	_		-	_	_	
14.5 Environmental hazards	No		No	No	No	
Additional Information	_		-	-	-	
14.6 Special precautions for user oils						
14.7 Transport in bulk according to An	nex   of MARPOL	73/78 and th	e IBC Code			
Section 15: Regulatory Informatio						
		slation speci	fic for the substance or mixture	e EU Regulation (EC) No. 1907/	2006 (REACH)	
15.1 Safety, health and environmental regulations / legislation specific for the substance or mixture EU Regulation (EC) No. 1907/         Annex XIV – List of substances subject to authorisation         Annex XIV         None of the components are listed         Substances of very high concern						
Annex XVII – Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles.						
International Lists National Inventory		Inventory name				
Australia		Australian Inventory of Chemical Substances (AICS) – Yes				
Canada		Domestic Substances List (DSL) – Yes Non-Domestic Substances List (NDSL) – No				
China			f Existing Chemical Substances			
		inventory o	. Easting chemical substances			





_	European Inventory of Existing Commercial Chemical Substances (EINECS) – Yes				
Europe	European List of Notified Chemical Substances (ELINCS) – No				
Japan	Inventory of Existing and New Chemical Substances (ENCS) – Yes				
Korea	Existing Chemicals List (ECL) – Yes				
New Zealand	New Zealand Inventory – Yes				
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS) – Yes				
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory – Yes				
	oly with the inventory requirements administered by the governing country(s) uct are not listed or exempt from listing on the inventory administered by the governing country(s).				
Section 16: Other Information					
Revision comments					
Legend to abbreviations					
ADR	European agreement concerning the international carriage of dangerous good by road.				
RID	Regulations agreement concerning the international carriage of dangerous good by rail.				
IMDG Code	International Maritime Dangerous Goods Code.				
ICAO	International Civil Aviation Organization.				
IATA	International Air Transport Association.				
GHS	Globally Harmonized System of Classification and Labeling of Chemicals.				
CLP	Classification, Labelling and Packaging Regulation [Regulation (EC) No.1272/2008].				
SCBA	Self-Contained Breathing Apparatus.				
REACH	Registration, Evaluation, Authorization and Restriction of Chemicals Regulation [Regulation (EC) No. 1907/2006].				
LC 50	Median lethal concentration.				
LD 50	Median lethal dose.				
PBT	Persistent, Bio accumulative and Toxic.				

GANDHAR OIL REFINERY (INDIA) LTD.		
Taloja Plant	Plot No.10, MIDC, Main Road, Taloja, Taluka Panvel, District - Raigad 410208, India.	
Silvassa Plant	Plot No. 2, Survey No. 678/1/3, Village Naroli, Near Naroli Check Post, Silvassa, Dadra & Nagar Haveli, Union Territory 396230, India.	
Emergency / Info Phone No.	Phone: +91-22-40635600 • Fax: +91-22-40635601	
Email	info@gandharoil.com	





# DIVYOL EPX - 2 (HD) GREASE

Section 1: Identification of the Substance / Mixt	ture			
1.1 Product identifier				
Product name	Divvol EPX – 2 (H	Divyol EPX – 2 (HD) Grease		
Product description		Extreme Pressure Grease		
Product type	Grease			
MARPOL Annex-1	****			
1.2 Identified uses				
	Automotive & Inc			
Distribution of substance				
Formulation & (re)packing of substance & mixtures	Automotive & Ind			
Manufacture of substance	Automotive & Ind			
Functional fluids	Automotive & Ind	dustrial Grease		
Section 2: Hazard Identification				
4-Extreme	Health		1	
3-High	Flammability		1	
2-Moderate	Reactivity		0	
1-Slight	Special		-	
Section 3: Compostion / Information on Ingred				
Chemical Name / Ingredients	% by wt.	Hazardous		CAS No.
Lithium Hydroxide	0.5 - 22	Yes		1310-66-3
Mineral Oil	82 - 94	Yes		64742-52-5, 64741-88-4, 64742-54-7, 64742-01-4
12 HSA	4 - 10	No		106-14-9
НСО	2 - 6	No		8001-78-3
Mix Additives	0 - 3	Yes		Proprietary Mixture
Zinc dialkyldithiophosphate	0 - 25	Yes		68457-79-4
Polyisobutylene	0 - 2	No		9003-27-4
Product / Ingredient name	Lithium soaps from natural fatty substances			
Section 4: First Aid Measures				
Inhalation exposure	Remove to fresh	air & provide oxy	gen, i	if breathing is difficult. Contact physician
Skin contact		Remove contaminated clothing. Flush skin with water. Wash skin thoroughly with mild soap & water. If irritation occurs, call a physician.		
Swallowing or other		Do not induce vomiting. In general no treatment is necessary unless large quantities are ingested. Get medical advice.		
Eye contact	Rinse continuous	Rinse continuously with water for several minutes. Get medical attention, if irritation persists.		
Protection first-aiders		Disconnecting electrical supply. Ensure adequate ventilation and check that a safe and breathing area is available before entry into confined spaces.		
Section 5: Fire Fighting Measures				
5.1 Extinguishing media				
Unsuitable extinguishing media		Use dry powder, foam, carbon dioxide. Do not use direct water and wet chemicals, or water on the burning product. They may spread the fire. Use foam simultaneously on the surface.		
5.2 Special hazards arising from the substance or mix				
Hazards from the substance or mixture			onta	iners may rupture and when exposed to heat, creating a highly
Hazardous thermal decomposition products	particulates, gase	Incomplete combustion is likely to give rise to a complex mixture of airborne solid and liquid particulates, gases, including carbon monoxide, H <sub>2</sub> S, SO <sub>x</sub> (sulphur oxides) or sulphuric acid and unidentified organic and inorganic compounds.		
5.3 Advice for firefighters		-		
Special precautions for firefighters				g all persons from the vicinity of the incident if there is a fire. No sonal risk or without suitable training.
Special protective equipment for firefighters	Firefighters shou (SCBA) with a full helmets, protecti	action shall be taken involving any personal risk or without suitable training. Firefighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face- piece operated in positive pressure mode. Clothing for firefighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.		





6.1 Personal precautions, protective equipment and em	ergency procedures
processie equipment and em	Keep non-involved personnel away from the area of spillage.
For non-emergency personnel	Alert emergency personnel. Except in case of small spillages, the feasibility of any actions should always be assessed and advised, if possible, by a trained, competent person in charge of managing the emergency. Stop leak if safe to do so. Avoid direct contact with the product. Stay upwind / keep distance from source. In case of large spillages, alert occupants in downwind areas. Eliminate all ignition sources if safe to do so. Spillages of limited amounts of product, especially in the open air when vapours will be usually quickly dispersed, are dynamic situations, which will presumably limit the exposure to dangerous concentrations. Note : Recommended measures are based on the most likely spillage scenarios for this material; however, local conditions (wind, air temperature, wave / current direction and speed) may significantly influence the choice of appropriate actions.
For emergency responders	For this reason, local experts should be consulted when necessary. Local regulations may also prescribe or limit actions to be taken. Small spillages: Normal antistatic working clothes are usually adequate. Large spillages: Full body suit of chemically resistant and thermal resistant material should be used. Work gloves providing adequate chemical resistance, specifically to aromatic hydrocarbons. Note: Gloves made of PVA are not water-resistant, and are not suitable for emergency use. Safety helmet, antistatic non-skid safety shoes or boots. Goggles and / or face shield, if splashes or contact with eyes is possible or anticipated. Respiratory Protection : A half or full-face respirator with filter(s) for organic vapours (and when applicable for H <sub>2</sub> S) a Self Contained Breathing Apparatus (SCBA) can be used according to the extent of spill and predictable amount of exposure. If the situation cannot be completely assessed, or if an oxygen deficiency is possible, only SCBA's should be used.
6.2 Environmental precautions	Prevent product from entering sewers, rivers or other bodies of water. If necessary dike the product with dry earth, sand or similar non-combustible materials. In case of soil contamination, remove contaminated soil and treat in accordance with local regulations. In case of small spillages in closed waters (i.e. ports), contain product with floating barriers or other equipment. Collect spilled product by absorbing with specific floating absorbents. If possible, large spillages in open waters should be contained with floating barriers or other mechanical means. If this is not possible, control the spreading of the spillage, and collect the product by skimming or other suitable mechanical means. The use of dispersants should be advised by an expert, and, if required, approved by local authorities.
6.3 Methods and material for containment and cleaning	l up
Small spill	Stop leak if without risk. Absorb spilled product with suitable non-combustible materials.
Large spill	Large spillages may be cautiously covered with foam, if available, to limit vapour cloud formation. Do not use water jet. When inside buildings or confined spaces, ensure adequate ventilation. Transfer collected product and other contaminated materials to suitable containers for recovery or safe disposal.
6.4 Reference to other sections	See Section 1: For emergency contact information. See Section 8: For information on appropriate personal protective equipment. See Section 13: For additional waste treatment information.
Section 7: Handling and Storage	
7.1 Advice on general information – hygiene, storage	Obtain special instructions before use. Keep away from heat / sparks / open flames/hot surfaces. No smoking. Use and store only outdoors or in a well-ventilated area. Hazard of slipping on spilt product. Avoid release to the environment.
7.2 Conditions for safe storage including any incompatibilities	Storage area layout, tank design, equipment and operating procedures must comply with the relevant regional, national or local legislation. Storage installations should be designed with adequate bunds in case of leaks or spills. Cleaning, inspection and maintenance of internal structure of storage tanks must be done only by properly equipped and qualified personnel as defined by national, local or company regulations. Store separately from oxidising agents. Keep only in the original container or in a suitable container for this kind of product. Keep container tightly closed and sealed until ready for use. Do not store in unlabelled containers. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Empty containers may contain harmful, flammable / combustible or explosive residue or vapours. Do not cut, grind, drill, weld, reuse or dispose of containers unless adequate precautions are taken against these hazards.
	Protect from sunlight.



Flammability (solid, gas)

Vapour pressure

Density Solubility (ies)

Flammability limits in air (lower), % by volume Flammability limits in air (upper), % by volume



r any available use-specific information provided in the Exposure Scenario(s). distillates, mixture of hydrocarbons FS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m <sup>3</sup> 8 hours. Form: mist and fume STEL: 3 mg/m <sup>3</sup> 15 minutes. orm: mist and fume [Air contaminant]. FS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m <sup>3</sup> 8 hours. Form: mist and fume STEL: 3 mg/m <sup>3</sup> 15 minutes. orm: mist and fume. 'this product contains ingredients with exposure limits, personal, workplace atmosphere or biological nonitoring may be required to determine the effectiveness of the ventilation or other control measures nd/or the necessity to use respiratory protective equipment. Reference should be made to monitoring tandards, such as the following: European Standard EN 689 (Workplace atmospheres – Guidance or the assessment of exposure by inhalation to chemical agents for comparison with limit values nd measurement strategy) European Standard EN 14042 (Workplace atmospheres – Guide for the pplication and use of procedures for the assessment of exposure to chemical and biological agents) uropean Standard EN 482 (Workplace atmospheres – General requirements for the performance of rocedures for the measurement of chemical agents). Reference to national guidance documents for nethods for the determination of hazardous substances will also be required. Aechanical ventilation and local exhaust will reduce exposure via the air. Use oil resistant material in onstruction of handling equipment. Store under recommended conditions and if heated, temperature ontrol equipment should be used to avoid overheating. Ash hands, forearms and face thoroughly after handling chemical products, before eating, smoking nd using the lavatory and at the end of the working period. Ensure that eyewash stations and safety howers are close to the workstation location. Wash contaminated clothing before reuse. ecommended: Safety glasses with side shields. – 8 hours (breakthrough time): nitrile rubber.
FS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m <sup>3</sup> 8 hours. Form: mist and fume STEL: 3 mg/m <sup>3</sup> 15 minutes. orm: mist and fume [Air contaminant]. FS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m <sup>3</sup> 8 hours. Form: mist and fume STEL: 3 mg/m <sup>3</sup> 15 minutes. orm: mist and fume. This product contains ingredients with exposure limits, personal, workplace atmosphere or biological nonitoring may be required to determine the effectiveness of the ventilation or other control measures nd/or the necessity to use respiratory protective equipment. Reference should be made to monitoring tandards, such as the following: European Standard EN 689 (Workplace atmospheres – Guidance or the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres – Guide for the pplication and use of procedures for the assessment of exposure to chemical and biological agents) uropean Standard EN 482 (Workplace atmospheres – General requirements for the performance of rocedures for the measurement of chemical agents). Reference to national guidance documents for tethods for the determination of hazardous substances will also be required. Nechanical ventilation and local exhaust will reduce exposure via the air. Use oil resistant material in onstruction of handling equipment. Store under recommended conditions and if heated, temperature ontrol equipment should be used to avoid overheating. Aash hands, forearms and face thoroughly after handling chemical products, before eating, smoking nd using the lavatory and at the end of the working period. Ensure that eyewash stations and safety howers are close to the workstation location. Wash contaminated clothing before reuse. ecommended: Safety glasses with side shields. – 8 hours (breakthrough time): nitrile rubber.
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– 8 hours (breakthrough time): nitrile rubber.
-
-
/ear protective clothing if there is a risk of skin contact. Change contaminated clothes at the end of /orking shift.
ppropriate footwear and any additional skin protection measures should be selected based on the ask being performed and the risks involved and should be approved by a specialist before handling nis product.
espirator selection must be based on known or anticipated exposure levels, the hazards of the product nd the safe working limits of the selected respirator. Use a properly fitted, particulate filter respirator omplying with an approved standard if a risk assessment indicates this is necessary.
missions from ventilation or work process equipment should be checked to ensure they comply with ne requirements of environmental protection legislation. In some cases, fume scrubbers, filters or ngineering modifications to the process equipment will be necessary to reduce emissions to acceptable evels.
lear
mooth & Homogeneous
mber
etroleum odor
lot available
.0 – 9.0
195 ℃ (ASTM D 566)
195 C (ASTM D 500)
205 °C (Mineral Oil)

Not available Not available

Not available

Not volatile

0.88 – 0.95 kg/L





Solubility (water)		Insoluble in wat	tor						
Partition coefficient (n-octanol/water)									
Decomposition temperature	· · · · · ·		Not available						
· · · · · · · · · · · · · · · · · · ·		Not available	No data						
Worked Penetration at 25°C		265 – 295 (ASTN	M D 217)						
Explosive properties		No data	vi () 217)						
· · ·		No data							
Oxidising properties DMSO extractable compounds for	r baca ail substanco(s)								
according to IP346		<3 %	ot available %						
Section 10: Stability and Rea	ctivity								
10.1 Reactivity		No specific test data related to reactivity available for this product or its ingredients.							
10.2 Chemical stability		Stable under no	ormal conditions						
10.3 Possibility of hazardous rea	octions	Under normal c	Under normal conditions of storage and use, hazardous reactions will not occur. Oxidising agent.						
10.4 Conditions to avoid		Keep away from	n extreme heat and oxidising a	gents.					
10.5 Incompatible materials			nbustion is likely to give rise to ses, including carbon monoxic						
10.6 Hazardous decomposition	products		ganic and inorganic compound		•				
SECTION 11: Toxicological In	formation								
11.1 Information on toxicologica	al effects								
Acute toxicity									
Product / ingredient name	Result		Species	Dose	Exposure				
5	LC 50 Inhalation due	ts and mists	Rat	>2.18mg/l	4 hours				
Distillate (Petroleum), hydro	LD 50 Derr		Rabbit	> 5000 mg/kg	_				
treated heavy paraffinic	LD 50 Ora	-	Rat	>15000 mg/kg	_				
Invitation / convection				5 5					
Irritation / corrosion									
Skin									
Eye		NO KNOWN SIGNI	ficant effects or critical hazard	5.					
Respiratory									
Sensation									
Skin		No known significant effects or critical hazards.							
Respiratory									
Mutagenicity		No data available to indicate product or any components present greater than 0.1 % are multigene or genotoxic.							
Carcinogenicity		The base oil(s) in this product is based on an severely hydrotreated distillate.							
Reproductive toxicity		The product should not be regarded as a carcinogen. Contains no ingredient listed as toxic to reproduction.							
Specific target organ toxicity – sin	gle exposure								
Specific target organ toxicity – rep		Not classified							
Aspiration hazard		Aspiration hazard – Category 1							
Information on likely routes of exp	oosure	Not available							
Potential acute health effects									
Eye contact		Eye contact may cause redness and transient pain.							
Inhalation		Inhalation of oil mist or vapours at elevated temperatures may cause respiratory irritation.							
Skin contact			No known significant effects or critical hazards.						
Ingestion			wallowed and enters airways.						
Potential chronic health effects		may be latal II S	wanowed and enters all wdys.						
		No known size	ficant officers or critical harded	c .					
General			ificant effects or critical hazard		The product should not be				
Carcinogenicity		The base oil(s) in this product is based on an severely hydrotreated distillate. The product should not be regarded as a carcinogen.							

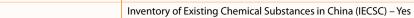




China



Mutagenicity								
Teratogenicity Product / ingredient name		Nokoowo	No known significant effects or critical hazards.					
		NO KHOWH S	significant effects of critical haza	105.				
Fertility effects	lity effects							
Other information Specific hazard		Not availab	le					
Section 12: Ecological Information	1							
12.1 Toxicity		Not expected	ed to be harmful to aquatic orga	anisms.				
12.2 Persistence and degradability		Not inherer	Not inherently biodegradable.					
12.3 Bioaccumulative potential		Bioaccumulation is unlikely to be significant because of the low water solubility of this product.						
12.4 Mobility in soil		ered mobile.		<u>, , ,</u>				
12.5 Results of PBT & vPvB assessment		Not applicable						
12.6 Other adverse effects		Insoluble in	water. Spills may form a film or nsfer could also be impaired.	n water surfaces causing physica	al damage to organisms.			
Section 13: Disposal Consideration	าร							
The information in this section contains information provided in the Exposure Sc		d guidance. T	he list of Identified Uses in Secti	on 1 should be consulted for ar	ny available use-specific			
Product Methods of disposal		Where possible (e.g. in the absence of relevant contamination), recycling of used substance is feasible and recommended. This substance can be burned or incinerated, subject to national/local authorisations, relevant contamination limits, safety regulations and air quality legislation. Contaminated or waste substance (not directly recyclable): Disposal can be carried out directly, or by delivery to qualified waste handlers. National legislation may identify a specific organisation, and/or prescribe composition limits and methods for recovery or disposal						
Hazardous waste		Yes						
European waste catalogue (EWC) Waste Code 13 03 07*		Waste designation.						
Packaging		Mineral-based non-chlorinated insulating and heat transmission oils.						
Methods of disposal	of disposal		The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.					
Section 14: Transport Information								
International transport regulations								
	ADR / R	ID	ADN	IMO / IMDG Classification	ICAO / IATA Classification			
14.1 UN number	Not regul	ated	Not regulated	Not regulated	Not regulated			
14.2 UN proper shipping name	_		_	-	_			
14.3 Transport hazard class(es)	_		_	_	_			
14.4 Packing group	_		_	-	_			
14.5 Environmental hazards	No		No	No	No			
Additional Information	_		-	-	-			
14.6 Special precautions for user oils								
14.7 Transport in bulk according to An	nex Lof MARPOL	73/78 and th	e IBC Code					
Section 15: Regulatory Informatio								
15.1 Safety, health and environmental		slation specie	fic for the substance or mixture	EU Regulation (EC) No. 1907/	2006 (REACH)			
Annex XIV – List of substances subject to Annex XIV			e components are listed					
Substances of very high concern			Percent and more a					
Annex XVII – Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles.		Not applicable						
International Lists National Inventory		Inventory name						
Australia		Australian I	nventory of Chemical Substance	es (AICS) – Yes				
Canada		Domestic Substances List (DSL) – Yes						
		Non-Domestic Substances List (NDSL) – No						









Former	European Inventory of Existing Commercial Chemical Substances (EINECS) – Yes				
Europe	European List of Notified Chemical Substances (ELINCS) – No				
Japan	Inventory of Existing and New Chemical Substances (ENCS) – Yes				
Korea	Existing Chemicals List (ECL) – Yes				
New Zealand	New Zealand Inventory – Yes				
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS) – Yes				
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory – Yes				
	oly with the inventory requirements administered by the governing country(s) uct are not listed or exempt from listing on the inventory administered by the governing country(s).				
Section 16: Other Information					
Revision comments					
Legend to abbreviations					
ADR	European agreement concerning the international carriage of dangerous good by road.				
RID	Regulations agreement concerning the international carriage of dangerous good by rail.				
IMDG Code	International Maritime Dangerous Goods Code.				
ICAO	International Civil Aviation Organization.				
IATA	International Air Transport Association.				
GHS	Globally Harmonized System of Classification and Labeling of Chemicals.				
CLP	Classification, Labelling and Packaging Regulation [Regulation (EC) No.1272/2008].				
SCBA	Self-Contained Breathing Apparatus.				
REACH	Registration, Evaluation, Authorization and Restriction of Chemicals Regulation [Regulation (EC) No. 1907/2006].				
LC 50	Median lethal concentration.				
LD 50	Median lethal dose.				
PBT	Persistent, Bio accumulative and Toxic.				

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Emergency / Info Phone No.	Phone: +91-22-40635600 • Fax: +91-22-40635601	
Email	info@gandharoil.com	





### **DIVYOL EPX - 2 GREASE**

Section 1: Identification of the Substance / Mixture				
1.1 Product identifier				
Product name	Divvol EPX – 2 Gr	Divyol EPX – 2 Grease		
Product description		Extreme Pressure Grease		
Product type	Grease	Grease		
MARPOL Annex-1	****			
1.2 Identified uses				
Distribution of substance	Automotive & Inc			
Formulation & (re)packing of substance & mixtures	Automotive & Inc	dustrial Grease		
Manufacture of substance	Automotive & Inc	dustrial Grease		
Functional fluids	Automotive & Inc	dustrial Grease		
Section 2: Hazard Identification				
4-Extreme	Health		1	
3-High	Flammability		1	
2-Moderate	Reactivity		0	
1-Slight	Special		_	
Section 3: Compostion / Information on Ingredi				
, , , , , , , , , , , , , , , , , , , ,				
Chemical Name / Ingredients	% by wt.	Hazardous		CAS No. 1310-66-3
Lithium Hydroxide Mineral Oil	0.4 - 2 82 - 95	Yes Yes		64742-52-5, 64741-88-4, 64742-54-7, 64742-01-4
12 HSA	4 - 10	No		04742-52-5, 04741-88-4, 04742-54-7, 04742-01-4 106-14-9
НСО	1 - 5	No		8001-78-3
Additives	0 - 3	Yes		Proprietary Mixture
Zinc dialkyldithiophosphate	0 - 2	Yes		68457-79-4
Additives	0 -3	Yes		68511-50-2
Product / Ingredient name	Lithium soaps fro	Lithium soaps from natural fatty sub		nces
Section 4: First Aid Measures				
Inhalation exposure	Remove to fresh	air & provide oxyo	aen, it	f breathing is difficult. Contact physician
Skin contact	Remove contami	Remove contaminated clothing. Flush skin with water. Wash skin thoroughly with mild soap & water. If irritation occurs, call a physician.		
Swallowing or other	Do not induce vo	Do not induce vomiting. In general no treatment is necessary unless large quantities are ingested. Get medical advice.		
Eye contact	Rinse continuous	Rinse continuously with water for several minutes. Get medical attention, if irritation persists.		
Protection first-aiders	Disconnecting el	Disconnecting electrical supply. Ensure adequate ventilation and check that a safe and breathing area is available before entry into confined spaces.		
Section 5: Fire Fighting Measures				
5.1 Extinguishing media				
Unsuitable extinguishing media				Do not use direct water and wet chemicals, or water on the fire. Use foam simultaneously on the surface.
5.2 Special hazards arising from the substance or mix				
Hazards from the substance or mixture	Flammable liquid	Flammable liquids in pressurised containers may rupture and when exposed to heat, creating a highly flammable vapour cloud.		
Hazardous thermal decomposition products	particulates, gase	Incomplete combustion is likely to give rise to a complex mixture of airborne solid and liquid particulates, gases, including carbon monoxide, H <sub>2</sub> S, SO <sub>x</sub> (sulphur oxides) or sulphuric acid and unidentified organic and inorganic compounds.		
5.3 Advice for firefighters				
Special precautions for firefighters				g all persons from the vicinity of the incident if there is a fire. No sonal risk or without suitable training.
Special protective equipment for firefighters	Firefighters shou (SCBA) with a full helmets, protecti	ld wear appropria face- piece opera	ate pr ated i ves) c	otective equipment and self-contained breathing apparatus in positive pressure mode. Clothing for firefighters (including conforming to European standard EN 469 will provide a basic level





6.1 Personal precautions protective equipment and em	ergency procedures			
6.1 Personal precautions, protective equipment and emergency procedures Keep non-involved personnel away from the area of spillage.				
For non-emergency personnel	Alert emergency personnel away from the area of spillage. Alert emergency personnel. Except in case of small spillages, the feasibility of any actions should always be assessed and advised, if possible, by a trained, competent person in charge of managing the emergency. Stop leak if safe to do so. Avoid direct contact with the product. Stay upwind / keep distance from source. In case of large spillages, alert occupants in downwind areas. Eliminate all ignition sources if safe to do so. Spillages of limited amounts of product, especially in the open air when vapours will be usually quickly dispersed, are dynamic situations, which will presumably limit the exposure to dangerous concentrations. Note : Recommended measures are based on the most likely spillage scenarios for this material; however, local conditions (wind, air temperature, wave / current direction and speed) may significantly influence the choice of appropriate actions.			
For emergency responders	For this reason, local experts should be consulted when necessary. Local regulations may also prescribe or limit actions to be taken. Small spillages: Normal antistatic working clothes are usually adequate. Large spillages: Full body suit of chemically resistant and thermal resistant material should be used. Work gloves providing adequate chemical resistance, specifically to aromatic hydrocarbons. Note: Gloves made of PVA are not water-resistant, and are not suitable for emergency use. Safety helmet, antistatic non-skid safety shoes or boots. Goggles and / or face shield, if splashes or contact with eyes is possible or anticipated. Respiratory Protection : A half or full-face respirator with filter(s) for organic vapours (and when applicable for H <sub>2</sub> S) a Self Contained Breathing Apparatus (SCBA) can be used according to the extent of spill and predictable amount of exposure. If the situation cannot be completely assessed, or if an oxygen deficiency is possible, only SCBA's should be used.			
6.2 Environmental precautions	Prevent product from entering sewers, rivers or other bodies of water. If necessary dike the product with dry earth, sand or similar non-combustible materials. In case of soil contamination, remove contaminated soil and treat in accordance with local regulations. In case of small spillages in closed waters (i.e. ports), contain product with floating barriers or other equipment. Collect spilled product by absorbing with specific floating absorbents. If possible, large spillages in open waters should be contained with floating barriers or other mechanical means. If this is not possible, control the spreading of the spillage, and collect the product by skimming or other suitable mechanical means. The use of dispersants should be advised by an expert, and, if required, approved by local authorities.			
6.3 Methods and material for containment and cleaning	up			
Small spill	Stop leak if without risk. Absorb spilled product with suitable non-combustible materials.			
Large spill	Large spillages may be cautiously covered with foam, if available, to limit vapour cloud formation. Do not use water jet. When inside buildings or confined spaces, ensure adequate ventilation. Transfer collected product and other contaminated materials to suitable containers for recovery or safe disposal.			
6.4 Reference to other sections	See Section 1: For emergency contact information. See Section 8: For information on appropriate personal protective equipment. See Section 13: For additional waste treatment information.			
Section 7: Handling and Storage				
7.1 Advice on general information – hygiene, storage	Obtain special instructions before use. Keep away from heat / sparks / open flames/hot surfaces. No smoking. Use and store only outdoors or in a well-ventilated area. Hazard of slipping on spilt product. Avoid release to the environment.			
7.2 Conditions for safe storage including any incompatibilities	Storage area layout, tank design, equipment and operating procedures must comply with the relevant regional, national or local legislation. Storage installations should be designed with adequate bunds in case of leaks or spills. Cleaning, inspection and maintenance of internal structure of storage tanks must be done only by properly equipped and qualified personnel as defined by national, local or company regulations. Store separately from oxidising agents. Keep only in the original container or in a suitable container for this kind of product. Keep container tightly closed and sealed until ready for use. Do not store in unlabelled containers. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Empty containers may contain harmful, flammable / combustible or explosive residue or vapours. Do not cut, grind, drill, weld, reuse or dispose of containers unless adequate precautions are taken against these hazards. Protect from sunlight.			
7.3 Specific end use(s) – Recommendations	Not available			



Vapour pressure

Density Solubility (ies)



Section 8: Exposure Controls / Personal Protect	tion
The list of Identified Uses in Section 1 should be consu	Ited for any available use-specific information provided in the Exposure Scenario(s).
8.1 Control parameters	
Occupational exposure limits	
Product / Ingredient name	Distillates, mixture of hydrocarbons
Exposure limits values	AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m <sup>3</sup> 8 hours. Form: mist and fume STEL: 3 mg/m <sup>3</sup> 15 minutes. Form: mist and fume [Air contaminant]. AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m <sup>3</sup> 8 hours. Form: mist and fume STEL: 3 mg/m <sup>3</sup> 15 minutes. Form: mist and fume.
Recommended monitoring procedures	If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres – Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres – Guide for the application and use of procedures for the assessment of exposure to chemical agents) European Standard EN 482 (Workplace atmospheres – General requirements for the performance of procedures for the measurement of chemical agents). Reference to national guidance documents for methods for the determination of hazardous substances will also be required.
8.2 Exposure control Appropriate engineering controls	Mechanical ventilation and local exhaust will reduce exposure via the air. Use oil resistant material in construction of handling equipment. Store under recommended conditions and if heated, temperature control equipment should be used to avoid overheating.
Individual protection measures	
Hygiene measures	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Ensure that eyewash stations and safety showers are close to the workstation location. Wash contaminated clothing before reuse.
Eye / face protection	Recommended: Safety glasses with side shields.
Skin protection	
Hand protection	4 – 8 hours (breakthrough time): nitrile rubber.
Body protection	Wear protective clothing if there is a risk of skin contact. Change contaminated clothes at the end of working shift.
Other skin protection	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary.
Environmental exposure control	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.
Section 9: Physical and Chemical Properties	
Appearance	Clear
Physical state	Smooth & Homogeneous
Colour	Pale Yellow
Odor	Petroleum odor
Odour threshold	Not available
Dropping point	> 195 °C (ASTM D 566)
Flash point	> 200 °C (Mineral Oil)
Evaporation rate	Not available
Flammability (solid, gas)	Not available
Flammability (solid, gas) Flammability limits in air (lower), % by volume	Not available       Not available



Not volatile

0.88 – 0.95 kg/L





Solubility (water)		Insoluble in water				
Partition coefficient (n-octanol/water)		Not available				
Decomposition temperature		No data				
Auto-ignition temperature		Not available				
Worked Penetration at 25°C		265 – 295 (ASTM D 217)				
Explosive properties		No data				
Oxidising properties		No data				
DMSO extractable compounds for base oil substance(s) according to IP346		Not available <3 %				
Section 10: Stability and Reactivity						
10.1 Reactivity		No specific test data related to reactivity available for this product or its ingredients.				
10.2 Chemical stability		Stable under normal conditions				
10.3 Possibility of hazardous rea	actions	Under normal c	conditions of storage and use, I	hazardous reactions will not o	ccur. Oxidising agent.	
10.4 Conditions to avoid		Keep away fron	n extreme heat and oxidising a	gents.		
10.5 Incompatible materials		Incomplete combustion is likely to give rise to a complex mixture of airborne solid and liquid particulates, gases, including carbon monoxide, $H_2S$ , $SO_x$ (sulphur oxides) or sulphuric acid and				
10.6 Hazardous decomposition	products		ganic and inorganic compound			
SECTION 11: Toxicological In	formation					
11.1 Information on toxicologica	al effects					
Acute toxicity						
Product / ingredient name	Result		Species	Dose	Exposure	
	LC 50 Inhalation due	sts and mists	Rat	>2.18mg/l	4 hours	
Distillate (Petroleum), hydro treated heavy paraffinic	LD 50 Derr	nal	Rabbit	> 5000 mg/kg	-	
treated neavy paraminic	LD 50 Oral		Rat	>15000 mg/kg	-	
Irritation / corrosion						
Skin						
Eye			ificant effects or critical hazard	s.		
Respiratory						
Sensation						
Skin						
Respiratory		No known significant effects or critical hazards.				
Mutagenicity		No data available to indicate product or any components present greater than 0.1 % are multigene or genotoxic.				
Carcinogenicity		The base oil(s) in this product is based on an severely hydrotreated distillate.				
Reproductive toxicity		The product should not be regarded as a carcinogen. Contains no ingredient listed as toxic to reproduction.				
Specific target organ toxicity – single exposure						
Specific target organ toxicity – rep	<u> </u>	Not classified				
Aspiration hazard		Aspiration hazard – Category 1				
Information on likely routes of exposure		Not available				
Potential acute health effects						
Eye contact		Eye contact may cause redness and transient pain.				
Inhalation		Inhalation of oil mist or vapours at elevated temperatures may cause respiratory irritation.				
Skin contact		No known significant effects or critical hazards.				
Ingestion		May be fatal if swallowed and enters airways.				
Potential chronic health effects		,	chief and the second seco			
General		No known significant effects or critical hazards.				
Carcinogenicity		The base oil(s) in this product is based on an severely hydrotreated distillate. The product should not be regarded as a carcinogen.				
		-	-			







Mutagonicity						
Mutagenicity						
Teratogenicity Product / ingradiant name		No known s	No known significant effects or critical hazards.			
Product / ingredient name						
Fertility effects		Not availab	٩			
Other information Specific hazard		Not available				
Section 12: Ecological Information		Not expect	ad to be bermful to equatic area	anisme		
12.1 Toxicity 12.2 Persistence and degradability		Not expected to be harmful to aquatic organisms.				
		Not inherently biodegradable.				
12.3 Bioaccumulative potential		Bioaccumulation is unlikely to be significant because of the low water solubility of this product.				
12.4 Mobility in soil		Not considered mobile.				
12.5 Results of PBT & vPvB assessment		Not applicable				
12.6 Other adverse effects		Insoluble in water. Spills may form a film on water surfaces causing physical damage to organisms. Oxygen transfer could also be impaired.				
Section 13: Disposal Considerations						
The information in this section contains information provided in the Exposure Sc		d guidance. T	he list of Identified Uses in Secti	ion 1 should be consulted for ar	ny available use-specific	
Product Methods of disposal		Where possible (e.g. in the absence of relevant contamination), recycling of used substance is feasible and recommended. This substance can be burned or incinerated, subject to national/local authorisations, relevant contamination limits, safety regulations and air quality legislation. Contaminated or waste substance (not directly recyclable): Disposal can be carried out directly, or by delivery to qualified waste handlers. National legislation may identify a specific organisation, and/or prescribe composition limits and methods for recovery or disposal				
Hazardous waste		Yes				
European waste catalogue (EWC) Waste	Code 13 03 07*	Waste desi	gnation.			
Packaging		Mineral-ba	sed non-chlorinated insulating	and heat transmission oils.		
Methods of disposal		The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.				
Section 14: Transport Information						
International transport regulations						
	ADR / R	ID	ADN	IMO / IMDG Classification	ICAO / IATA Classification	
14.1 UN number	Not regul	ated	Not regulated	Not regulated	Not regulated	
14.2 UN proper shipping name	-		_	_	-	
14.3 Transport hazard class(es)	_		_	-	-	
14.4 Packing group	-		-	-	-	
14.5 Environmental hazards	No		No	No	No	
Additional Information	_		-	-	-	
14.6 Special precautions for user oils						
14.7 Transport in bulk according to An	nex I of MARPOL	73/78 and th	e IBC Code			
Section 15: Regulatory Informatio						
15.1 Safety, health and environmental		slation speci	fic for the substance or mixture	e EU Regulation (EC) No. 1907/	(2006 (REACH)	
Annex XIV – List of substances subject to authorisation Annex XIV Substances of very high concern		None of the components are listed				
Annex XVII – Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles.		Not applicable				
International Lists National Inventory		Inventory name				
Australia		Australian Inventory of Chemical Substances (AICS) – Yes				
Canada		Domestic Substances List (DSL) – Yes Non-Domestic Substances List (NDSL) – No				
China		Inventory of Existing Chemical Substances in China (IECSC) – Yes				
				$\frac{1}{100} \frac{1}{100} \frac{1}$		







_	European Inventory of Existing Commercial Chemical Substances (EINECS) – Yes		
Europe	European List of Notified Chemical Substances (ELINCS) – No		
Japan	Inventory of Existing and New Chemical Substances (ENCS) – Yes		
Korea	Existing Chemicals List (ECL) – Yes		
New Zealand	New Zealand Inventory – Yes		
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS) – Yes		
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory – Yes		
	oly with the inventory requirements administered by the governing country(s) uct are not listed or exempt from listing on the inventory administered by the governing country(s).		
Section 16: Other Information			
Revision comments			
Legend to abbreviations			
ADR	European agreement concerning the international carriage of dangerous good by road.		
RID	Regulations agreement concerning the international carriage of dangerous good by rail.		
IMDG Code	International Maritime Dangerous Goods Code.		
ICAO	International Civil Aviation Organization.		
IATA	International Air Transport Association.		
GHS	Globally Harmonized System of Classification and Labeling of Chemicals.		
CLP	Classification, Labelling and Packaging Regulation [Regulation (EC) No.1272/2008].		
SCBA	Self-Contained Breathing Apparatus.		
REACH	Registration, Evaluation, Authorization and Restriction of Chemicals Regulation [Regulation (EC) No. 1907/2006].		
LC 50	Median lethal concentration.		
LD 50	Median lethal dose.		
PBT	Persistent, Bio accumulative and Toxic.		

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Emergency / Info Phone No.	Phone: +91-22-40635600 • Fax: +91-22-40635601	
Email	info@gandharoil.com	





# DIVYOL EPX – 3 (C) GREASE

Section 1: Identification of the Substance / Mixture					
1.1 Product identifier					
Product name	Divyol EPX – 3 (C	Divyol EPX – 3 (C) Grease			
Product description	Extreme Pressure Grease				
Product type	Grease				
MARPOL Annex-1	****				
1.2 Identified uses					
Distribution of substance					
		Automotive & Industrial Grease			
Formulation & (re)packing of substance & mixtures		Automotive & Industrial Grease			
Manufacture of substance	Automotive & Ine				
Functional fluids	Automotive & Ine	dustrial Grease			
Section 2: Hazard Identification					
4-Extreme	Health	1			
3-High	Flammability		1		
2-Moderate	Reactivity		0		
1-Slight	Special		-		
Section 3: Compostion / Information on Ingredients					
Chemical Name / Ingredients	% by wt.	Hazardous	CAS No.		
Lithium Hydroxide	0.5 - 2	Yes	1310-66-3		
Mineral Oil	82 - 90	Yes	64741-88-4, 64742-01-4, Proprietary Mixture, 64742-52-5		
12 HSA	4 - 10	No	106-14-9		
НСО	2 - 6	No	8001-78-3		
Zinc dialkyldithiophosphate	0 - 2	Yes	68457-79-4		
Additives	0-2	Yes	Proprietary Mixture		
Sulphurised Oil	0 - 4	No	72102-30-8		
Bitumen	0 - 2	No	8052-42-4		
Product / Ingredient name	Lithium soaps fro	om natural fatty su	ubstances		
Section 4: First Aid Measures					
Inhalation exposure	tion exposure Remove to fresh air & provide oxygen, if breathing is difficult. Contact physician				
Skin contact		Remove contaminated clothing. Flush skin with water. Wash skin thoroughly with mild soap & wate If irritation occurs, call a physician.			
Swallowing or other		Do not induce vomiting. In general no treatment is necessary unless large quantities are inge Get medical advice.			
Eye contact	Rinse continuous	Rinse continuously with water for several minutes. Get medical attention, if irritation persists.			
Protection first-aiders	5	Disconnecting electrical supply. Ensure adequate ventilation and check that a safe and breathing are available before entry into confined spaces.			
Section 5: Fire Fighting Measures					
5.1 Extinguishing media					
Unsuitable extinguishing media Use dry powder, foam, carbon dioxide. Do not use direct water and wet chemicals, of burning product. They may spread the fire. Use foam simultaneously on the surface					
5.2 Special hazards arising from the substance or mix	ture				
Hazards from the substance or mixture		Flammable liquids in pressurised containers may rupture and when exposed to heat, crea flammable vapour cloud.			
Hazardous thermal decomposition products	Incomplete combustion is likely to give rise to a complex mixture of airborne solid and liquid particulates, gases, including carbon monoxide, $H_2S$ , $SO_x$ (sulphur oxides) or sulphuric acid and unidentified organic and inorganic compounds.				
5.3 Advice for firefighters					
Special precautions for firefighters		Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.			
pecial protective equipment for firefighters for firefighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face- piece operated in positive pressure mode. Clothing for firefighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic I of protection for chemical incidents.					





6.1 Personal precautions, protective equipment and emergency procedures				
For non-emergency personnel	Keep non-involved personnel away from the area of spillage. Alert emergency personnel. Except in case of small spillages, the feasibility of any actions should always be assessed and advised, if possible, by a trained, competent person in charge of managing the emergency. Stop leak if safe to do so. Avoid direct contact with the product. Stay upwind / keep distance from source. In case of large spillages, alert occupants in downwind areas. Eliminate all ignition sources if safe to do so. Spillages of limited amounts of product, especially in the open air when vapours will be usually quickly dispersed, are dynamic situations, which will presumably limit the exposure to dangerous concentrations. Note : Recommended measures are based on the most likely spillage scenarios for this material; however, local conditions (wind, air temperature, wave / current direction and speed) may significantly influence the choice of appropriate actions.			
For emergency responders	For this reason, local experts should be consulted when necessary. Local regulations may also prescribe or limit actions to be taken. Small spillages: Normal antistatic working clothes are usually adequate. Large spillages: Full body suit of chemically resistant and thermal resistant material should be used. Work gloves providing adequate chemical resistance, specifically to aromatic hydrocarbons. Note: Gloves made of PVA are not water-resistant, and are not suitable for emergency use. Safety helmet, antistatic non-skid safety shoes or boots. Goggles and / or face shield, if splashes or contact with eyes is possible or anticipated. Respiratory Protection : A half or full-face respirator with filter(s) for organic vapours (and when applicable for H <sub>2</sub> S) a Self Contained Breathing Apparatus (SCBA) can be used according to the extent of spill and predictable amount of exposure. If the situation cannot be completely assessed, or if an oxygen deficiency is possible, only SCBA's should be used.			
6.2 Environmental precautions	Prevent product from entering sewers, rivers or other bodies of water. If necessary dike the product with dry earth, sand or similar non-combustible materials. In case of soil contamination, remove contaminated soil and treat in accordance with local regulations. In case of small spillages in closed waters (i.e. ports), contain product with floating barriers or other equipment. Collect spilled product by absorbing with specific floating absorbents. If possible, large spillages in open waters should be contained with floating barriers or other mechanical means. If this is not possible, control the spreading of the spillage, and collect the product by skimming or other suitable mechanical means. The use of dispersants should be advised by an expert, and, if required, approved by local authorities.			
6.3 Methods and material for containment and cleaning	up			
Small spill	Stop leak if without risk. Absorb spilled product with suitable non-combustible materials.			
Large spill	Large spillages may be cautiously covered with foam, if available, to limit vapour cloud formation. Do not use water jet. When inside buildings or confined spaces, ensure adequate ventilation. Transfer collected product and other contaminated materials to suitable containers for recovery or safe disposal.			
6.4 Reference to other sections	See Section 1: For emergency contact information. See Section 8: For information on appropriate personal protective equipment. See Section 13: For additional waste treatment information.			
Section 7: Handling and Storage				
7.1 Advice on general information – hygiene, storage	Obtain special instructions before use. Keep away from heat / sparks / open flames/hot surfaces. No smoking. Use and store only outdoors or in a well-ventilated area. Hazard of slipping on spilt product. Avoid release to the environment.			
7.2 Conditions for safe storage including any incompatibilities	Storage area layout, tank design, equipment and operating procedures must comply with the relevant regional, national or local legislation. Storage installations should be designed with adequate bunds in case of leaks or spills. Cleaning, inspection and maintenance of internal structure of storage tanks must be done only by properly equipped and qualified personnel as defined by national, local or company regulations. Store separately from oxidising agents. Keep only in the original container or in a suitable container for this kind of product. Keep container tightly closed and sealed until ready for use. Do not store in unlabelled containers. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Empty containers may contain harmful, flammable / combustible or explosive residue or vapours. Do not cut, grind, drill, weld, reuse or dispose of containers unless adequate precautions are taken against these hazards. Protect from sunlight.			
7.3 Specific end use(s) – Recommendations     Not available				



Vapour pressure Density Solubility (ies)



Section 8: Exposure Controls / Personal Protect	
The list of Identified Uses in Section 1 should be consult	ted for any available use-specific information provided in the Exposure Scenario(s).
8.1 Control parameters	
Occupational exposure limits	
Product / Ingredient name	Distillates, mixture of hydrocarbons
Exposure limits values	AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m <sup>3</sup> 8 hours. Form: mist and fume STEL: 3 mg/m <sup>3</sup> 15 minutes. Form: mist and fume [Air contaminant]. AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m <sup>3</sup> 8 hours. Form: mist and fume STEL: 3 mg/m <sup>3</sup> 15 minutes. Form: mist and fume.
Recommended monitoring procedures	If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres – Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres – Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres – General requirements for the performance of procedures for the measurement of chemical agents). Reference to national guidance documents for methods for the determination of hazardous substances will also be required.
8.2 Exposure control Appropriate engineering controls	Mechanical ventilation and local exhaust will reduce exposure via the air. Use oil resistant material in construction of handling equipment. Store under recommended conditions and if heated, temperature control equipment should be used to avoid overheating.
Individual protection measures	
Hygiene measures	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Ensure that eyewash stations and safety showers are close to the workstation location. Wash contaminated clothing before reuse.
Eye / face protection	Recommended: Safety glasses with side shields.
Skin protection	
Hand protection	4 – 8 hours (breakthrough time): nitrile rubber.
Body protection	Wear protective clothing if there is a risk of skin contact. Change contaminated clothes at the end of working shift.
Other skin protection	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary.
Environmental exposure control	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.
Section 9: Physical and Chemical Properties	
Appearance	Clear
Physical state	Smooth & Homogeneous
Colour	Dark Brown
Odor	Petroleum odor
Odour threshold	Not available
Dropping point	> 180 °C (ASTM D 566)
Flash point	> 210 °C (Mineral Oil)
Evaporation rate	Not available
Flammability (solid, gas)	Not available
Flammability limits in air (lower), % by volume	Not available
Flammability limits in air (upper), % by volume	Not available



Not volatile





Solubility (water)		Insoluble in wa	ter			
Partition coefficient (n-octanol/water)		Not available				
· · · · · · · · · · · · · · · · · · ·		No data				
Auto-ignition temperature		Not available				
Worked Penetration at 25°C		220 – 250 (ASTI	M D 217)			
Explosive properties		No data	10217)			
Oxidising properties		No data				
DMSO extractable compounds fo	r base oil substance(s)	Not available				
according to IP346		<3 %				
Section 10: Stability and Rea	ctivity	1				
10.1 Reactivity		No specific test	data related to reactivity avail	able for this product or its ingr	redients.	
10.2 Chemical stability			ormal conditions			
10.3 Possibility of hazardous rea	actions	Under normal c	conditions of storage and use,	hazardous reactions will not o	ccur. Oxidising agent.	
10.4 Conditions to avoid		Keep away from	n extreme heat and oxidising a	igents.		
10.5 Incompatible materials		Incomplete con particulates, ga	nbustion is likely to give rise to ses, including carbon monoxic	o a complex mixture of airborn de, H₂S, SO <sub>x</sub> (sulphur oxides) or	e solid and liquid sulphuric acid and	
10.6 Hazardous decomposition	products		ganic and inorganic compound			
SECTION 11: Toxicological In	formation					
11.1 Information on toxicologica	al effects					
Acute toxicity						
Product / ingredient name	Result		Species	Dose	Exposure	
	LC 50 Inhalation due	sts and mists	Rat	>2.18mg/l	4 hours	
Distillate (Petroleum), hydro	LD 50 Derr	mal	Rabbit	> 5000 mg/kg	-	
treated heavy paraffinic	LD 50 Or	al	Rat	>15000 mg/kg	-	
Irritation / corrosion						
Skin						
Eye		No known significant effects or critical hazards.				
Respiratory						
Sensation						
Skin						
Respiratory		No known significant effects or critical hazards.				
Mutagenicity		No data available to indicate product or any components present greater than 0.1 % are				
		multigene or genotoxic.				
Carcinogenicity			•	severely hydrotreated distillate		
Reproductive toxicity		The product should not be regarded as a carcinogen. Contains no ingredient listed as toxic to reproduction.				
Specific target organ toxicity – sin		Not classified				
Specific target organ toxicity – rep	peated exposure	NOT CLASSIFIED				
Aspiration hazard		Aspiration hazard – Category 1				
Information on likely routes of exp	posure	Not available				
Potential acute health effects						
Eye contact		Eye contact may cause redness and transient pain.				
Inhalation		Inhalation of oil mist or vapours at elevated temperatures may cause respiratory irritation.				
Skin contact		No known sign	ificant effects or critical hazard	ls.		
Ingestion		May be fatal if swallowed and enters airways.				
Potential chronic health effects						
General		No known signi	ificant effects or critical hazard	ls.		
Carcinogenicity		The base oil(s) in this product is based on an severely hydrotreated distillate. The product should not be regarded as a carcinogen.				
		. eguided us d e				







Mutagenicity						
Teratogenicity			significant effects or critical haz	ards.		
Product / ingredient name						
Fertility effects		NI	1			
Other information Specific hazard		Not availab	le			
Section 12: Ecological Information	1					
12.1 Toxicity			ed to be harmful to aquatic org	anisms.		
12.2 Persistence and degradability			ntly biodegradable.			
12.3 Bioaccumulative potential		Bioaccumulation is unlikely to be significant because of the low water solubility of this product.				
12.4 Mobility in soil			ered mobile.			
12.5 Results of PBT & vPvB assessment		Not applica				
12.6 Other adverse effects			n water. Spills may form a film or nsfer could also be impaired.	n water surfaces causing physica	al damage to organisms.	
Section 13: Disposal Consideration	าร					
The information in this section contains information provided in the Exposure Sc		d guidance. T	he list of Identified Uses in Sect	ion 1 should be consulted for ar	ny available use-specific	
Product Methods of disposal Product Methods of disposal Where possible (e.g. in the absence of relevant conta feasible and recommended. This substance can be bu authorisations, relevant contamination limits, safety r or waste substance (not directly recyclable): Disposal qualified waste handlers. National legislation may ide composition limits and methods for recovery or dispo			e can be burned or incinerated, its, safety regulations and air qu ): Disposal can be carried out di on may identify a specific organ	subject to national/local iality legislation. Contaminated rectly, or by delivery to		
Hazardous waste Yes						
European waste catalogue (EWC) Waste	Waste designation.					
Packaging		Mineral-ba	sed non-chlorinated insulating	and heat transmission oils.		
Methods of disposal	Methods of disposal		The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.			
Section 14: Transport Information						
International transport regulations						
	ADR / R	ID	ADN	IMO / IMDG Classification	ICAO / IATA Classification	
14.1 UN number	Not regul	ated	Not regulated	Not regulated	Not regulated	
14.2 UN proper shipping name	-		_	-	-	
14.3 Transport hazard class(es)	-		_	-	-	
14.4 Packing group	-		-	-	-	
14.5 Environmental hazards	No		No	No	No	
Additional Information	_		_	-	_	
14.6 Special precautions for user oils				·		
14.7 Transport in bulk according to An	nex Lof MARPOL	73/78 and th	e IBC Code			
Section 15: Regulatory Informatio		c,, o ana m				
		slation speci	fic for the substance or mixture	e FU Regulation (FC) No. 1907/	2006 (REACH)	
Annex XIV – List of substances subject to Annex XIV Substances of very high concern	islation specific for the substance or mixture EU Regulation (EC) No. 1907/2006 (REACH) None of the components are listed					
Annex XVII – Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles.		Not applicable				
International Lists National Inventory		Inventory name				
Australia		Australian Inventory of Chemical Substances (AICS) – Yes				
Canada		Domestic Substances List (DSL) – Yes Non-Domestic Substances List (NDSL) – No				
China		Inventory of Existing Chemical Substances in China (IECSC) – Yes				
China		inventory 0	a chemical substances	$\frac{1}{1000} = 1000$		





_	European Inventory of Existing Commercial Chemical Substances (EINECS) – Yes				
Europe	European List of Notified Chemical Substances (ELINCS) – No				
Japan	Inventory of Existing and New Chemical Substances (ENCS) – Yes				
Korea	Existing Chemicals List (ECL) – Yes				
New Zealand	New Zealand Inventory – Yes				
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS) – Yes				
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory – Yes				
	oly with the inventory requirements administered by the governing country(s) uct are not listed or exempt from listing on the inventory administered by the governing country(s).				
Section 16: Other Information					
Revision comments					
Legend to abbreviations					
ADR	European agreement concerning the international carriage of dangerous good by road.				
RID	Regulations agreement concerning the international carriage of dangerous good by rail.				
IMDG Code	International Maritime Dangerous Goods Code.				
ICAO	International Civil Aviation Organization.				
IATA	International Air Transport Association.				
GHS	Globally Harmonized System of Classification and Labeling of Chemicals.				
CLP	Classification, Labelling and Packaging Regulation [Regulation (EC) No.1272/2008].				
SCBA	Self-Contained Breathing Apparatus.				
REACH	Registration, Evaluation, Authorization and Restriction of Chemicals Regulation [Regulation (EC) No. 1907/2006].				
LC 50	Median lethal concentration.				
LD 50	Median lethal dose.				
PBT	Persistent, Bio accumulative and Toxic.				

GANDHAR OIL REFINERY (INDIA) LTD.				
Taloja Plant         Plot No.10, MIDC, Main Road, Taloja, Taluka Panvel, District - Raigad 410208, India.				
Silvassa Plant	lot No. 2, Survey No. 678/1/3, Village Naroli, Near Naroli Check Post, Silvassa, Dadra & Nagar Haveli, Union Territory 396230, India.			
Emergency / Info Phone No.	Phone: +91-22-40635600 • Fax: +91-22-40635601			
Email	info@gandharoil.com			





# DIVYOL EPX - 3 (HD) GREASE

Section 1: Identification of the Substance / Mix	ture			
1.1 Product identifier				
Product name	Divyol EPX – 3 (H	D) Grease		
Product description		Extreme Pressure Grease		
Product type	Grease			
MARPOL Annex-1	****			
1.2 Identified uses				
Distribution of substance	Automotive & Inc			
Formulation & (re)packing of substance & mixtures	Automotive & Inc			
Manufacture of substance	Automotive & Ind	dustrial Grease		
Functional fluids	Automotive & Inc	dustrial Grease		
Section 2: Hazard Identification				
4-Extreme	Health		1	
3-High	Flammability		1	
2-Moderate	Reactivity		0	
1-Slight	Special		-	
Section 3: Composition / Information on Ingred	•			
Chemical Name / Ingredients	% by wt.	Hazardous		CAS No.
Lithium Hydroxide	0.5 - 2	Yes		1310-66-3
Mineral Oil 12 HSA	82 - 94	Yes		64742-52-5, 64741-88-4, 64742-54-7, 64742-01-4
НСО	4 - 10 2 - 6	No No		106-14-9 8001-78-3
Mix Additives	0-3	Yes		Proprietary Mixture
Zinc dialkyldithiophosphate	0 - 25	Yes		68457-79-4
Polyisobutylene	0-2	No		9003-27-4
Product / Ingredient name	Lithium soaps fro	om natural fatty su	ubsta	ances
Section 4: First Aid Measures		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
Inhalation exposure	Remove to fresh	air & provide oxyc	non	if breathing is difficult. Contact physician
				skin with water. Wash skin thoroughly with mild soap & water.
Skin contact	If irritation occur	s, call a physician.		
Swallowing or other	Do not induce vo Get medical advi		l no	treatment is necessary unless large quantities are ingested.
Eye contact	Rinse continuous	sly with water for s	seve	ral minutes. Get medical attention, if irritation persists.
Protection first-aiders		lectrical supply. Er entry into confine		e adequate ventilation and check that a safe and breathing area is aces.
Section 5: Fire Fighting Measures				
5.1 Extinguishing media				
Unsuitable extinguishing media				Do not use direct water and wet chemicals, or water on the fire. Use foam simultaneously on the surface.
5.2 Special hazards arising from the substance or mix	5.			
Hazards from the substance or mixture			onta	ainers may rupture and when exposed to heat, creating a highly
Hazardous thermal decomposition products	Incomplete com particulates, gase	<ul> <li>Incomplete combustion is likely to give rise to a complex mixture of airborne solid and liquid particulates, gases, including carbon monoxide, H<sub>2</sub>S, SO<sub>x</sub> (sulphur oxides) or sulphuric acid and unidentified organic and inorganic compounds.</li> </ul>		
5.3 Advice for firefighters				
Special precautions for firefighters				g all persons from the vicinity of the incident if there is a fire. No sonal risk or without suitable training.
Special protective equipment for firefighters	Firefighters shou (SCBA) with a ful helmets, protect	<ul> <li>action shall be taken involving any personal risk or without suitable training.</li> <li>Firefighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face- piece operated in positive pressure mode. Clothing for firefighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.</li> </ul>		





6.1 Personal precautions, protective equipment and em	ergency procedures
For non-emergency personnel	Keep non-involved personnel away from the area of spillage. Alert emergency personnel. Except in case of small spillages, the feasibility of any actions should always be assessed and advised, if possible, by a trained, competent person in charge of managing the emergency. Stop leak if safe to do so. Avoid direct contact with the product. Stay upwind / keep distance from source. In case of large spillages, alert occupants in downwind areas. Eliminate all ignition sources if safe to do so. Spillages of limited amounts of product, especially in the open air when vapours will be usually quickly dispersed, are dynamic situations, which will presumably limit the exposure to dangerous concentrations. Note : Recommended measures are based on the most likely spillage scenarios for this material; however, local conditions (wind, air temperature, wave / current direction and speed) may significantly influence the choice of appropriate actions.
For emergency responders	For this reason, local experts should be consulted when necessary. Local regulations may also prescribe or limit actions to be taken. Small spillages: Normal antistatic working clothes are usually adequate. Large spillages: Full body suit of chemically resistant and thermal resistant material should be used. Work gloves providing adequate chemical resistance, specifically to aromatic hydrocarbons. Note: Gloves made of PVA are not water-resistant, and are not suitable for emergency use. Safety helmet, antistatic non-skid safety shoes or boots. Goggles and / or face shield, if splashes or contact with eyes is possible or anticipated. Respiratory Protection : A half or full-face respirator with filter(s) for organic vapours (and when applicable for H <sub>2</sub> S) a Self Contained Breathing Apparatus (SCBA) can be used according to the extent of spill and predictable amount of exposure. If the situation cannot be completely assessed, or if an oxygen deficiency is possible, only SCBA's should be used.
6.2 Environmental precautions	Prevent product from entering sewers, rivers or other bodies of water. If necessary dike the product with dry earth, sand or similar non-combustible materials. In case of soil contamination, remove contaminated soil and treat in accordance with local regulations. In case of small spillages in closed waters (i.e. ports), contain product with floating barriers or other equipment. Collect spilled product by absorbing with specific floating absorbents. If possible, large spillages in open waters should be contained with floating barriers or other mechanical means. If this is not possible, control the spreading of the spillage, and collect the product by skimming or other suitable mechanical means. The use of dispersants should be advised by an expert, and, if required, approved by local authorities.
6.3 Methods and material for containment and cleaning	up
Small spill	Stop leak if without risk. Absorb spilled product with suitable non-combustible materials.
Large spill	Large spillages may be cautiously covered with foam, if available, to limit vapour cloud formation. Do not use water jet. When inside buildings or confined spaces, ensure adequate ventilation. Transfer collected product and other contaminated materials to suitable containers for recovery or safe disposal.
6.4 Reference to other sections	See Section 1: For emergency contact information. See Section 8: For information on appropriate personal protective equipment. See Section 13: For additional waste treatment information.
Section 7: Handling and Storage	
7.1 Advice on general information – hygiene, storage	Obtain special instructions before use. Keep away from heat / sparks / open flames/hot surfaces. No smoking. Use and store only outdoors or in a well-ventilated area. Hazard of slipping on spilt product. Avoid release to the environment.
7.2 Conditions for safe storage including any incompatibilities	Storage area layout, tank design, equipment and operating procedures must comply with the relevant regional, national or local legislation. Storage installations should be designed with adequate bunds in case of leaks or spills. Cleaning, inspection and maintenance of internal structure of storage tanks must be done only by properly equipped and qualified personnel as defined by national, local or company regulations. Store separately from oxidising agents. Keep only in the original container or in a suitable container for this kind of product. Keep container tightly closed and sealed until ready for use. Do not store in unlabelled containers. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Empty containers may contain harmful, flammable / combustible or explosive residue or vapours. Do not cut, grind, drill, weld, reuse or dispose of containers unless adequate precautions are taken against these hazards. Protect from sunlight.
7.3 Specific end use(s) – Recommendations	Not available



Vapour pressure

Density Solubility (ies)



Section 8: Exposure Controls / Personal Protect	tion
	Ited for any available use-specific information provided in the Exposure Scenario(s).
8.1 Control parameters	
Occupational exposure limits	
Product / Ingredient name	Distillates, mixture of hydrocarbons
Exposure limits values	AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m <sup>3</sup> 8 hours. Form: mist and fume STEL: 3 mg/m <sup>3</sup> 15 minutes. Form: mist and fume [Air contaminant]. AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m <sup>3</sup> 8 hours. Form: mist and fume STEL: 3 mg/m <sup>3</sup> 15 minutes. Form: mist and fume.
Recommended monitoring procedures	If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres – Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres – Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres – General requirements for the performance of procedures for the measurement of chemical agents). Reference to national guidance documents for methods for the determination of hazardous substances will also be required.
8.2 Exposure control Appropriate engineering controls	Mechanical ventilation and local exhaust will reduce exposure via the air. Use oil resistant material in construction of handling equipment. Store under recommended conditions and if heated, temperature control equipment should be used to avoid overheating.
Individual protection measures	
Hygiene measures	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Ensure that eyewash stations and safety showers are close to the workstation location. Wash contaminated clothing before reuse.
Eye / face protection	Recommended: Safety glasses with side shields.
Skin protection	
Hand protection	4 – 8 hours (breakthrough time): nitrile rubber.
Body protection	Wear protective clothing if there is a risk of skin contact. Change contaminated clothes at the end of working shift.
Other skin protection	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary.
Environmental exposure control	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.
Section 9: Physical and Chemical Properties	
Appearance	Clear
Physical state	Smooth & Homogeneous
Colour	Amber
Odor	Petroleum odor
Odour threshold	Not available
Dropping point	> 198 °C (ASTM D 566)
Flash point	> 25 °C (Mineral Oil)
	Not available
Evaporation rate	
Evaporation rate Flammability (solid, gas)	Not available
	Not available       Not available
Flammability (solid, gas)	



Not volatile





Solubility (water)		Insoluble in wat	er				
Partition coefficient (n-octanol/water)		Not available					
Decomposition temperature		No data					
Auto-ignition temperature		Not available					
Worked Penetration at 25°C		220 – 250 (ASTN	A D 217)				
Explosive properties		No data	n U 217)				
· · · ·		No data					
Oxidising properties DMSO extractable compounds for	(hace oil substance(s)						
according to IP346		Not available <3 %					
Section 10: Stability and Rea	ctivity	1					
10.1 Reactivity		No specific test	data related to reactivity availa	able for this product or its ingr	edients.		
10.2 Chemical stability		Stable under no	ormal conditions				
10.3 Possibility of hazardous rea	ctions	Under normal c	onditions of storage and use, I	nazardous reactions will not o	ccur. Oxidising agent.		
10.4 Conditions to avoid		Keep away from	n extreme heat and oxidising a	gents.			
10.5 Incompatible materials		Incomplete con particulates, gas	nbustion is likely to give rise to ses, including carbon monoxic	a complex mixture of airborn le, H <sub>2</sub> S, SO, (sulphur oxides) or	e solid and liquid sulphuric acid and		
10.6 Hazardous decomposition	products		ganic and inorganic compound				
SECTION 11: Toxicological In	formation						
11.1 Information on toxicologica	al effects						
Acute toxicity							
Product / ingredient name	Result		Species	Dose	Exposure		
	LC 50 Inhalation due	sts and mists	Rat	>2.18mg/l	4 hours		
Distillate (Petroleum), hydro	LD 50 Derr	mal	Rabbit	> 5000 mg/kg	_		
treated heavy paraffinic	LD 50 Or	al	Rat	>15000 mg/kg	-		
Irritation / corrosion							
Skin							
Eye		No known significant effects or critical hazards.					
Respiratory							
Sensation							
Skin							
Respiratory		No known significant effects or critical hazards.					
		No data availab	le to indicate product or any o	omponents present greater th	an 0.1 % are		
Mutagenicity		No data available to indicate product or any components present greater than 0.1 % are multigene or genotoxic.					
Carcinogenicity			n this product is based on an s				
Reproductive toxicity		The product should not be regarded as a carcinogen. Contains no ingredient listed as toxic to reproduction.					
Specific target organ toxicity – sin	gle exposure	Not classified					
Specific target organ toxicity – rep	eated exposure	Not classified					
Aspiration hazard		Aspiration hazard – Category 1					
Information on likely routes of exp	oosure	Not available					
Potential acute health effects							
Eye contact		Eye contact may cause redness and transient pain.					
Inhalation		Inhalation of oil	mist or vapours at elevated te	emperatures may cause respira	itory irritation.		
Skin contact			ficant effects or critical hazard				
Ingestion			wallowed and enters airways.				
Potential chronic health effects							
		No known signi	ficant effects or critical hazard	S.			
General		The base oil(s) in this product is based on an severely hydrotreated distillate. The product should not be					
Carcinogenicity		-		everely hydrotreated distillate	. The product should not be		







Mutagenicity						
Teratogenicity			significant effects or critical haz	ards.		
Product / ingredient name						
Fertility effects		Not such the la	1-			
Other information Specific hazard		Not availab	le			
Section 12: Ecological Information						
12.1 Toxicity		Not expected to be harmful to aquatic organisms.				
12.2 Persistence and degradability		Not inherently biodegradable.				
12.3 Bioaccumulative potential		Bioaccumulation is unlikely to be significant because of the low water solubility of this product.				
12.4 Mobility in soil			ered mobile.			
12.5 Results of PBT & vPvB assessment	:	Not applica				
12.6 Other adverse effects			n water. Spills may form a film of nsfer could also be impaired.	n water surfaces causing physica	al damage to organisms.	
Section 13: Disposal Consideration						
The information in this section contains information provided in the Exposure So	generic advice and enario(s).	d guidance. T	he list of Identified Uses in Sect	ion 1 should be consulted for ar	ny available use-specific	
Product Methods of disposal Where possible (e.g. in the absence of relevant contamination), recycling of used substance is feasible and recommended. This substance can be burned or incinerated, subject to national/loo authorisations, relevant contamination limits, safety regulations and air quality legislation. Contour or waste substance (not directly recyclable): Disposal can be carried out directly, or by delivery to qualified waste handlers. National legislation may identify a specific organisation, and/or prescription limits and methods for recovery or disposal			subject to national/local ality legislation. Contaminated rectly, or by delivery to			
Hazardous waste	Hazardous waste					
European waste catalogue (EWC) Waste Code 13 03 07*		Waste designation.				
Packaging		Mineral-based non-chlorinated insulating and heat transmission oils.				
Methods of disposal		The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.				
Section 14: Transport Information						
International transport regulations						
	ADR / R	ID	ADN	IMO / IMDG Classification	ICAO / IATA Classification	
14.1 UN number	Not regul	ated	Not regulated	Not regulated	Not regulated	
14.2 UN proper shipping name	_		_	_	_	
14.3 Transport hazard class(es)	_		-	_	_	
14.4 Packing group	_		-	_	_	
14.5 Environmental hazards	No		No	No	No	
Additional Information	_		-	-	-	
14.6 Special precautions for user oils						
14.7 Transport in bulk according to An	nex   of MARPOL	73/78 and th	e IBC Code			
Section 15: Regulatory Informatio						
15.1 Safety, health and environmental		slation speci	fic for the substance or mixture	e EU Regulation (EC) No. 1907/	2006 (REACH)	
Annex XIV – List of substances subject to authorisation Annex XIV Substances of very high concern		None of the components are listed				
Annex XVII – Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles.		Not applicable				
International Lists National Inventory		Inventory name				
Australia		Australian Inventory of Chemical Substances (AICS) – Yes				
Canada		Domestic Substances List (DSL) – Yes Non-Domestic Substances List (NDSL) – No				
China		Inventory of Existing Chemical Substances in China (IECSC) – Yes				
		inventory o	. Easting chemical substances			







	European Inventory of Existing Commercial Chemical Substances (EINECS) – Yes				
Europe	European List of Notified Chemical Substances (ELINCS) – No				
Japan	Inventory of Existing and New Chemical Substances (ENCS) – Yes				
Korea	Existing Chemicals List (ECL) – Yes				
New Zealand	New Zealand Inventory – Yes				
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS) – Yes				
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory – Yes				
	oly with the inventory requirements administered by the governing country(s) uct are not listed or exempt from listing on the inventory administered by the governing country(s).				
Section 16: Other Information					
Revision comments					
Legend to abbreviations					
ADR	European agreement concerning the international carriage of dangerous good by road.				
RID	Regulations agreement concerning the international carriage of dangerous good by rail.				
IMDG Code	International Maritime Dangerous Goods Code.				
ICAO	International Civil Aviation Organization.				
IATA	International Air Transport Association.				
GHS	Globally Harmonized System of Classification and Labeling of Chemicals.				
CLP	Classification, Labelling and Packaging Regulation [Regulation (EC) No.1272/2008].				
SCBA	Self-Contained Breathing Apparatus.				
REACH	Registration, Evaluation, Authorization and Restriction of Chemicals Regulation [Regulation (EC) No. 1907/2006].				
LC 50	Median lethal concentration.				
LD 50	Median lethal dose.				
РВТ	Persistent, Bio accumulative and Toxic.				

GANDHAR OIL REFINERY (INDIA) LTD.				
Taloja Plant         Plot No.10, MIDC, Main Road, Taloja, Taluka Panvel, District - Raigad 410208, India.				
Silvassa Plant	lot No. 2, Survey No. 678/1/3, Village Naroli, Near Naroli Check Post, Silvassa, Dadra & Nagar Haveli, Union Territory 396230, India.			
Emergency / Info Phone No.	Phone: +91-22-40635600 • Fax: +91-22-40635601			
Email	info@gandharoil.com			





### **DIVYOL EPX - 3 GREASE**

Section 1: Identification of the Substance / Mixt	ure					
1.1 Product identifier						
Product name	Divvol EPX – 3 Gr	Divyol EPX – 3 Grease				
Product description	-	Extreme Pressure Grease				
Product type	Grease	Grease				
MARPOL Annex-1	****					
1.2 Identified uses						
Distribution of substance	Automotive & Ind					
Formulation & (re)packing of substance & mixtures	Automotive & Ind	dustrial Grease				
Manufacture of substance	Automotive & Ind	dustrial Grease				
Functional fluids	Automotive & Inc	dustrial Grease				
Section 2: Hazard Identification						
4-Extreme	Health		1			
3-High	Flammability		1			
2-Moderate	Reactivity		0			
1-Slight	Special		_			
Section 3: Compostion / Information on Ingredi						
, , , , , , , , , , , , , , , , , , , ,						
Chemical Name / Ingredients	% by wt.	Hazardous		CAS No. 1310-66-3		
Lithium Hydroxide Mineral Oil	0.4 - 2 82 - 95	Yes Yes		64742-52-5, 64741-88-4, 64742-54-7, 64742-01-4		
12 HSA	4 - 10	No		04742-52-5, 04741-88-4, 04742-54-7, 04742-01-4 106-14-9		
НСО	1 - 5	No		8001-78-3		
Additives	0 - 3	Yes		Proprietary Mixture		
Zinc dialkyldithiophosphate	0 - 2	Yes		68457-79-4		
Additives	0 -3	Yes		68511-50-2		
Product / Ingredient name	Lithium soaps fro	om natural fatty su	ubsta	nces		
Section 4: First Aid Measures						
Inhalation exposure	Remove to fresh	air & provide oxyc	gen, i	f breathing is difficult. Contact physician		
Skin contact	Remove contami	Remove contaminated clothing. Flush skin with water. Wash skin thoroughly with mild soap & water. If irritation occurs, call a physician.				
Swallowing or other	Do not induce vo	Do not induce vomiting. In general no treatment is necessary unless large quantities are ingested. Get medical advice.				
Eye contact	Rinse continuous	ly with water for	sever	al minutes. Get medical attention, if irritation persists.		
Protection first-aiders	Disconnecting el	Disconnecting electrical supply. Ensure adequate ventilation and check that a safe and breathing area is available before entry into confined spaces.				
Section 5: Fire Fighting Measures						
5.1 Extinguishing media						
Unsuitable extinguishing media				Do not use direct water and wet chemicals, or water on the fire. Use foam simultaneously on the surface.		
5.2 Special hazards arising from the substance or mix	<b>e</b> .					
Hazards from the substance or mixture			onta	iners may rupture and when exposed to heat, creating a highly		
Hazardous thermal decomposition products	particulates, gase	Incomplete combustion is likely to give rise to a complex mixture of airborne solid and liquid particulates, gases, including carbon monoxide, H <sub>2</sub> S, SO <sub>x</sub> (sulphur oxides) or sulphuric acid and unidentified organic and inorganic compounds.				
5.3 Advice for firefighters						
Special precautions for firefighters	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No					
Special protective equipment for firefighters	Firefighters shou (SCBA) with a full helmets, protecti	<ul> <li>action shall be taken involving any personal risk or without suitable training.</li> <li>Firefighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face- piece operated in positive pressure mode. Clothing for firefighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.</li> </ul>				





6.1 Personal precautions, protective equipment and em	ergency procedures
stri ersonal precautions, protective equipment and em	Keep non-involved personnel away from the area of spillage.
For non-emergency personnel	Alert emergency personnel away from the area of spillage. Alert emergency personnel. Except in case of small spillages, the feasibility of any actions should always be assessed and advised, if possible, by a trained, competent person in charge of managing the emergency. Stop leak if safe to do so. Avoid direct contact with the product. Stay upwind / keep distance from source. In case of large spillages, alert occupants in downwind areas. Eliminate all ignition sources if safe to do so. Spillages of limited amounts of product, especially in the open air when vapours will be usually quickly dispersed, are dynamic situations, which will presumably limit the exposure to dangerous concentrations. Note : Recommended measures are based on the most likely spillage scenarios for this material; however, local conditions (wind, air temperature, wave / current direction and speed) may significantly influence the choice of appropriate actions.
For emergency responders	For this reason, local experts should be consulted when necessary. Local regulations may also prescribe or limit actions to be taken. Small spillages: Normal antistatic working clothes are usually adequate. Large spillages: Full body suit of chemically resistant and thermal resistant material should be used. Work gloves providing adequate chemical resistance, specifically to aromatic hydrocarbons. Note: Gloves made of PVA are not water-resistant, and are not suitable for emergency use. Safety helmet, antistatic non-skid safety shoes or boots. Goggles and / or face shield, if splashes or contact with eyes is possible or anticipated. Respiratory Protection : A half or full-face respirator with filter(s) for organic vapours (and when applicable for H <sub>2</sub> S) a Self Contained Breathing Apparatus (SCBA) can be used according to the extent of spill and predictable amount of exposure. If the situation cannot be completely assessed, or if an oxygen deficiency is possible, only SCBA's should be used.
6.2 Environmental precautions	Prevent product from entering sewers, rivers or other bodies of water. If necessary dike the product with dry earth, sand or similar non-combustible materials. In case of soil contamination, remove contaminated soil and treat in accordance with local regulations. In case of small spillages in closed waters (i.e. ports), contain product with floating barriers or other equipment. Collect spilled product by absorbing with specific floating absorbents. If possible, large spillages in open waters should be contained with floating barriers or other mechanical means. If this is not possible, control the spreading of the spillage, and collect the product by skimming or other suitable mechanical means. The use of dispersants should be advised by an expert, and, if required, approved by local authorities.
6.3 Methods and material for containment and cleaning	up
Small spill	Stop leak if without risk. Absorb spilled product with suitable non-combustible materials.
Large spill	Large spillages may be cautiously covered with foam, if available, to limit vapour cloud formation. Do not use water jet. When inside buildings or confined spaces, ensure adequate ventilation. Transfer collected product and other contaminated materials to suitable containers for recovery or safe disposal.
6.4 Reference to other sections	See Section 1: For emergency contact information. See Section 8: For information on appropriate personal protective equipment. See Section 13: For additional waste treatment information.
Section 7: Handling and Storage	
7.1 Advice on general information – hygiene, storage	Obtain special instructions before use. Keep away from heat / sparks / open flames/hot surfaces. No smoking. Use and store only outdoors or in a well-ventilated area. Hazard of slipping on spilt product. Avoid release to the environment.
7.2 Conditions for safe storage including any incompatibilities	Storage area layout, tank design, equipment and operating procedures must comply with the relevant regional, national or local legislation. Storage installations should be designed with adequate bunds in case of leaks or spills. Cleaning, inspection and maintenance of internal structure of storage tanks must be done only by properly equipped and qualified personnel as defined by national, local or company regulations. Store separately from oxidising agents. Keep only in the original container or in a suitable container for this kind of product. Keep container tightly closed and sealed until ready for use. Do not store in unlabelled containers. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Empty containers may contain harmful, flammable / combustible or explosive residue or vapours. Do not cut, grind, drill, weld, reuse or dispose of containers unless adequate precautions are taken against these hazards. Protect from sunlight.
7.3 Specific end use(s) – Recommendations	Not available



Vapour pressure Density Solubility (ies)



Section 8: Exposure Controls / Personal Protection	n
-	d for any available use-specific information provided in the Exposure Scenario(s).
8.1 Control parameters	
Occupational exposure limits	
Product / Ingredient name	Distillates, mixture of hydrocarbons
Exposure limits values	AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m <sup>3</sup> 8 hours. Form: mist and fume STEL: 3 mg/m <sup>3</sup> 15 minutes. Form: mist and fume [Air contaminant]. AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m <sup>3</sup> 8 hours. Form: mist and fume STEL: 3 mg/m <sup>3</sup> 15 minutes. Form: mist and fume.
Recommended monitoring procedures	If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres – Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres – Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres – General requirements for the performance of procedures for the measurement of chemical agents). Reference to national guidance documents for methods for the determination of hazardous substances will also be required.
8.2 Exposure control Appropriate engineering controls	Mechanical ventilation and local exhaust will reduce exposure via the air. Use oil resistant material in construction of handling equipment. Store under recommended conditions and if heated, temperature control equipment should be used to avoid overheating.
Individual protection measures	
Hygiene measures	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Ensure that eyewash stations and safety showers are close to the workstation location. Wash contaminated clothing before reuse.
Eye / face protection	Recommended: Safety glasses with side shields.
Skin protection	
Hand protection	4 – 8 hours (breakthrough time): nitrile rubber.
Body protection	Wear protective clothing if there is a risk of skin contact. Change contaminated clothes at the end of working shift.
Other skin protection	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary.
Respiratory protection Environmental exposure control	and the safe working limits of the selected respirator. Use a properly fitted, particulate filter respirator
	and the safe working limits of the selected respirator. Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary. Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable
Environmental exposure control	and the safe working limits of the selected respirator. Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary. Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable
Environmental exposure control Section 9: Physical and Chemical Properties	and the safe working limits of the selected respirator. Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary. Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.
Environmental exposure control Section 9: Physical and Chemical Properties Appearance	and the safe working limits of the selected respirator. Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary. Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels. Clear
Environmental exposure control Section 9: Physical and Chemical Properties Appearance Physical state	and the safe working limits of the selected respirator. Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary. Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels. Clear Smooth & Homogeneous
Environmental exposure control  Section 9: Physical and Chemical Properties  Appearance  Physical state Colour	and the safe working limits of the selected respirator. Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary.         Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.         Clear       Smooth & Homogeneous         Pale Yellow       Pale Yellow
Environmental exposure control Section 9: Physical and Chemical Properties Appearance Physical state Colour Odor	and the safe working limits of the selected respirator. Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary.         Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.         Clear       Smooth & Homogeneous         Pale Yellow       Petroleum odor
Environmental exposure control Section 9: Physical and Chemical Properties Appearance Physical state Colour Odor Odor Odour threshold	and the safe working limits of the selected respirator. Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary.         Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.         Clear       Clear         Smooth & Homogeneous       Pale Yellow         Petroleum odor       Not available
Environmental exposure control Section 9: Physical and Chemical Properties Appearance Physical state Colour Odor Odour threshold Dropping point	and the safe working limits of the selected respirator. Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary. Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels. Clear Smooth & Homogeneous Pale Yellow Petroleum odor Not available > 180 °C (ASTM D 566)
Environmental exposure control  Section 9: Physical and Chemical Properties  Appearance Physical state Colour Odor Odor Odour threshold Dropping point Flash point	and the safe working limits of the selected respirator. Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary.         Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.         Clear       Smooth & Homogeneous         Pale Yellow       Petroleum odor         Not available       > 180 °C (ASTM D 566)         > 200 °C (Mineral Oil)       ************************************
Environmental exposure control Section 9: Physical and Chemical Properties Appearance Physical state Colour Odor Odor Odour threshold Dropping point Flash point Evaporation rate	and the safe working limits of the selected respirator. Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary.         Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.         Clear         Smooth & Homogeneous         Pale Yellow         Petroleum odor         Not available         > 180 °C (ASTM D 566)         > 200 °C (Mineral Oil)         Not available



Not volatile





Solubility (water)		Insoluble in wa	ter			
Partition coefficient (n-octanol/wa	ater)	Not available				
Decomposition temperature	No data					
Auto-ignition temperature	Not available					
Worked Penetration at 25°C		220 – 250 (ASTI	M D 217)			
Explosive properties		No data				
Oxidising properties		No data				
DMSO extractable compounds for according to IP346	r base oil substance(s)	Not available <3 %				
Section 10: Stability and Rea	ctivity					
10.1 Reactivity		No specific test	data related to reactivity avail	able for this product or its ingr	edients.	
10.2 Chemical stability		Stable under no	ormal conditions			
10.3 Possibility of hazardous rea	octions	Under normal c	conditions of storage and use, I	hazardous reactions will not o	ccur. Oxidising agent.	
10.4 Conditions to avoid			n extreme heat and oxidising a			
10.5 Incompatible materials			nbustion is likely to give rise to ses, including carbon monoxic			
10.6 Hazardous decomposition	products		ganic and inorganic compound			
SECTION 11: Toxicological In	formation					
11.1 Information on toxicologica	al effects					
Acute toxicity						
Product / ingredient name	Result		Species	Dose	Exposure	
	LC 50 Inhalation due	sts and mists	Rat	>2.18mg/l	4 hours	
Distillate (Petroleum), hydro	LD 50 Dermal		Rabbit	> 5000 mg/kg	_	
treated heavy paraffinic	LD 50 Oral		Rat	>15000 mg/kg	-	
Irritation / corrosion			·			
Skin						
Eye		No known significant effects or critical hazards.				
Respiratory		i to known sign				
Sensation						
Skin						
Respiratory		No known significant effects or critical hazards.				
		No data available to indicate product or any components present greater than 0.1 % are				
Mutagenicity		multigene or ge	enotoxic.			
Carcinogenicity			n this product is based on an s		•	
Reproductive toxicity		•	ould not be regarded as a carc predient listed as toxic to repro	5		
Specific target organ toxicity – sin		Not classified				
Specific target organ toxicity – rep	peated exposure					
Aspiration hazard		Aspiration hazard – Category 1				
Information on likely routes of exp	oosure	Not available				
Potential acute health effects						
Eye contact			y cause redness and transient			
Inhalation Inhalation of oil mist or vapours at elevated temperatures may cause respiratory irritation.			tory irritation.			
Skin contact		No known signi	ificant effects or critical hazard	S.		
Ingestion		May be fatal if swallowed and enters airways.				
Potential chronic health effects						
General		No known significant effects or critical hazards.				
Carcinogenicity		The base oil(s) i regarded as a ca	n this product is based on an s arcinogen.	everely hydrotreated distillate	. The product should not be	







Mutagenicity						
Teratogenicity		No known s	significant effects or critical haz	ards.		
Product / ingredient name						
Fertility effects						
Other information Specific hazard		Not availab	le			
Section 12: Ecological Information						
12.1 Toxicity		Not expected to be harmful to aquatic organisms.				
12.2 Persistence and degradability			ntly biodegradable.			
12.3 Bioaccumulative potential				nt because of the low water solu	bility of this product.	
12.4 Mobility in soil			ered mobile.			
12.5 Results of PBT & vPvB assessment	:	Not applica				
12.6 Other adverse effects			n water. Spills may form a film of nsfer could also be impaired.	n water surfaces causing physica	al damage to organisms.	
Section 13: Disposal Consideration						
The information in this section contains information provided in the Exposure So	generic advice and enario(s).	d guidance. T	he list of Identified Uses in Sect	ion 1 should be consulted for ar	ny available use-specific	
Product Methods of disposal	Product Methods of disposal Where possible (e.g. in the absence of relevant contamination), recycling of used substance is feasible and recommended. This substance can be burned or incinerated, subject to national/loca authorisations, relevant contamination limits, safety regulations and air quality legislation. Contar or waste substance (not directly recyclable): Disposal can be carried out directly, or by delivery to qualified waste handlers. National legislation may identify a specific organisation, and/or prescrib composition limits and methods for recovery or disposal					
Hazardous waste		Yes				
European waste catalogue (EWC) Waste	Code 13 03 07*	Waste designation.				
Packaging		Mineral-ba	sed non-chlorinated insulating	and heat transmission oils.		
Methods of disposal				d or minimised wherever possib y be considered when recycling	1 3 3	
Section 14: Transport Information						
International transport regulations						
	ADR / R	ID	ADN	IMO / IMDG Classification	ICAO / IATA Classification	
14.1 UN number	Not regul	ated	Not regulated	Not regulated	Not regulated	
14.2 UN proper shipping name	_		_	_	_	
14.3 Transport hazard class(es)	_		-	_	_	
14.4 Packing group	_		-	_	_	
14.5 Environmental hazards	No		No	No	No	
Additional Information	_		-	-	-	
14.6 Special precautions for user oils						
14.7 Transport in bulk according to An	nex   of MARPOL	73/78 and th	e IBC Code			
Section 15: Regulatory Informatio						
		slation speci	fic for the substance or mixture	e EU Regulation (EC) No. 1907/	2006 (REACH)	
Annex XIV – List of substances subject to Annex XIV Substances of very high concern	islation specific for the substance or mixture EU Regulation (EC) No. 1907/2006 (REACH) None of the components are listed					
Annex XVII – Restrictions on the manufa on the market and use of certain danger mixtures and articles.	Not applicable					
International Lists National Inventory		Inventory name				
Australia		Australian I	nventory of Chemical Substanc	es (AICS) – Yes		
Canada		Domestic Substances List (DSL) – Yes Non-Domestic Substances List (NDSL) – No				
China			f Existing Chemical Substances			
		inventory o	. Easting chemical substances			





	European Inventory of Existing Commercial Chemical Substances (EINECS) – Yes			
Europe	European List of Notified Chemical Substances (ELINCS) – No			
Japan	Inventory of Existing and New Chemical Substances (ENCS) – Yes			
Korea	Existing Chemicals List (ECL) – Yes			
New Zealand	New Zealand Inventory – Yes			
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS) – Yes			
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory – Yes			
	oly with the inventory requirements administered by the governing country(s) uct are not listed or exempt from listing on the inventory administered by the governing country(s).			
Section 16: Other Information				
Revision comments				
Legend to abbreviations				
ADR	European agreement concerning the international carriage of dangerous good by road.			
RID	Regulations agreement concerning the international carriage of dangerous good by rail.			
IMDG Code	International Maritime Dangerous Goods Code.			
ICAO	International Civil Aviation Organization.			
IATA	International Air Transport Association.			
GHS	Globally Harmonized System of Classification and Labeling of Chemicals.			
CLP	Classification, Labelling and Packaging Regulation [Regulation (EC) No.1272/2008].			
SCBA	Self-Contained Breathing Apparatus.			
REACH	Registration, Evaluation, Authorization and Restriction of Chemicals Regulation [Regulation (EC) No. 1907/2006].			
LC 50	Median lethal concentration.			
LD 50	Median lethal dose.			
РВТ	Persistent, Bio accumulative and Toxic.			

GANDHAR OIL REFINERY (INDIA) LTD.					
Taloja Plant	Plot No.10, MIDC, Main Road, Taloja, Taluka Panvel, District - Raigad 410208, India.				
Silvassa Plant	Plot No. 2, Survey No. 678/1/3, Village Naroli, Near Naroli Check Post, Silvassa, Dadra & Nagar Haveli, Union Territory 396230, India.				
Emergency / Info Phone No.	Phone: +91-22-40635600 • Fax: +91-22-40635601				
Email	info@gandharoil.com				





## **DIVYOL GRAPHITE 0 GREASE**

Section 1: Identification of the Substance / Mixt						
1.1 Product identifier						
Product name		Divyol Graphite 0 Grease				
Product description	Graphite Grease					
Product type		Grease				
MARPOL Annex-1	****					
1.2 Identified uses						
Distribution of substance	Automotive & Inc	dustrial Grease				
Formulation & (re)packing of substance & mixtures	Automotive & Ind	dustrial Grease				
Manufacture of substance	Automotive & Ind	dustrial Grease				
Functional fluids	Automotive & Ind	dustrial Grease				
Section 2: Hazard Identification						
4-Extreme	Health		1			
3-High	Flammability		1			
2-Moderate	Reactivity		0			
1-Slight	Special		-			
Section 3: Composition / Information on Ingredi						
Chemical Name / Ingredients Mix Fatty Acid	% by wt. 10 - 20	Hazardous No		CAS No. Proprietary Mixture		
Calcium Hydroxide	1-3	Yes		1305-62-0		
Mineral Oil	70 - 85	Yes		68990-65-8, 64741-88-4, Proprietary Mixture		
Additives	0 - 2	Yes		Proprietary Mixture		
Graphite Powder	5 - 10	Yes		7782-42-5		
Product / Ingredient name	Calcium soaps fro	om natural fatty s	ubsta	nces		
Section 4: First Aid Measures	culcium soups in		absta			
Inhalation exposure	Pomovo to frosh	air & provide over	non if	f broathing is difficult. Contact physician		
	Remove to fresh air & provide oxygen, if breathing is difficult. Contact physician Remove contaminated clothing. Flush skin with water. Wash skin thoroughly with mild soap & water.					
Skin contact		If irritation occurs, call a physician.				
Swallowing or other		Do not induce vomiting. In general no treatment is necessary unless large quantities are ingested. Get medical advice.				
Eye contact	Rinse continuous	Rinse continuously with water for several minutes. Get medical attention, if irritation persists.				
Protection first-aiders		ectrical supply. Er entry into confine		adequate ventilation and check that a safe and breathing area is ices.		
Section 5: Fire Fighting Measures						
5.1 Extinguishing media						
Unsuitable extinguishing media				Do not use direct water and wet chemicals, or water on the fire. Use foam simultaneously on the surface.		
5.2 Special hazards arising from the substance or mix			, the I	incluse real sinal and ously on the surface.		
Hazards from the substance or mixture	Flammable liquid		ontai	ners may rupture and when exposed to heat, creating a highly		
Hazardous thermal decomposition products	Incomplete com particulates, gase	flammable vapour cloud. Incomplete combustion is likely to give rise to a complex mixture of airborne solid and liquid particulates, gases, including carbon monoxide, H <sub>2</sub> S, SO <sub>x</sub> (sulphur oxides) or sulphuric acid and unidentified organic and inorganic compounds.				
5.3 Advice for firefighters	2.9	<u></u>				
Special precautions for firefighters	Promptly isolate action shall be ta	the scene by reme	oving	all persons from the vicinity of the incident if there is a fire. No onal risk or without suitable training.		
Special protective equipment for firefighters	Firefighters shou (SCBA) with a full helmets, protecti	ld wear appropria face- piece opera	nte pro ated in ves) co	otective equipment and self-contained breathing apparatus n positive pressure mode. Clothing for firefighters (including onforming to European standard EN 469 will provide a basic level		







6.1 Personal precautions, protective equipment and emergency procedures						
processie equipment and em	Keep non-involved personnel away from the area of spillage.					
For non-emergency personnel	Alert emergency personnel. Except in case of small spillages, the feasibility of any actions should always be assessed and advised, if possible, by a trained, competent person in charge of managing the emergency. Stop leak if safe to do so. Avoid direct contact with the product. Stay upwind / keep distance from source. In case of large spillages, alert occupants in downwind areas. Eliminate all ignition sources if safe to do so. Spillages of limited amounts of product, especially in the open air when vapours will be usually quickly dispersed, are dynamic situations, which will presumably limit the exposure to dangerous concentrations. Note : Recommended measures are based on the most likely spillage scenarios for this material; however, local conditions (wind, air temperature, wave / current direction and speed) may significantly influence the choice of appropriate actions.					
For emergency responders	For this reason, local experts should be consulted when necessary. Local regulations may also prescribe or limit actions to be taken. Small spillages: Normal antistatic working clothes are usually adequate. Large spillages: Full body suit of chemically resistant and thermal resistant material should be used. Work gloves providing adequate chemical resistance, specifically to aromatic hydrocarbons. Note: Gloves made of PVA are not water-resistant, and are not suitable for emergency use. Safety helmet, antistatic non-skid safety shoes or boots. Goggles and / or face shield, if splashes or contact with eyes is possible or anticipated. Respiratory Protection : A half or full-face respirator with filter(s) for organic vapours (and when applicable for H <sub>2</sub> S) a Self Contained Breathing Apparatus (SCBA) can be used according to the extent of spill and predictable amount of exposure. If the situation cannot be completely assessed, or if an oxygen deficiency is possible, only SCBA's should be used.					
6.2 Environmental precautions	Prevent product from entering sewers, rivers or other bodies of water. If necessary dike the product with dry earth, sand or similar non-combustible materials. In case of soil contamination, remove contaminated soil and treat in accordance with local regulations. In case of small spillages in closed waters (i.e. ports), contain product with floating barriers or other equipment. Collect spilled product by absorbing with specific floating absorbents. If possible, large spillages in open waters should be contained with floating barriers or other mechanical means. If this is not possible, control the spreading of the spillage, and collect the product by skimming or other suitable mechanical means. The use of dispersants should be advised by an expert, and, if required, approved by local authorities.					
6.3 Methods and material for containment and cleaning	l up					
Small spill	Stop leak if without risk. Absorb spilled product with suitable non-combustible materials.					
Large spill	Large spillages may be cautiously covered with foam, if available, to limit vapour cloud formation. Do not use water jet. When inside buildings or confined spaces, ensure adequate ventilation. Transfer collected product and other contaminated materials to suitable containers for recovery or safe disposal.					
6.4 Reference to other sections	See Section 1: For emergency contact information. See Section 8: For information on appropriate personal protective equipment. See Section 13: For additional waste treatment information.					
Section 7: Handling and Storage						
7.1 Advice on general information – hygiene, storage	Obtain special instructions before use. Keep away from heat / sparks / open flames/hot surfaces. No smoking. Use and store only outdoors or in a well-ventilated area. Hazard of slipping on spilt product. Avoid release to the environment.					
7.2 Conditions for safe storage including any incompatibilities	Storage area layout, tank design, equipment and operating procedures must comply with the relevant regional, national or local legislation. Storage installations should be designed with adequate bunds in case of leaks or spills. Cleaning, inspection and maintenance of internal structure of storage tanks must be done only by properly equipped and qualified personnel as defined by national, local or company regulations. Store separately from oxidising agents. Keep only in the original container or in a suitable container for this kind of product. Keep container tightly closed and sealed until ready for use. Do not store in unlabelled containers. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Empty containers may contain harmful, flammable / combustible or explosive residue or vapours. Do not cut, grind, drill, weld, reuse or dispose of containers unless adequate precautions are taken against these hazards.					
	Protect from sunlight.					



Density Solubility (ies)



Section 8: Exposure Controls / Personal Protect	tion
-	Ited for any available use-specific information provided in the Exposure Scenario(s).
8.1 Control parameters	
Occupational exposure limits	
Product / Ingredient name	Distillates, mixture of hydrocarbons
	AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m <sup>3</sup> 8 hours. Form: mist and fume STEL: 3 mg/m <sup>3</sup> 15 minutes.
Exposure limits values	Form: mist and fume [Air contaminant]. AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m <sup>3</sup> 8 hours. Form: mist and fume STEL: 3 mg/m <sup>3</sup> 15 minutes. Form: mist and fume.
Recommended monitoring procedures	If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres – Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres – Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres – General requirements for the performance of procedures for the measurement of chemical agents). Reference to national guidance documents for methods for the determination of hazardous substances will also be required.
8.2 Exposure control Appropriate engineering controls	Mechanical ventilation and local exhaust will reduce exposure via the air. Use oil resistant material in construction of handling equipment. Store under recommended conditions and if heated, temperature control equipment should be used to avoid overheating.
Individual protection measures	
Hygiene measures	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Ensure that eyewash stations and safety showers are close to the workstation location. Wash contaminated clothing before reuse.
Eye / face protection	Recommended: Safety glasses with side shields.
Skin protection	
Hand protection	4 – 8 hours (breakthrough time): nitrile rubber.
Body protection	Wear protective clothing if there is a risk of skin contact. Change contaminated clothes at the end of working shift.
Other skin protection	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary.
Environmental exposure control	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.
Section 9: Physical and Chemical Properties	
Appearance	Clear
Physical state	Smooth, Homogenous & Dark Gray
Colour	Dark Gray
Odor	Petroleum odor
Odour threshold	Not available
Dropping point	> 90 °C (ASTM D 566)
Flash point	> 180 °C (Mineral Oil)
Evaporation rate	Not available
Flammability (solid, gas)	Not available
Flammability limits in air (lower), % by volume	Not available
Flammability limits in air (upper), % by volume	Not available
Vapour pressure	Not volatile







Colubility (water)		Incoluble in use	tor			
Solubility (water)	ator	Insoluble in water				
Partition coefficient (n-octanol/wa	Not available					
Decomposition temperature						
Auto-ignition temperature     Not available       Murdued Demonstration at 25%     255 - 205 (ACTAL D 217)						
Worked Penetration at 25°C						
Explosive properties		No data				
Oxidising properties	1 11 1 7 7 7	No data				
DMSO extractable compounds for according to IP346		Not available <3 %				
Section 10: Stability and Rea	ctivity					
10.1 Reactivity		No specific test	data related to reactivity availa	able for this product or its ingr	edients.	
10.2 Chemical stability		Stable under no	ormal conditions			
10.3 Possibility of hazardous rea	octions	Under normal c	conditions of storage and use, I	nazardous reactions will not o	ccur. Oxidising agent.	
10.4 Conditions to avoid		Keep away from	n extreme heat and oxidising a	gents.		
10.5 Incompatible materials		Incomplete con particulates, ga	nbustion is likely to give rise to ses, including carbon monoxic	a complex mixture of airborn le. H <sub>2</sub> S, SO (sulphur oxides) or	e solid and liquid sulphuric acid and	
10.6 Hazardous decomposition	products		ganic and inorganic compound			
SECTION 11: Toxicological In	formation					
11.1 Information on toxicologica	al effects					
Acute toxicity						
Product / ingredient name	Result		Species	Dose	Exposure	
	LC 50 Inhalation du	sts and mists	Rat	>2.18mg/l	4 hours	
Distillate (Petroleum), hydro	LD 50 Dermal		Rabbit	> 5000 mg/kg	_	
treated heavy paraffinic	LD 50 Or	al	Rat	>15000 mg/kg	-	
Irritation / corrosion			·			
Skin						
Eye		No known siani	ificant effects or critical hazard	S.		
Respiratory						
Sensation						
Skin						
Respiratory		No known signi	No known significant effects or critical hazards.			
Mutagenicity		No data available to indicate product or any components present greater than 0.1 % are				
		multigene or ge		overely bydrotrested distillate		
Carcinogenicity			n this product is based on an s		•	
Reproductive toxicity			ould not be regarded as a carc predient listed as toxic to repro	5		
Specific target organ toxicity – sin		Not classified				
Specific target organ toxicity – rep	peated exposure					
Aspiration hazard		Aspiration hazard – Category 1				
Information on likely routes of exp	oosure	Not available				
Potential acute health effects						
Eye contact	e contact Eye contact may cause redness and transient pain.					
Inhalation	halation Inhalation of oil mist or vapours at elevated temperatures may cause respiratory irritation.			tory irritation.		
Skin contact No known significant effects or critical hazards.						
Ingestion May be fatal if swallowed and enters airways.						
Potential chronic health effects						
General		No known signi	ificant effects or critical hazard	S.		
Carcinogenicity		The base oil(s) i regarded as a ca	n this product is based on an s arcinogen.	everely hydrotreated distillate	. The product should not be	
		-				







Intratagenicity increase of the second seco	Mutagenicity						
<form>          Product, rignedient name         Not available           fertility effects         Not available           Other information Specific hazards         Not available           Section 12: Ecological Information         Not available           12.1 Toxicity         Not expected to be harmful to aquatic organisms.           12.2 Fersitence and degradability         Not inherently biodegradable.           12.3 Bioaccumulative potential         Not aplicable           12.4 Mobility in soil         Not considered mobile.           12.5 Eaclust of PBT &amp; VP&amp; assessmet         Not aplicable           12.6 Other adverse effects         Not aplicable           Toxing the considered mobile.         Not applicable           12.6 Section 13: Disposit Considered and softward and guidance. The list of fertified Ubes in Section 13: should be consulted or any available use specific information provided in the Exposure Section 13: should be consulted or any available use specific information provided in the Exposure Section 13: should be consulted or any available use specific or available in any identify a specific organisation, recycling or any available use specific information intrody, skey regulations any identify a specific organisation, recycling organisation, and/or procesclip           Fordard Ecological Decological Decological Decological Decological Decological Decological Decological Decological Decolog</form>							
<form>          Internation Specific hazard         Net available           Other information Specific hazard         Not available           12.1 Toxicity         Not expected to be harmful to aquatic organisms.           12.2 Presistence and degradability in all         Not inherently biologengradability.           12.3 Bioaccumulative potential         Bioaccumulation is unikely to be significant because of the low water solubility of this product.           12.5 Reutis OFPE a/Vba assessment         Not applicable           12.6 Toxicity OFPE a/Vba assessment         Wore possible (on in the abnerso of relevant containition), expecting or evaluable use specific torganisms.           Product Methods of disposal         Wore possible (on in the abnerso of relevant containition), expecting or evaluable use specific organisms.           Product Methods of disposal         Were possible (on in the abnerso of relevant containition), expecting or evaluable use specific organisms.           Notardiplicable         Notar evaluable         Notar evaluable or evaluable.           Reading Methods of disposal         Were possible (on in the abnerso of relevant containition), expecting assessment or unatificable and recommended. This substance on the unrend or information organities and recomaninated particity aspectific organisation organid eva</form>			No known s	No known significant effects or critical hazards.			
Other Information Specific hazard         Net available           Section 12: Ecological Information         Not expected to be harmful to aquatic organisms.           12: Parsistence and degradability         Not expected to be harmful to aquatic organisms.           12: A Mobility in soil         Not considered mobile.           12: A Mobility in soil         Not considered mobile. </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>							
Section 12: Ecological Information         Not expected to be harmful ta aquatic organisms.           12.1 Toxidity         Not expected to be harmful ta aquatic organisms.           12.3 Brostneer and degradability         Not expected to be harmful ta aquatic organisms.           12.4 Mobility notel         Not considered mobile.           12.4 Mobility notel         Not considered mobile.           12.5 Results of PBT & VP& assessment         Not applicable           12.6 Other adverse effects         Not applicable           Section 13: Disposal Considerations         The information in this section or talnes generic adverse and guidance. The list of identified Uses in Section 1 should be consulted for any available use specific information provided in the Exposure Scenario(s).           Product Methods of disposal         Where possible leg, in the absence of relevant contamination, recycling of used substance is freasible and recommended. This substance can be burned or innormated autification used substance is composition limits, and recommended. This substance can be burned or innormated autification and used substance is composition limits and methods for recovery or disposal           Hazardous waste         Vos           European waste catalogue (EWC) Wiste Code 13 03 07°         Woste designation.           Not interaction or landifit involution guided waste dusted where very disposal         Inconvertee construction or landifit involution guided waste for any available use specific organisacian.           14.1 UN number         Not /// NO Classification<			Not availab	le			
12.1 privation     Not expected to be harmful to aquatic organisms.       12.2 Prestance and legand bill.     Not anotal-construction is unlikely to be significant to be assue of the low water sub-likely of this product.       12.4 Obtaining the point of the sub-sub-sub-sub-sub-sub-sub-sub-sub-sub-	•	1					
12.2 Persistence and degradability       Not inherently biodegradable.         12.3 Bioaccumulative potential       Bioaccumulation is unlikely to be significant because of the low water solubility of this product.         12.4 Mobility is and       Not considered mobile.         12.5 Results of PBT & vPvB assessment       Not applicable         Insoluble in water. Spills may form a film on water surfaces causing physical damage to organisms. Oxygen transfer could also be impaired.         Section 13: Disposal Considerations       Where possible (eg. in the absence of relevant contamination) recycling of used substance is feasible and recommended. This substance can be burned or indirected, subject to national/local authorisation, relevant contamination limits, stering contamination, and/or prescribe composition limits and methods for recovery or disposal         Product Methods of disposal       Where possible (eg. in the absence of relevant contamination) intrescriber qualified vases burned or indirectly cryptelible (organisation) and/or qualified vases burned or indirectly cryptelible.         Hazardous waste       Yes         European waste catalogue (EWC) Waste Code 13 03 07*       Waste designation.         Rethods of disposal       The generation of waste should be avoided or minimised wherever possible.         Yes       European in and transport regulation         The generation of waste should be avoided or minimised wherever possible.       Not regulated         Authoristion of of vaste should be avoided or minimised wherever possible.       Not regulated </td <td colspan="5"></td> <td></td>							
12.3 Bracum Jative potential       Not considered mobile.         12.4 Mobility in soil of PT 4 vVP assesmet       Not applicable         12.6 Guites of PT 4 vVP assesmet.       Not applicable.         12.6 Guites of PT 4 vVP assesmet.       Not applicable.         2.6 Guites of PT 4 vVP assesmet.       Not applicable.         2.6 Guites of PT 4 vVP assesmet.       Not applicable.         3.6 Guites adverse effects.       Not applicable.         3.7 Guites adverse effects.       VP recorded also be impaired.         3.7 Guites adverse effects.       VP averse solito to solito adverse effects.         3.7 Guites adverse effects.       VP averse solito.         1.8 Guites adverse advere	· · · · · · · · · · · · · · · · · · ·		•				
12.4 Mobility in soil       Not considered mobile.         12.5 Results of PRT & VPR assessment       Not applicable         12.6 Other adverse effects       Unsoluble in water. Spills may form a film on water surfaces causing physical damage to organisms. Oxygen transfer could also be impaired.         Section 13: Disposal Considerations       The information in this section contains generic advice and guidance. The list of identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).         Product Methods of disposal       Where possible (e.g. in the absence of relevant contamination limits, adjett regulations, and ang inquality (edjatic). Contaminatol or qualified water handles. Nationariation limits, adjett regulations, and ang inquality (edjatic). Contaminatol or qualified water handles. Nationariation limits, adjett regulations, and ang inquality (edjatic).         Hazardous waste       Yes         European waste catalogue (EWC) Waste Code 13 03 07*       Waste disgination.         Packaging       Mineral-based non -chlorinated insulting and heat transmission ells.         Methods of disposal       The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landitil should only be considered when recycling is not faesible.         Section 13: Transport Information       -       -       -         Interational transport regulated       Not regulated       Not regulated       Not regulated       Not regulated         14.1							
12.6 Other adverse effects     Nonludie in water. Splits may form a fitm on water surfaces causing physical damage to organisms. Nongen transfer could also be impaired.       Section 13: Disposal Considerations:       Section 13: Disposal Considerations:       Section 13: Disposal Considerations:       The information in this section contains generic advices undividual and be impaired.       Section 13: Disposal Considerations:       The information in this section contains generic advices on tabulation of relevant contamination intervices. Job et or tabulations and arguality legislation.       Note the providual disposal on the commendo of this substance contations and arguality legislation.       Product Methods of disposal       Yes       European waste catalogue (KPC) Waste Code 13 03 07*       Waste designation.       Recident on transport insubstance contains disposal on the recyclic prograsilion on any identify a specific organisation, and/or prescribe composition limits and methods for recovery or disposal       Master dost disposal       Note generation of waste should be avoided or minimised wherever possible Waste packaging should be recyclic prescribe insulating and heat transmission oils.       Note generation of waste should be avoided or minimised wherever possible Waste packaging should be recyclic prescribe.       Note generation of waste should be avoided or minimised wherevere possible (Maste packaging should be recyclic prescribe.				· · ·			
Application adverse energy       Oxygen transfer could also be impaired.         Section 13: Disposal Considerations       Oxygen transfer could also be impaired.         Section 13: Disposal Considerations       Oxygen transfer could also be impaired.         Section 13: Disposal Considerations       Oxygen transfer could also be impaired.         The information in this section contains generic advice and year optimized in the Exposure Scenario(s).       Where possible (e.g. in the absence of relevant contamination finits, sefery regulations and ar quality explaisation. Contamination finits, sefery regulations and ar quality explaisation. contamination finits, sefery regulations and ar quality explaisation. Contaminated the finits, sefery regulations and ar quality explaisation. Contaminated the finits, sefery regulations and ar quality explaisation. Contaminated the finits, sefery regulations and ar quality explaisation. The quarter of the explashes on orchorinated insulating and heat transmission and ar quality explaisation. The quarter operation of vaste existion may identify a specific organisation, and/or prescribe composition limits and methods for recovery or disposal         Macadous waste       Yes       The generation of vaste existion or shating and heat transmission oils.         Methods of disposal       Mineral-based non-chlorinated insulating and heat transmission oils.       The generation of vaste existion or the existing explaisation.         Methods of disposal       ADR / RD       ADN       IMO / IMDG Classification       ICAO / IATA Classification         14.1 UN number       ADR / RD       ADN       IMO / IMDG C	12.5 Results of PBT & vPvB assessment	:	Not applica	ble			
The information in this section contains generic advice and substance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario().       Where possible (e.g. in the absence of relevant contamination intervated, subject to national/local authorisation, relevant contamination limits, safety regulations and air quality legislation. Contaminated in this, safety regulations and air quality legislation. Contaminated or qualified wase handlens. National legislation may identify a specific organisation, and/or preservice or waste substance (not directly recyclable): Disposal can be carried out directly, or by delivery to qualified waste handlens. National legislation may identify a specific organisation, and/or preservice or waste substance for directly recyclable): Disposal can be carried out directly or by delivery to qualified waste handlens. National legislation may identify a specific organisation, and/or preservice composition limits and methods for recovery or disposal         Nate designation       Yes       Implementation of waste should be avoided or minimission oils.       Nate recyclable: Disposal organisation, and/or preservice         Rethods of disposal       The generation of waste should be avoided or minimission when recyclable.       Nate packaging should be exoleded or minimission (Mater Specific Organisation).         14.1 UN number       ADR / IND       ADN       IMO / IMDG classification       ICAO / IATA Classification         14.2 UW proper shipping pame       -       -       -       -       -         14.3 Transport hazard class(es)       -       -       -       -       -	12.6 Other adverse effects				n water surfaces causing physica	al damage to organisms.	
Information provided in the Exposure Scenario(s).  Where possible (a, in the absence of relevant contamination), recycling of used substance is the authorisations, relevant contaminated or inclinerated, subject to national/local authorisations, relevant contamination limits, safety regulations and air quality legislation. Contaminated or qualified waste handlers. National legislation may detect or artied out directly, recycling regulations and air quality legislation. Contaminated or qualified waste handlers. National legislation may detect or artied out directly, recycling regulations and air quality legislation. Contaminated or qualified waste handlers. National legislation may detect or artied out directly, recycling is specific organisation, and/or prescribe composition limits and methods for recovery or disposal Hazardous waste  Ketods of disposal  Ketods	Section 13: Disposal Consideration	าร					
Appendix Methods of disposal         Satisble and recommended. This substance and point longet and yob point of a star point point of a star point of a star point of a star p			d guidance. T	he list of Identified Uses in Secti	ion 1 should be consulted for ar	ny available use-specific	
European waste catalogue (EWC) Waste Cwel 13 03 07*         Meate designation.           Packaging         Mineral-based non-chlorinated insulating and heat transmission oils.           Methods of disposal         The generation of waste should be avoideded or minimised wherever possible. Waste packaging should be creceded or minimised wherever possible. Waste packaging should be creceded or minimised wherever possible. Waste packaging should be creceded or minimised wherever possible. Waste packaging should be creceded or minimised wherever possible. Waste packaging should be creceded or minimised wherever possible. Waste packaging should be creceded or minimised wherever possible. Waste packaging should be creceded or minimised wherever possible. Waste packaging should be creceded or minimised wherever possible. Waste packaging should be creceded or minimised wherever possible. Waste packaging should be creceded or minimised wherever possible. Waste packaging should be creceded or minimised wherever possible. Waste packaging should be creceded or minimised wherever possible. Waste packaging should be creceded or minimised wherever possible. Waste packaging should be creceded or minimised wherever possible. Waste packaging should be creceded or minimised wherever possible. Waste packaging should be creceded or minimised wherever possible. Waste packaging should be creceded or minimised wherever possible. Waste packaging should be creceded or minimised wherever possible. Waste packaging should be created or minimised wherever possible. Waste packaging should be created or minimised where yero should be created or minimised wherever possible. Waste packaging should be created or minimised wherever packaging should	Product Methods of disposal       feasible and recommended. This substance can be burned or incinerated, subject to national/loc         Product Methods of disposal       authorisations, relevant contamination limits, safety regulations and air quality legislation. Conta         or waste substance (not directly recyclable): Disposal can be carried out directly, or by delivery to         qualified waste handlers. National legislation may identify a specific organisation, and/or prescrit					subject to national/local iality legislation. Contaminated rectly, or by delivery to	
Packaging       Mineral-based non-chlorinated insulating and heat transmission oils.         Methods of disposal       The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.         Section 14: Transport Information       ADR / RID       ADN       IMO / IMDG Classification       ICAO / IATA Classification         14.1 UN number       Not regulated       Not regulated       Not regulated       Not regulated         14.2 UN proper shipping name       -       -       -       -         14.3 Transport hazard class(es)       - <td< td=""><td>Hazardous waste</td><td></td><td>Yes</td><td></td><td></td><td></td></td<>	Hazardous waste		Yes				
Methods of disposal       The generation of waste should be avoided or minimised wherever possible.       Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.         Section 14: Transport Information         International transport regulations         International transport regulations         14.1 UN number       ADR / IND       ADN       IMO / IMDG Classification       ICAO / IATA Classification         14.2 UN proper shipping name       -       -       -       -         14.3 Transport hazard class(es)       -       -       -       -       -         14.4 Packing group       - <t< td=""><td>European waste catalogue (EWC) Waste</td><td>Code 13 03 07*</td><td>Waste desi</td><td>gnation.</td><td></td><td></td></t<>	European waste catalogue (EWC) Waste	Code 13 03 07*	Waste desi	gnation.			
Methods of disposal       recycled. Incineration or landfill should only be considered when recycling is not feasible.         Section 14: Transport Information         International transport regulations         Methods of disposal       ICAO / IATA Classification         IADR / RID       ADR / RID <th cols<="" td=""><td>Packaging</td><td></td><td>Mineral-ba</td><td>sed non-chlorinated insulating</td><td>and heat transmission oils.</td><td></td></th>	<td>Packaging</td> <td></td> <td>Mineral-ba</td> <td>sed non-chlorinated insulating</td> <td>and heat transmission oils.</td> <td></td>	Packaging		Mineral-ba	sed non-chlorinated insulating	and heat transmission oils.	
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Additional Information	14.4 Packing group			-	-	_	
14.6 Special precautions for user oils         14.7 Transport in bulk according to Annex I of MARPOL 73/78 and the IBC Code         Section 15: Regulatory Information         15.1 Safety, health and environmental regulations / legistion specific for the substance or mixture EU Regulation (EC) No. 1907/2006 (REACH)         Annex XIV – List of substances subject to authorisation Annex XIV       None of the components are listed         Substances of very high concern       None of the components are listed         Annex XVI – Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles.       Not applicable         International Lists National Inventory       Inventory name         Australia       Australian Inventory of Chemical Substances (AICS) – Yes         Canada       Domestic Substances List (NDSL) – No	14.5 Environmental hazards	No		No	No	No	
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	Canada						
	China						







_	European Inventory of Existing Commercial Chemical Substances (EINECS) – Yes				
Europe	European List of Notified Chemical Substances (ELINCS) – No				
Japan	Inventory of Existing and New Chemical Substances (ENCS) – Yes				
Korea	Existing Chemicals List (ECL) – Yes				
New Zealand	New Zealand Inventory – Yes				
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS) – Yes				
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory – Yes				
	oly with the inventory requirements administered by the governing country(s) uct are not listed or exempt from listing on the inventory administered by the governing country(s).				
Section 16: Other Information					
Revision comments					
Legend to abbreviations					
ADR	European agreement concerning the international carriage of dangerous good by road.				
RID	Regulations agreement concerning the international carriage of dangerous good by rail.				
IMDG Code	International Maritime Dangerous Goods Code.				
ICAO	International Civil Aviation Organization.				
IATA	International Air Transport Association.				
GHS	Globally Harmonized System of Classification and Labeling of Chemicals.				
CLP	Classification, Labelling and Packaging Regulation [Regulation (EC) No.1272/2008].				
SCBA	Self-Contained Breathing Apparatus.				
REACH	Registration, Evaluation, Authorization and Restriction of Chemicals Regulation [Regulation (EC) No. 1907/2006].				
LC 50	Median lethal concentration.				
LD 50	Median lethal dose.				
PBT	Persistent, Bio accumulative and Toxic.				

GANDHAR OIL REFINERY (INDIA) LTD.		
Taloja Plant	Plot No.10, MIDC, Main Road, Taloja, Taluka Panvel, District - Raigad 410208, India.	
Silvassa Plant	Plot No. 2, Survey No. 678/1/3, Village Naroli, Near Naroli Check Post, Silvassa, Dadra & Nagar Haveli, Union Territory 396230, India.	
Emergency / Info Phone No.	Info Phone No. Phone: +91-22-40635600 • Fax: +91-22-40635601	
Email	info@gandharoil.com	





## **DIVYOL GRAPHITE 1 GREASE**

Section 1: Identification of the Substance / Mixt	ture			
1.1 Product identifier				
Product name	Divvol Graphite 1	Divyol Graphite 1 Grease		
Product description	Graphite Grease			
Product type	Grease			
MARPOL Annex-1	****			
1.2 Identified uses				
	Automotive Oliv			
Distribution of substance	Automotive & Inc			
Formulation & (re)packing of substance & mixtures	Automotive & Inc			
Manufacture of substance	Automotive & Inc	dustrial Grease		
Functional fluids	Automotive & Inc	dustrial Grease		
Section 2: Hazard Identification				
4-Extreme	Health		1	
3-High	Flammability		1	
2-Moderate	Reactivity		0	
1-Slight	Special		-	
Section 3: Compostion / Information on Ingred	ients			
Chemical Name / Ingredients	% by wt.	Hazardous		CAS No.
Mix Fatty Acid	10 - 20	No		Proprietary Mixture
Calcium Hydroxide	1 - 3	Yes		1305-62-0
Mineral Oil	70 - 85	Yes		68990-65-8, 64741-88-4, Proprietary Mixture
Additives	0 - 2	Yes		Proprietary Mixture
Graphite Powder	5 - 10	Yes		7782-42-5
Product / Ingredient name	Calcium soaps fro	om natural fatty s	ubsta	ances
Section 4: First Aid Measures				
Inhalation exposure	Remove to fresh	Remove to fresh air & provide oxygen, if breathing is difficult. Contact physician		
Skin contact		Remove contaminated clothing. Flush skin with water. Wash skin thoroughly with mild soap & water. If irritation occurs, call a physician.		
Swallowing or other	Do not induce vo	Do not induce vomiting. In general no treatment is necessary unless large quantities are ingested. Get medical advice.		
Eye contact	Rinse continuous	Rinse continuously with water for several minutes. Get medical attention, if irritation persists.		
Protection first-aiders	Disconnecting el	Disconnecting electrical supply. Ensure adequate ventilation and check that a safe and breathing area is available before entry into confined spaces.		
Section 5: Fire Fighting Measures				
5.1 Extinguishing media				
Unsuitable extinguishing media		Use dry powder, foam, carbon dioxide. Do not use direct water and wet chemicals, or water on the burning product. They may spread the fire. Use foam simultaneously on the surface.		
5.2 Special hazards arising from the substance or mixture				
Hazards from the substance or mixture	Flammable liquid	Flammable liquids in pressurised containers may rupture and when exposed to heat, creating a highly flammable vapour cloud.		
Hazardous thermal decomposition products	particulates, gase	Incomplete combustion is likely to give rise to a complex mixture of airborne solid and liquid particulates, gases, including carbon monoxide, $H_2S$ , $SO_x$ (sulphur oxides) or sulphuric acid and unidentified organic and inorganic compounds.		
5.3 Advice for firefighters		5		•
Special precautions for firefighters		Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.		
Special protective equipment for firefighters	Firefighters shou (SCBA) with a ful helmets, protect	Firefighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face- piece operated in positive pressure mode. Clothing for firefighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.		







6.1 Personal precautions, protective equipment and emergency procedures				
Keep non-involved personnel away from the area of spillage.				
For non-emergency personnel	Alert emergency personnel. Except in case of small spillages, the feasibility of any actions should always be assessed and advised, if possible, by a trained, competent person in charge of managing the emergency. Stop leak if safe to do so. Avoid direct contact with the product. Stay upwind / keep distance from source. In case of large spillages, alert occupants in downwind areas. Eliminate all ignition sources if safe to do so. Spillages of limited amounts of product, especially in the open air when vapours will be usually quickly dispersed, are dynamic situations, which will presumably limit the exposure to dangerous concentrations. Note : Recommended measures are based on the most likely spillage scenarios for this material; however, local conditions (wind, air temperature, wave / current direction and speed) may significantly influence the choice of appropriate actions.			
For emergency responders	For this reason, local experts should be consulted when necessary. Local regulations may also prescribe or limit actions to be taken. Small spillages: Normal antistatic working clothes are usually adequate. Large spillages: Full body suit of chemically resistant and thermal resistant material should be used. Work gloves providing adequate chemical resistance, specifically to aromatic hydrocarbons. Note: Gloves made of PVA are not water-resistant, and are not suitable for emergency use. Safety helmet, antistatic non-skid safety shoes or boots. Goggles and / or face shield, if splashes or contact with eyes is possible or anticipated. Respiratory Protection : A half or full-face respirator with filter(s) for organic vapours (and when applicable for H <sub>2</sub> S) a Self Contained Breathing Apparatus (SCBA) can be used according to the extent of spill and predictable amount of exposure. If the situation cannot be completely assessed, or if an oxygen deficiency is possible, only SCBA's should be used.			
6.2 Environmental precautions	Prevent product from entering sewers, rivers or other bodies of water. If necessary dike the product with dry earth, sand or similar non-combustible materials. In case of soil contamination, remove contaminated soil and treat in accordance with local regulations. In case of small spillages in closed waters (i.e. ports), contain product with floating barriers or other equipment. Collect spilled product by absorbing with specific floating absorbents. If possible, large spillages in open waters should be contained with floating barriers or other mechanical means. If this is not possible, control the spreading of the spillage, and collect the product by skimming or other suitable mechanical means. The use of dispersants should be advised by an expert, and, if required, approved by local authorities.			
6.3 Methods and material for containment and cleaning	l up			
Small spill	Stop leak if without risk. Absorb spilled product with suitable non-combustible materials.			
Large spill	Large spillages may be cautiously covered with foam, if available, to limit vapour cloud formation. Do not use water jet. When inside buildings or confined spaces, ensure adequate ventilation. Transfer collected product and other contaminated materials to suitable containers for recovery or safe disposal.			
6.4 Reference to other sections	See Section 1: For emergency contact information. See Section 8: For information on appropriate personal protective equipment. See Section 13: For additional waste treatment information.			
Section 7: Handling and Storage				
7.1 Advice on general information – hygiene, storage	Obtain special instructions before use. Keep away from heat / sparks / open flames/hot surfaces. No smoking. Use and store only outdoors or in a well-ventilated area. Hazard of slipping on spilt product. Avoid release to the environment.			
7.2 Conditions for safe storage including any incompatibilities	Storage area layout, tank design, equipment and operating procedures must comply with the relevant regional, national or local legislation. Storage installations should be designed with adequate bunds in case of leaks or spills. Cleaning, inspection and maintenance of internal structure of storage tanks must be done only by properly equipped and qualified personnel as defined by national, local or company regulations. Store separately from oxidising agents. Keep only in the original container or in a suitable container for this kind of product. Keep container tightly closed and sealed until ready for use. Do not store in unlabelled containers. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Empty containers may contain harmful, flammable / combustible or explosive residue or vapours. Do not cut, grind, drill, weld, reuse or dispose of containers unless adequate precautions are taken against these hazards.			
	Protect from sunlight.			



Density Solubility (ies)



Section 8: Exposure Controls / Personal Protect	tion
-	Ited for any available use-specific information provided in the Exposure Scenario(s).
8.1 Control parameters	
Occupational exposure limits	
Product / Ingredient name	Distillates, mixture of hydrocarbons
	AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m <sup>3</sup> 8 hours. Form: mist and fume STEL: 3 mg/m <sup>3</sup> 15 minutes.
Exposure limits values	Form: mist and fume [Air contaminant]. AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m <sup>3</sup> 8 hours. Form: mist and fume STEL: 3 mg/m <sup>3</sup> 15 minutes. Form: mist and fume.
Recommended monitoring procedures	If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres – Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres – Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres – General requirements for the performance of procedures for the measurement of chemical agents). Reference to national guidance documents for methods for the determination of hazardous substances will also be required.
8.2 Exposure control Appropriate engineering controls	Mechanical ventilation and local exhaust will reduce exposure via the air. Use oil resistant material in construction of handling equipment. Store under recommended conditions and if heated, temperature control equipment should be used to avoid overheating.
Individual protection measures	
Hygiene measures	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Ensure that eyewash stations and safety showers are close to the workstation location. Wash contaminated clothing before reuse.
Eye / face protection	Recommended: Safety glasses with side shields.
Skin protection	
Hand protection	4 – 8 hours (breakthrough time): nitrile rubber.
Body protection	Wear protective clothing if there is a risk of skin contact. Change contaminated clothes at the end of working shift.
Other skin protection	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary.
Environmental exposure control	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.
Section 9: Physical and Chemical Properties	
Appearance	Clear
Physical state	Smooth, Homogenous & Dark Gray
Colour	Dark Gray
Odor	Petroleum odor
Odour threshold	Not available
Dropping point	> 90 °C (ASTM D 566)
Flash point	> 180 °C (Mineral Oil)
Evaporation rate	Not available
Flammability (solid, gas)	Not available
Flammability limits in air (lower), % by volume	Not available
Flammability limits in air (upper), % by volume	Not available
Vapour pressure	Not volatile







Solubility (water)		Insoluble in wat	tor			
Partition coefficient (n-octanol/water)		Not available				
· · · · · · · · · · · · · · · · · · ·		No data				
F		Not available				
		310 – 340 (ASTM	M D 217)			
		No data	WID 217)			
Explosive properties		No data				
Oxidising properties DMSO extractable compounds fo	r baca ail substanca(s)					
according to IP346		Not available <3 %				
Section 10: Stability and Rea	ctivity					
10.1 Reactivity		No specific test	data related to reactivity avail	able for this product or its ingr	edients.	
10.2 Chemical stability			ormal conditions			
10.3 Possibility of hazardous rea	octions	Under normal c	conditions of storage and use, I	hazardous reactions will not o	ccur. Oxidising agent.	
10.4 Conditions to avoid		Keep away from	n extreme heat and oxidising a	igents.		
10.5 Incompatible materials		Incomplete con particulates, ga	nbustion is likely to give rise to ses, including carbon monoxic	a complex mixture of airborn de, H <sub>2</sub> S, SO, (sulphur oxides) or	e solid and liquid sulphuric acid and	
10.6 Hazardous decomposition	products		ganic and inorganic compound		•	
SECTION 11: Toxicological In	formation					
11.1 Information on toxicologica	al effects					
Acute toxicity						
Product / ingredient name	Result		Species	Dose	Exposure	
	LC 50 Inhalation due	sts and mists	Rat	>2.18mg/l	4 hours	
Distillate (Petroleum), hydro	LD 50 Derr	nal	Rabbit	> 5000 mg/kg	-	
treated heavy paraffinic	LD 50 Ora	al	Rat	>15000 mg/kg	-	
Irritation / corrosion						
Skin						
Eye		No known signi	No known cignificant offacts or critical bazards			
Respiratory		No known significant effects or critical hazards.				
Sensation						
Skin						
		No known significant effects or critical hazards.				
Respiratory						
Mutagenicity		No data available to indicate product or any components present greater than 0.1 % are multigene or genotoxic.				
Carcinogenicity			n this product is based on an s		•	
Reproductive toxicity			The product should not be regarded as a carcinogen. Contains no ingredient listed as toxic to reproduction.			
Specific target organ toxicity – sin	igle exposure	Not cleast				
Specific target organ toxicity – rep	peated exposure	Not classified				
Aspiration hazard		Aspiration hazard – Category 1				
Information on likely routes of exposure		Not available				
Potential acute health effects						
Eye contact		Eye contact may cause redness and transient pain.				
-		Inhalation of oil mist or vapours at elevated temperatures may cause respiratory irritation.				
Skin contact		No known significant effects or critical hazards.				
Ingestion		May be fatal if swallowed and enters airways.				
Potential chronic health effects						
General		No known siani	ificant effects or critical hazard	S.		
Carcinogenicity		The base oil(s) in this product is based on an severely hydrotreated distillate. The product should not be regarded as a carcinogen.				







<form>          Tendsgenighing         Network significant effects or critical hazards.           Product / ingredient name         Network significant effects or critical hazards.           Tenting effects         Network significant effects or critical hazards.           Other information Specific hazard         Net valuale           Table information Specific hazard         Net valuale           12.1 Prosider of Specific hazard         Net valuale           12.3 Bioaccumulation is unlikely to be significant because of the low water solubility of this product.         Net considered mobile.           12.3 Bioaccumulation is unlikely to be significant because of the low water solubility of this product.         Net considered mobile.           12.4 Bottion GPT &amp; VeP assess         Net considered mobile.         Net considered mobile.           12.5 Bottion GPT &amp; VeP assess         Net considered mobile.         Net applicable.           12.6 Control GPT &amp; VeP asses         Vent applicable in value. Specific hazards.         Net applicable.           Section 13: Disposal Considerations:         Vent applicable in value. Specific hazards.         Net applicable.           Section 13: Disposal Considerations:         Went applicable in value. Specific hazards.         Net applicable.           Section 13: Disposal Considerations:         Went applicable in the formation inverside specific hazards.         Net applicable.           Section 14: Disposal Considerations:<th>Mutagenicity</th><th></th><th></th><th></th><th></th><th></th></form>	Mutagenicity						
<form>          Product, rignedient name         Not available           fertility effects         Not available           Other information Specific hazards         Not available           Section 12: Ecological Information         Not available           12.1 Toxicity         Not expected to be harmful to aquatic organisms.           12.2 Fersitence and degradability         Not inherently biodegradable.           12.3 Bioaccumulative potential         Not aplicable           12.4 Mobility in soil         Not considered mobile.           12.5 Eaclust of PBT &amp; VP&amp; assessmet         Not aplicable           12.6 Other adverse effects         Not aplicable           Toxing the considered mobile.         Not applicable           12.6 Section 13: Disposit Considered and softward and guidance. The list of fertified Ubes in Section 13: should be consulted or any available use specific information provided in the Exposure Section 13: should be consulted or any available use specific information provided in the Exposure Section 13: should be consulted or any available use specific or available in any identify a specific organisation, recycling or any available use specific information intrody, skey regulations any identify a specific organisation, recycling organisation, and/or procesclip           Fordard Ecological Decological Decological Decological Decological Decological Decological Decological Decological Decolog</form>	,						
<form>          Internation Specific hazard         Net available           Other information Specific hazard         Not available           12.1 Toxicity         Not expected to be harmful to aquatic organisms.           12.2 Presistence and degradability in all         Not inherently biologengradability.           12.3 Bioaccumulative potential         Bioaccumulation is unikely to be significant because of the low water solubility of this product.           12.5 Reutis OFPE a/Vba assessment         Not applicable           12.6 Toxicity OFPE a/Vba assessment         Wore possible (on in the abnerso of relevant containition), expecting or evaluable use specific torganisms.           Product Methods of disposal         Wore possible (on in the abnerso of relevant containition), expecting or evaluable use specific organisms.           Product Methods of disposal         Were possible (on in the abnerso of relevant containition), expecting or evaluable use specific organisms.           Notardiplicable         Notar evaluable         Notar evaluable or evaluable.           Reading Methods of disposal         Were possible (on in the abnerso of relevant containition), expecting assessment or unatificable and recommended. This substance on the unrend or information organities and recomaninated particity aspectific organisation organid eva</form>		•		significant effects or critical haza	ards.		
Other Information Specific hazard         Net available           Section 12: Ecological Information         Not expected to be harmful to aquatic organisms.           12: Parsistence and degradability         Not expected to be harmful to aquatic organisms.           12: A Mobility in soil         Not considered mobile.           12: A Mobility in soil         Not considered mobile. </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>							
Section 12: Ecological Information         Not expected to be harmful ta aquatic organisms.           12.1 Toxidity         Not expected to be harmful ta aquatic organisms.           12.3 Brostneer and degradability         Not expected to be harmful ta aquatic organisms.           12.4 Mobility notel         Not considered mobile.           12.4 Mobility notel         Not considered mobile.           12.5 Results of PBT & VP& assessment         Not applicable           12.6 Other adverse effects         Not applicable           Section 13: Disposal Considerations         The information in this section or talnes generic adverse and guidance. The list of identified Uses in Section 1 should be consulted for any available use specific information provided in the Exposure Scenario(s).           Product Methods of disposal         Where possible leq, in the absence of relevant contamination, recycling of used substance is freasible and recommended. This substance can be burned or innormated autification used substance is composition limits, and recommended. This substance can be burned or innormated autification and used substance is composition limits and methods for recovery or disposal           Hazardous waste         Vos           European waste catalogue (EWC) Wiste Code 13 03 07°         Woste designation.           Not interaction or landifit involution guided waste dusted where very disposal         Incomention involution guided waste should be avoided or minimised where very called.           14.1 UN number         Not /// NO Classification         ICA			Not availab	le			
12.1 privation     Not expected to be harmful to aquatic organisms.       12.2 Prestance and legand bill.     Not anotal-construction is unlikely to be significant to be assue of the low water sub-likely of this product.       12.4 Obtaining the point of the sub-sub-sub-sub-sub-sub-sub-sub-sub-sub-	•	1					
12.2 Persistence and degradability       Not inherently biodegradable.         12.3 Bioaccumulative potential       Bioaccumulation is unlikely to be significant because of the low water solubility of this product.         12.4 Mobility is and       Not considered mobile.         12.5 Results of PBT & vPvB assessment       Not applicable         Insoluble in water. Spills may form a film on water surfaces causing physical damage to organisms. Oxygen transfer could also be impaired.         Section 13: Disposal Considerations       Where possible (eg. in the absence of relevant contamination) recycling of used substance is feasible and recommended. This substance can be burned or indirected, subject to national/local authorisation, relevant contamination limits, stering contamination, and/or prescribe composition limits and methods for recovery or disposal         Product Methods of disposal       Where possible (eg. in the absence of relevant contamination) intrescriber qualified vases burned or indirectly cryptelible (biposal can be carried out directly, or ty delivery to requalified vases bandles n. National legislation may lightly legislation. Contaminated or waste substance incort directly ercyclable in basice or indirectly applicable.         Hazardous waste       Yes         European waste catalogue (EWC) Waste Code 13 03 07*       Waste designation.         Rethods of disposal       De MO / IMDC Classification       ICAO / IATA Classification         Not regulated       Not regulated       Not regulated       Not regulated         Section 14: Transport Informatio <td< td=""><td></td><td></td><td>Not expect</td><td>ed to be harmful to aquatic org</td><td>anisms.</td><td></td></td<>			Not expect	ed to be harmful to aquatic org	anisms.		
12.3 Bracum Jative potential       Not considered mobile.         12.4 Mobility in soil of PT 4 vVP assesmet       Not applicable         12.6 Guites of PT 4 vVP assesmet.       Not applicable.         12.6 Guites of PT 4 vVP assesmet.       Not applicable.         2.6 Guites of PT 4 vVP assesmet.       Not applicable.         2.6 Guites of PT 4 vVP assesmet.       Not applicable.         3.6 Guites adverse effects.       Not applicable.         3.7 Guites adverse effects.       VP recorded also be impaired.         3.7 Guites adverse effects.       VP averse visite (e.g. in the absence of relevant containtation, recycling of used subtance is feasible and commended. This subtance (and incinerated subject to notanillog) adverse subtance is differentiable. National legislation may identify a space and ar quality legislation. Containtated or avaitable is ubined or indinerated subject to notanillog prescribe subtance in direct recycling.         Product Methods of disposal       Verse received is adverse in order direct visition of adverse to duite.         Readaging       Verse interverse in order direct visition order direct is adverse in order direct visition or indirect visi	· · · · · · · · · · · · · · · · · · ·		•				
12.4 Mobility in soil       Not considered mobile.         12.5 Results of PRT & VPR assessment       Not applicable         12.6 Other adverse effects       Unsoluble in water. Spills may form a film on water surfaces causing physical damage to organisms. Oxygen transfer could also be impaired.         Section 13: Disposal Considerations       The information in this section contains generic advice and guidance. The list of identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).         Product Methods of disposal       Where possible (e.g. in the absence of relevant contamination limits, adjett regulations, and ang inquality (edjaticn, contamination), recycling of used substance is trassible and recommended. This substance can be bured on indinerated. Subject to national/local authorisation, relevant contamination limits, adjett regulations and ang inquality (edjaticn, contamination)         Hazardous waste       Yes         European waste catalogue (EWC) Waste Code 13 03 07*       Waste disgination.         Packaging       Mineral-based non -chlorinated insulting and heat transmission ells.         The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landifit isould only be considered when recycling is not faesible.         Section 13: Transport Information       -       -         Interational transport regulated       Not regulated       Not regulated         14.1 UN number       ADR /R IND       ADN       MO/IMDG Class				, ,	nt because of the low water solu	Ibility of this product.	
12.6 Other adverse effects     Nonludie in water. Splits may form a fitm on water surfaces causing physical damage to organisms. Nongen transfer could also be impaired.       Section 13: Disposal Considerations:       Section 13: Disposal Considerations:       Section 13: Disposal Considerations:       The information in this section contains generic advices undividual and be impaired.       Section 13: Disposal Considerations:       The information in this section contains generic advices on tabulation of relevant contamination intervices. Job et or tabulations and arguality legislation.       Note the providual disposal on the commendo of this substance contations and arguality legislation.       Product Methods of disposal       Yes       European waste catalogue (KPC) Waste Code 13 03 07*       Waste designation.       Recident on transport insubstance contains disposal on the recyclic prograsilion on any identify a specific organisation, and/or prescribe composition limits and methods for recovery or disposal       Master dost disposal       Note generation of waste should be avoided or minimised wherever possible Waste packaging should be recyclic prescribe insulating and heat transmission oils.       Note generation of waste should be avoided or minimised wherever possible Waste packaging should be recyclic prescribe.       Note generation of waste should be avoided or minimised wherevere possible (Maste packaging should be recyclic prescribe.				· · ·			
Application adverse energy       Oxygen transfer could also be impaired.         Section 13: Disposal Considerations       Oxygen transfer could also be impaired.         Section 13: Disposal Considerations       Oxygen transfer could also be impaired.         Section 13: Disposal Considerations       Oxygen transfer could also be impaired.         The information in this section contains generic advice and year optimized in the Exposure Scenario(s).       Where possible (e.g. in the absence of relevant contamination finits, sefery regulations and ar quality explaisation. Contamination finits, sefery regulations and ar quality explaisation. Contamination finits, sefery regulations and ar quality explaisation. Contaminated the finits, sefery regulations and ar quality explaisation. Contaminated the finits, sefery regulations and ar quality explaisation. Contaminated the finits, sefery regulations and ar quality explaisation. The quarter of the explashes on orchorinated insulating and heat transmission and ar quality explaisation. The quarter operation of vaste existion may identify a specific organisation, and/or prescribe composition limits and methods for recovery or disposal         Macadous waste       Yes       The generation of vaste existion or shouts in soluting and heat transmission oils.         Methods of disposal       Mineral-based non-chlorinated insulating and heat transmission oils.       The generation of vaste existion existing existion existing existion existing exi	12.5 Results of PBT & vPvB assessment	:	Not applica	ble			
The information in this section contains generic advice and substance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario().       Where possible (e.g. in the absence of relevant contamination intervated, subject to national/local authorisation, relevant contamination limits, safety regulations and air quality legislation. Contaminated in this, safety regulations and air quality legislation. Contaminated or qualified wase handlens. National legislation may identify a specific organisation, and/or preservice or wase substance (not directly recyclable): Disposal can be carried out directly, or by delivery to qualified wase handlens. National legislation may identify a specific organisation, and/or preservice or wases catalogue (EWC) Wase Code 13 03 07       Yes         European wase catalogue (EWC) Wase Code 13 03 07       Wast e designation.       Mineral-based non-chlorinated insulating and heat transmission oils.         Nethods of disposal       Yes       The generation of wasts should be avoided or minimission where repossible. Wase packaging should be considered when recyclable.         Nethods of disposal       ADR / IND       ADN       IMO / IMDG Classification       ICAO / IATA Classification         14.1 UN number       ADR / IND       ADN       IMO / IMDG Classification       ICAO / IATA Classification         14.2 UW proper shipping name       -       -       -       -         14.3 Transport hazard class(es)       -       -       -       -         14.3 Faving regulation for user U MARPOLT/* arother program in bu	12.6 Other adverse effects				n water surfaces causing physica	al damage to organisms.	
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Packaging       Mineral-based non-chlorinated insulating and heat transmission oils.         Methods of disposal       The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.         Section 14: Transport Information       ADR / RID       ADN       IMO / IMDG Classification       ICAO / IATA Classification         14.1 UN number       Not regulated       Not regulated       Not regulated       Not regulated         14.2 UN proper shipping name       -       -       -       -         14.3 Transport hazerd class(es)       - <td< td=""><td>Hazardous waste</td><td></td><td>Yes</td><td></td><td></td><td></td></td<>	Hazardous waste		Yes				
Methods of disposal       The generation of waste should be avoided or minimised wherever possible.       Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.         Section 14: Transport Information         International transport regulations         International transport regulations         14.1 UN number       ADR / IND       ADN       IMO / IMDG Classification       ICAO / IATA Classification         14.2 UN proper shipping name       -       -       -       -         14.3 Transport hazard class(es)       -       -       -       -       -         14.4 Packing group       - <t< td=""><td>European waste catalogue (EWC) Waste</td><td>Code 13 03 07*</td><td>Waste desi</td><td>gnation.</td><td></td><td></td></t<>	European waste catalogue (EWC) Waste	Code 13 03 07*	Waste desi	gnation.			
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Additional Information	14.4 Packing group			-	-	_	
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	Canada	anada					
	China		Inventory of Existing Chemical Substances in China (IECSC) – Yes				







	European Inventory of Existing Commercial Chemical Substances (EINECS) – Yes
Europe	European List of Notified Chemical Substances (ELINCS) – No
Japan	Inventory of Existing and New Chemical Substances (ENCS) – Yes
Korea	Existing Chemicals List (ECL) – Yes
New Zealand	New Zealand Inventory – Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS) – Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory – Yes
	oly with the inventory requirements administered by the governing country(s) uct are not listed or exempt from listing on the inventory administered by the governing country(s).
Section 16: Other Information	
Revision comments	
Legend to abbreviations	
ADR	European agreement concerning the international carriage of dangerous good by road.
RID	Regulations agreement concerning the international carriage of dangerous good by rail.
IMDG Code	International Maritime Dangerous Goods Code.
ICAO	International Civil Aviation Organization.
IATA	International Air Transport Association.
GHS	Globally Harmonized System of Classification and Labeling of Chemicals.
CLP	Classification, Labelling and Packaging Regulation [Regulation (EC) No.1272/2008].
SCBA	Self-Contained Breathing Apparatus.
REACH	Registration, Evaluation, Authorization and Restriction of Chemicals Regulation [Regulation (EC) No. 1907/2006].
LC 50	Median lethal concentration.
LD 50	Median lethal dose.
РВТ	Persistent, Bio accumulative and Toxic.

GANDHAR OIL REFINERY (INDIA) LTD.		
Taloja Plant	Plot No.10, MIDC, Main Road, Taloja, Taluka Panvel, District - Raigad 410208, India.	
Silvassa Plant	Plot No. 2, Survey No. 678/1/3, Village Naroli, Near Naroli Check Post, Silvassa, Dadra & Nagar Haveli, Union Territory 396230, India.	
Emergency / Info Phone No.	Info Phone No. Phone: +91-22-40635600 • Fax: +91-22-40635601	
Email	info@gandharoil.com	





## **DIVYOL GRAPHITE 2 GREASE**

Section 1: Identification of the Substance / Mixt	ture			
1.1 Product identifier				
Product name	Divyol Graphite 2	Divyol Graphite 2 Grease		
Product description	Graphite Grease			
Product type	Grease			
MARPOL Annex-1	****			
1.2 Identified uses				
Distribution of substance	Automotive & Inc	dustrial Grease		
Formulation & (re)packing of substance & mixtures	Automotive & Inc			
Manufacture of substance	Automotive & Inc			
Functional fluids	Automotive & Inc			
Section 2: Hazard Identification	Automotive & mo			
	11		1	
4-Extreme	Health		1	
3-High	Flammability		1	
2-Moderate	Reactivity		0	
1-Slight	Special		-	
Section 3: Compostion / Information on Ingred	ients			
Chemical Name / Ingredients	% by wt.	Hazardous		CAS No.
Mix Fatty Acid	10 - 20	No		Proprietary Mixture
Calcium Hydroxide	1-3	Yes		1305-62-0
Mineral Oil Additives	70 - 85 0 - 2	Yes Yes		68990-65-8, 64741-88-4, Proprietary Mixture Proprietary Mixture
Graphite Powder	5 - 10	Yes		7782-42-5
· · ·				1102 12 5
	Product / Ingredient name Calcium soaps from natural fatty substances			
Section 4: First Aid Measures				
Inhalation exposure		Remove to fresh air & provide oxygen, if breathing is difficult. Contact physician		
Skin contact	If irritation occur	Remove contaminated clothing. Flush skin with water. Wash skin thoroughly with mild soap & water. If irritation occurs, call a physician.		
Swallowing or other		Do not induce vomiting. In general no treatment is necessary unless large quantities are ingested. Get medical advice.		
Eye contact	Rinse continuous	Rinse continuously with water for several minutes. Get medical attention, if irritation persists.		
Protection first-aiders		Disconnecting electrical supply. Ensure adequate ventilation and check that a safe and breathing area is available before entry into confined spaces.		
Section 5: Fire Fighting Measures				
5.1 Extinguishing media				
Unsuitable extinguishing media				use direct water and wet chemicals, or water on the e foam simultaneously on the surface.
5.2 Special hazards arising from the substance or mix	ture			
Hazards from the substance or mixture	Flammable liquid	Flammable liquids in pressurised containers may rupture and when exposed to heat, creating a highly flammable vapour cloud.		
Hazardous thermal decomposition products	particulates, gase	Incomplete combustion is likely to give rise to a complex mixture of airborne solid and liquid particulates, gases, including carbon monoxide, H <sub>2</sub> S, SO <sub>x</sub> (sulphur oxides) or sulphuric acid and unidentified organic and inorganic compounds.		
5.3 Advice for firefighters	5	5		
Special precautions for firefighters		Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.		
Special protective equipment for firefighters	Firefighters shou (SCBA) with a full helmets, protecti	Firefighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face- piece operated in positive pressure mode. Clothing for firefighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.		







6.1 Personal precautions, protective equipment and emergency procedures						
stri ersonal precautions, protective equipment and em	Keep non-involved personnel away from the area of spillage.					
For non-emergency personnel	Alert emergency personnel away from the area of spillage. Alert emergency personnel. Except in case of small spillages, the feasibility of any actions should always be assessed and advised, if possible, by a trained, competent person in charge of managing the emergency. Stop leak if safe to do so. Avoid direct contact with the product. Stay upwind / keep distance from source. In case of large spillages, alert occupants in downwind areas. Eliminate all ignition sources if safe to do so. Spillages of limited amounts of product, especially in the open air when vapours will be usually quickly dispersed, are dynamic situations, which will presumably limit the exposure to dangerous concentrations. Note : Recommended measures are based on the most likely spillage scenarios for this material; however, local conditions (wind, air temperature, wave / current direction and speed) may significantly influence the choice of appropriate actions.					
For emergency responders	For this reason, local experts should be consulted when necessary. Local regulations may also prescribe or limit actions to be taken. Small spillages: Normal antistatic working clothes are usually adequate. Large spillages: Full body suit of chemically resistant and thermal resistant material should be used. Work gloves providing adequate chemical resistance, specifically to aromatic hydrocarbons. Note: Gloves made of PVA are not water-resistant, and are not suitable for emergency use. Safety helmet, antistatic non-skid safety shoes or boots. Goggles and / or face shield, if splashes or contact with eyes is possible or anticipated. Respiratory Protection : A half or full-face respirator with filter(s) for organic vapours (and when applicable for H <sub>2</sub> S) a Self Contained Breathing Apparatus (SCBA) can be used according to the extent of spill and predictable amount of exposure. If the situation cannot be completely assessed, or if an oxygen deficiency is possible, only SCBA's should be used.					
6.2 Environmental precautions	Prevent product from entering sewers, rivers or other bodies of water. If necessary dike the product with dry earth, sand or similar non-combustible materials. In case of soil contamination, remove contaminated soil and treat in accordance with local regulations. In case of small spillages in closed waters (i.e. ports), contain product with floating barriers or other equipment. Collect spilled product by absorbing with specific floating absorbents. If possible, large spillages in open waters should be contained with floating barriers or other mechanical means. If this is not possible, control the spreading of the spillage, and collect the product by skimming or other suitable mechanical means. The use of dispersants should be advised by an expert, and, if required, approved by local authorities.					
6.3 Methods and material for containment and cleaning up						
Small spill	Stop leak if without risk. Absorb spilled product with suitable non-combustible materials.					
Large spill	Large spillages may be cautiously covered with foam, if available, to limit vapour cloud formation. Do not use water jet. When inside buildings or confined spaces, ensure adequate ventilation. Transfer collected product and other contaminated materials to suitable containers for recovery or safe disposal.					
6.4 Reference to other sections	See Section 1: For emergency contact information. See Section 8: For information on appropriate personal protective equipment. See Section 13: For additional waste treatment information.					
Section 7: Handling and Storage						
7.1 Advice on general information – hygiene, storage	Obtain special instructions before use. Keep away from heat / sparks / open flames/hot surfaces. No smoking. Use and store only outdoors or in a well-ventilated area. Hazard of slipping on spilt product. Avoid release to the environment.					
7.2 Conditions for safe storage including any incompatibilities	Storage area layout, tank design, equipment and operating procedures must comply with the relevant regional, national or local legislation. Storage installations should be designed with adequate bunds in case of leaks or spills. Cleaning, inspection and maintenance of internal structure of storage tanks must be done only by properly equipped and qualified personnel as defined by national, local or company regulations. Store separately from oxidising agents. Keep only in the original container or in a suitable container for this kind of product. Keep container tightly closed and sealed until ready for use. Do not store in unlabelled containers. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Empty containers may contain harmful, flammable / combustible or explosive residue or vapours. Do not cut, grind, drill, weld, reuse or dispose of containers unless adequate precautions are taken against these hazards. Protect from sunlight.					
7.3 Specific end use(s) – Recommendations	Not available					



Density Solubility (ies)



Section 8: Exposure Controls / Personal Protect	tion
The list of Identified Uses in Section 1 should be consu	ulted for any available use-specific information provided in the Exposure Scenario(s).
8.1 Control parameters	
Occupational exposure limits	
Product / Ingredient name	Distillates, mixture of hydrocarbons
Exposure limits values	AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m <sup>3</sup> 8 hours. Form: mist and fume STEL: 3 mg/m <sup>3</sup> 15 minutes. Form: mist and fume [Air contaminant]. AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m <sup>3</sup> 8 hours. Form: mist and fume STEL: 3 mg/m <sup>3</sup> 15 minutes. Form: mist and fume.
Recommended monitoring procedures	If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres – Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres – Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres – General requirements for the performance of procedures for the measurement of chemical agents). Reference to national guidance documents for methods for the determination of hazardous substances will also be required.
8.2 Exposure control Appropriate engineering controls	Mechanical ventilation and local exhaust will reduce exposure via the air. Use oil resistant material in construction of handling equipment. Store under recommended conditions and if heated, temperature control equipment should be used to avoid overheating.
Individual protection measures	
Hygiene measures	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Ensure that eyewash stations and safety showers are close to the workstation location. Wash contaminated clothing before reuse.
Eye / face protection	Recommended: Safety glasses with side shields.
Skin protection	
Hand protection	4 – 8 hours (breakthrough time): nitrile rubber.
Body protection	Wear protective clothing if there is a risk of skin contact. Change contaminated clothes at the end of working shift.
Other skin protection	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary.
Environmental exposure control	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.
Section 9: Physical and Chemical Properties	
Appearance	Clear
Physical state	Smooth, Homogenous & Dark Gray
Colour	Dark Gray
Odor	Petroleum odor
Odour threshold	Not available
Dropping point	> 100 °C (ASTM D 566)
Flash point	> 180 °C (Mineral Oil)
Evaporation rate	Not available
Flammability (solid, gas)	Not available
Flammability limits in air (lower), % by volume	Not available
Flammability limits in air (upper), % by volume	Not available
Vapour pressure	Not volatile







Solubility (water)		Insoluble in water					
Partition coefficient (n-octanol/water)		Not available					
Decomposition temperature		No data					
Auto-ignition temperature		Not available					
Worked Penetration at 25°C		265 – 295 (ASTM D 217)					
Explosive properties		No data					
Oxidising properties		No data					
DMSO extractable compounds for base oil substance(s) according to IP346		Not available <3 %					
Section 10: Stability and Rea	ctivity	•					
10.1 Reactivity		No specific test data related to reactivity available for this product or its ingredients.					
10.2 Chemical stability		Stable under normal conditions					
10.3 Possibility of hazardous rea	ctions	Under normal conditions of storage and use, hazardous reactions will not occur. Oxidising agent.					
10.4 Conditions to avoid			n extreme heat and oxidising a				
10.5 Incompatible materials		Incomplete combustion is likely to give rise to a complex mixture of airborne solid and liquid particulates, gases, including carbon monoxide, H <sub>2</sub> S, SO <sub>x</sub> (sulphur oxides) or sulphuric acid and					
10.6 Hazardous decomposition	products	unidentified organic and inorganic compounds.					
SECTION 11: Toxicological Int	formation						
11.1 Information on toxicologica	l effects						
Acute toxicity							
Product / ingredient name	Result		Species	Dose	Exposure		
5	LC 50 Inhalation due	sts and mists	Rat	>2.18mg/l	4 hours		
Distillate (Petroleum), hydro	LD 50 Derr	nal	Rabbit	> 5000 mg/kg	_		
treated heavy paraffinic	LD 50 Oral		Rat	>15000 mg/kg	_		
Irritation / corrosion							
Skin							
Eye			ificant effects or critical hazard	s.			
Respiratory		No known significant enects of entital nazards.					
Sensation							
Skin							
		No known significant effects or critical hazards.					
Respiratory Mutagenicity		No data available to indicate product or any components present greater than 0.1 % are multigene or genotoxic.					
Carcinogenicity			n this product is based on an s	everely hydrotreated distillate			
Reproductive toxicity		The product should not be regarded as a carcinogen. Contains no ingredient listed as toxic to reproduction.					
Specific target organ toxicity – single exposure							
Specific target organ toxicity – rep		Not classified					
Aspiration hazard		Aspiration hazard – Category 1					
Information on likely routes of exposure		Not available					
Potential acute health effects							
Eye contact		Eye contact may cause redness and transient pain.					
Inhalation		Inhalation of oil mist or vapours at elevated temperatures may cause respiratory irritation.					
Skin contact		No known significant effects or critical hazards.					
Ingestion		May be fatal if swallowed and enters airways.					
Potential chronic health effects							
General		No known significant effects or critical hazards.					
Carcinogenicity		The base oil(s) in this product is based on an severely hydrotreated distillate. The product should not be regarded as a carcinogen.					





Mutagenicity						
Teratogenicity		No known s	significant effects or critical haz	ards.		
Product / ingredient name						
Fertility effects		NI	1			
Other information Specific hazard		Not availab	le			
Section 12: Ecological Information	1					
12.1 Toxicity			ed to be harmful to aquatic org	anisms.		
12.2 Persistence and degradability		Not inherently biodegradable.				
12.3 Bioaccumulative potential				nt because of the low water solu	ibility of this product.	
12.4 Mobility in soil		Not considered mobile.				
12.5 Results of PBT & vPvB assessment	:	Not applica				
12.6 Other adverse effects		Insoluble in water. Spills may form a film on water surfaces causing physical damage to organisms. Oxygen transfer could also be impaired.				
Section 13: Disposal Consideration						
The information in this section contains information provided in the Exposure So	generic advice and cenario(s).	d guidance. T	he list of Identified Uses in Sect	ion 1 should be consulted for ar	ny available use-specific	
Product Methods of disposal		Where possible (e.g. in the absence of relevant contamination), recycling of used substance is feasible and recommended. This substance can be burned or incinerated, subject to national/local authorisations, relevant contamination limits, safety regulations and air quality legislation. Contaminated or waste substance (not directly recyclable): Disposal can be carried out directly, or by delivery to qualified waste handlers. National legislation may identify a specific organisation, and/or prescribe composition limits and methods for recovery or disposal				
Hazardous waste		Yes				
European waste catalogue (EWC) Waste	Code 13 03 07*	Waste desi	gnation.			
Packaging	ckaging		Mineral-based non-chlorinated insulating and heat transmission oils.			
Methods of disposal		The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.				
Section 14: Transport Information						
International transport regulations						
	ADR / R	ID	ADN	IMO / IMDG Classification	ICAO / IATA Classification	
14.1 UN number	Not regulated		Not regulated	Not regulated	Not regulated	
14.2 UN proper shipping name	_		_	_	_	
14.3 Transport hazard class(es)	-		-	_	_	
14.4 Packing group	-		-	_	_	
14.5 Environmental hazards	No		No	No	No	
Additional Information	_		-	-	-	
14.6 Special precautions for user oils						
14.7 Transport in bulk according to An	nex   of MARPOL	73/78 and th	e IBC Code			
Section 15: Regulatory Informatio						
15.1 Safety, health and environmental regulations / legislation specific for the substance or mixture EU Regulation (EC) No. 1907/2006 (REACH)						
Annex XIV – List of substances subject to authorisation Annex XIV Substances of very high concern		None of the components are listed				
Annex XVII – Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles.		Not applicable				
International Lists National Inventory		Inventory name				
Australia		Australian Inventory of Chemical Substances (AICS) – Yes				
Canada		Domestic Substances List (DSL) – Yes Non-Domestic Substances List (NDSL) – No				
China		Inventory of Existing Chemical Substances in China (IECSC) – Yes				





Furene	European Inventory of Existing Commercial Chemical Substances (EINECS) – Yes				
Europe	European List of Notified Chemical Substances (ELINCS) – No				
Japan	Inventory of Existing and New Chemical Substances (ENCS) – Yes				
Korea	Existing Chemicals List (ECL) – Yes				
New Zealand	New Zealand Inventory – Yes				
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS) – Yes				
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory – Yes				
	oly with the inventory requirements administered by the governing country(s) uct are not listed or exempt from listing on the inventory administered by the governing country(s).				
Section 16: Other Information					
Revision comments					
Legend to abbreviations					
ADR	European agreement concerning the international carriage of dangerous good by road.				
RID	Regulations agreement concerning the international carriage of dangerous good by rail.				
IMDG Code	International Maritime Dangerous Goods Code.				
ICAO	International Civil Aviation Organization.				
IATA	International Air Transport Association.				
GHS	Globally Harmonized System of Classification and Labeling of Chemicals.				
CLP	Classification, Labelling and Packaging Regulation [Regulation (EC) No.1272/2008].				
SCBA	Self-Contained Breathing Apparatus.				
REACH	Registration, Evaluation, Authorization and Restriction of Chemicals Regulation [Regulation (EC) No. 1907/2006].				
LC 50	Median lethal concentration.				
LD 50	Median lethal dose.				
РВТ	Persistent, Bio accumulative and Toxic.				

GANDHAR OIL REFINERY (INDIA) LTD.			
Taloja Plant	Plot No.10, MIDC, Main Road, Taloja, Taluka Panvel, District - Raigad 410208, India.		
Silvassa Plant	Plot No. 2, Survey No. 678/1/3, Village Naroli, Near Naroli Check Post, Silvassa, Dadra & Nagar Haveli, Union Territory 396230, India.		
Emergency / Info Phone No.	Phone: +91-22-40635600 • Fax: +91-22-40635601		
Email	info@gandharoil.com		





## **DIVYOL GRAPHITE 3 GREASE**

Section 1: Identification of the Substance / Mixe	ture					
1.1 Product identifier						
Product name	Divyol Graphite	Divyol Graphite 3 Grease				
Product description	Graphite Grease					
Product type	Grease					
MARPOL Annex-1	****					
1.2 Identified uses						
Distribution of substance						
Formulation & (re)packing of substance & mixtures		Automotive & Industrial Grease				
Manufacture of substance	Automotive & Industrial Grease					
		Automotive & Industrial Grease				
Functional fluids	Automotive & Inc	dustrial Grease				
Section 2: Hazard Identification						
4-Extreme	Health		1			
3-High	Flammability		1			
2-Moderate	Reactivity		0			
1-Slight	Special		-			
Section 3: Compostion / Information on Ingred	ients					
Chemical Name / Ingredients	% by wt.	Hazardous		CAS No.		
Mix Fatty Acid	10 - 20	No		Proprietary Mixture		
Calcium Hydroxide	1 - 3	Yes		1305-62-0		
Mineral Oil	70 - 85	Yes		68990-65-8, 64741-88-4, Proprietary Mixture		
Additives	0-2	Yes		Proprietary Mixture		
Graphite Powder	5 - 10	Yes		7782-42-5		
Product / Ingredient name	Calcium soaps from natural fatty substances					
Section 4: First Aid Measures						
Inhalation exposure	Remove to fresh	Remove to fresh air & provide oxygen, if breathing is difficult. Contact physician				
Skin contact		Remove contaminated clothing. Flush skin with water. Wash skin thoroughly with mild soap & water. If irritation occurs, call a physician.				
Swallowing or other		Do not induce vomiting. In general no treatment is necessary unless large quantities are ingested. Get medical advice.				
Eye contact	Rinse continuous	Rinse continuously with water for several minutes. Get r		al minutes. Get medical attention, if irritation persists.		
Protection first-aiders		Disconnecting electrical supply. Ensure adequate ventilation and check that a safe and breathing area available before entry into confined spaces.				
Section 5: Fire Fighting Measures						
5.1 Extinguishing media						
Unsuitable extinguishing media	dia burning product. They may spread the fire. Use foam simultaneously on the surface.					
5.2 Special hazards arising from the substance or mix	ture					
Hazards from the substance or mixture	Flammable liquids in pressurised containers may rupture and when exposed to heat, creating a high flammable vapour cloud.		iners may rupture and when exposed to heat, creating a highly			
Hazardous thermal decomposition products	Incomplete combustion is likely to give rise to a complex mixture of airborne solid and liquid particulates, gases, including carbon monoxide, H <sub>2</sub> S, SO <sub>x</sub> (sulphur oxides) or sulphuric acid and unidentified organic and inorganic compounds.					
5.3 Advice for firefighters						
Special precautions for firefighters		Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.				
pecial protective equipment for firefighters for firefighters should wear appropriate protective equipment and self-contained breathing apparate (SCBA) with a full face- piece operated in positive pressure mode. Clothing for firefighters (includite helmets, protective boots and gloves) conforming to European standard EN 469 will provide a bas of protection for chemical incidents.			otective equipment and self-contained breathing apparatus n positive pressure mode. Clothing for firefighters (including			







6.1. Personal precautions protective equipment and emergency procedures				
6.1 Personal precautions, protective equipment and emergency procedures				
For non-emergency personnel	Keep non-involved personnel away from the area of spillage. Alert emergency personnel. Except in case of small spillages, the feasibility of any actions should always be assessed and advised, if possible, by a trained, competent person in charge of managing the emergency. Stop leak if safe to do so. Avoid direct contact with the product. Stay upwind / keep distance from source. In case of large spillages, alert occupants in downwind areas. Eliminate all ignition sources if safe to do so. Spillages of limited amounts of product, especially in the open air when vapours will be usually quickly dispersed, are dynamic situations, which will presumably limit the exposure to dangerous concentrations. Note : Recommended measures are based on the most likely spillage scenarios for this material; however, local conditions (wind, air temperature, wave / current direction and speed) may significantly influence the choice of appropriate actions.			
For emergency responders	For this reason, local experts should be consulted when necessary. Local regulations may also prescribe or limit actions to be taken. Small spillages: Normal antistatic working clothes are usually adequate. Large spillages: Full body suit of chemically resistant and thermal resistant material should be used. Work gloves providing adequate chemical resistance, specifically to aromatic hydrocarbons. Note: Gloves made of PVA are not water-resistant, and are not suitable for emergency use. Safety helmet, antistatic non-skid safety shoes or boots. Goggles and / or face shield, if splashes or contact with eyes is possible or anticipated. Respiratory Protection : A half or full-face respirator with filter(s) for organic vapours (and when applicable for H <sub>2</sub> S) a Self Contained Breathing Apparatus (SCBA) can be used according to the extent of spill and predictable amount of exposure. If the situation cannot be completely assessed, or if an oxygen deficiency is possible, only SCBA's should be used.			
6.2 Environmental precautions	Prevent product from entering sewers, rivers or other bodies of water. If necessary dike the product with dry earth, sand or similar non-combustible materials. In case of soil contamination, remove contaminated soil and treat in accordance with local regulations. In case of small spillages in closed waters (i.e. ports), contain product with floating barriers or other equipment. Collect spilled product by absorbing with specific floating absorbents. If possible, large spillages in open waters should be contained with floating barriers or other mechanical means. If this is not possible, control the spreading of the spillage, and collect the product by skimming or other suitable mechanical means. The use of dispersants should be advised by an expert, and, if required, approved by local authorities.			
6.3 Methods and material for containment and cleaning	up			
Small spill	Stop leak if without risk. Absorb spilled product with suitable non-combustible materials.			
Large spill	Large spillages may be cautiously covered with foam, if available, to limit vapour cloud formation. Do not use water jet. When inside buildings or confined spaces, ensure adequate ventilation. Transfer collected product and other contaminated materials to suitable containers for recovery or safe disposal.			
6.4 Reference to other sections	See Section 1: For emergency contact information. See Section 8: For information on appropriate personal protective equipment. See Section 13: For additional waste treatment information.			
Section 7: Handling and Storage				
7.1 Advice on general information – hygiene, storage	Obtain special instructions before use. Keep away from heat / sparks / open flames/hot surfaces. No smoking. Use and store only outdoors or in a well-ventilated area. Hazard of slipping on spilt product. Avoid release to the environment.			
7.2 Conditions for safe storage including any incompatibilities	Storage area layout, tank design, equipment and operating procedures must comply with the relevant regional, national or local legislation. Storage installations should be designed with adequate bunds in case of leaks or spills. Cleaning, inspection and maintenance of internal structure of storage tanks must be done only by properly equipped and qualified personnel as defined by national, local or company regulations. Store separately from oxidising agents. Keep only in the original container or in a suitable container for this kind of product. Keep container tightly closed and sealed until ready for use. Do not store in unlabelled containers. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Empty containers may contain harmful, flammable / combustible or explosive residue or vapours. Do not cut, grind, drill, weld, reuse or dispose of containers unless adequate precautions are taken against these hazards. Protect from sunlight.			
7.3 Specific end use(s) – Recommendations	Not available			



Density Solubility (ies)



Section 8: Exposure Controls / Personal Protect	tion
-	Ited for any available use-specific information provided in the Exposure Scenario(s).
8.1 Control parameters	
Occupational exposure limits	
Product / Ingredient name	Distillates, mixture of hydrocarbons
	AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m <sup>3</sup> 8 hours. Form: mist and fume STEL: 3 mg/m <sup>3</sup> 15 minutes.
Exposure limits values	Form: mist and fume [Air contaminant]. AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m <sup>3</sup> 8 hours. Form: mist and fume STEL: 3 mg/m <sup>3</sup> 15 minutes. Form: mist and fume.
Recommended monitoring procedures	If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres – Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres – Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres – General requirements for the performance of procedures for the measurement of chemical agents). Reference to national guidance documents for methods for the determination of hazardous substances will also be required.
8.2 Exposure control Appropriate engineering controls	Mechanical ventilation and local exhaust will reduce exposure via the air. Use oil resistant material in construction of handling equipment. Store under recommended conditions and if heated, temperature control equipment should be used to avoid overheating.
Individual protection measures	
Hygiene measures	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Ensure that eyewash stations and safety showers are close to the workstation location. Wash contaminated clothing before reuse.
Eye / face protection	Recommended: Safety glasses with side shields.
Skin protection	
Hand protection	4 – 8 hours (breakthrough time): nitrile rubber.
Body protection	Wear protective clothing if there is a risk of skin contact. Change contaminated clothes at the end of working shift.
Other skin protection	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary.
Environmental exposure control	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.
Section 9: Physical and Chemical Properties	
Appearance	Clear
Physical state	Smooth, Homogenous & Dark Gray
Colour	Dark Gray
Odor	Petroleum odor
Odour threshold	Not available
Dropping point	> 90 °C (ASTM D 566)
Flash point	> 180 °C (Mineral Oil)
Evaporation rate	Not available
Flammability (solid, gas)	Not available
Flammability limits in air (lower), % by volume	Not available
Flammability limits in air (upper), % by volume	Not available
Vapour pressure	Not volatile







Solubility (water)		Insoluble in wat	ter		
Partition coefficient (n-octanol/water)		Not available			
Decomposition temperature		No data			
· · · · ·		Not available			
Worked Penetration at 25°C		220 – 250 (ASTM	M D 217)		
Explosive properties		No data			
Oxidising properties		No data			
DMSO extractable compounds for according to IP346	base oil substance(s)	Not available <3 %			
Section 10: Stability and Read	tivity				
10.1 Reactivity		No specific test	data related to reactivity avail	able for this product or its ingr	edients.
10.2 Chemical stability		Stable under no	ormal conditions		
10.3 Possibility of hazardous read	tions	Under normal c	conditions of storage and use, I	hazardous reactions will not o	cur. Oxidising agent.
10.4 Conditions to avoid		Keep away from	n extreme heat and oxidising a	igents.	
10.5 Incompatible materials			nbustion is likely to give rise to ses, including carbon monoxic		
10.6 Hazardous decomposition p	roducts		ganic and inorganic compound		
SECTION 11: Toxicological Inf	ormation				
11.1 Information on toxicological	effects				
Acute toxicity					
Product / ingredient name	Result		Species	Dose	Exposure
	LC 50 Inhalation due	sts and mists	Rat	>2.18mg/l	4 hours
Distillate (Petroleum), hydro	LD 50 Derr	nal	Rabbit	> 5000 mg/kg	_
treated heavy paraffinic	LD 50 Oral		Rat	>15000 mg/kg	-
Irritation / corrosion					
Skin					
Eye		No known significant effects or critical hazards.			
Respiratory					
Sensation					
Skin					
Respiratory		No known significant effects or critical hazards.			
Mutagenicity		No data available to indicate product or any components present greater than 0.1 % are multigene or genotoxic.			
Carcinogenicity		3 3	n this product is based on an s	everely hydrotrested distillate	
carcinogenicity					•
Reproductive toxicity		The product should not be regarded as a carcinogen. Contains no ingredient listed as toxic to reproduction.			
Specific target organ toxicity – sing	, <u>,</u>	Not classified			
Specific target organ toxicity – repo	eated exposure				
Aspiration hazard		Aspiration hazard – Category 1			
Information on likely routes of exp	osure	Not available			
Potential acute health effects		_			
Eye contact			ye contact may cause redness and transient pain.		
Inhalation			l mist or vapours at elevated te		tory irritation.
Skin contact No know			ificant effects or critical hazard	s.	
		May be fatal if swallowed and enters airways.			
Ingestion		May be fatal if s	wallowed and enters alrways.		
Ingestion Potential chronic health effects		-			
-		No known signi	ificant effects or critical hazard n this product is based on an s		







Mutagenicity						
Teratogenicity		No known s	significant effects or critical haz	ards.		
Product / ingredient name						
Fertility effects		Not such the la	1-			
Other information Specific hazard		Not availab	le			
Section 12: Ecological Information						
12.1 Toxicity			Not expected to be harmful to aquatic organisms.			
12.2 Persistence and degradability		Not inherently biodegradable.				
12.3 Bioaccumulative potential		Bioaccumulation is unlikely to be significant because of the low water solubility of this product.				
12.4 Mobility in soil			ered mobile.			
12.5 Results of PBT & vPvB assessment	:	Not applica				
12.6 Other adverse effects			n water. Spills may form a film of nsfer could also be impaired.	n water surfaces causing physica	al damage to organisms.	
Section 13: Disposal Consideration						
The information in this section contains information provided in the Exposure So	generic advice and enario(s).	d guidance. T	he list of Identified Uses in Sect	ion 1 should be consulted for ar	ny available use-specific	
Product Methods of disposal Where possible (e.g. in the absence of relevant contamination), recycling of used substance is feasible and recommended. This substance can be burned or incinerated, subject to national authorisations, relevant contamination limits, safety regulations and air quality legislation. Co or waste substance (not directly recyclable): Disposal can be carried out directly, or by deliver qualified waste handlers. National legislation may identify a specific organisation, and/or precomposition limits and methods for recovery or disposal			subject to national/local ality legislation. Contaminated rectly, or by delivery to			
Hazardous waste		Yes				
European waste catalogue (EWC) Waste	European waste catalogue (EWC) Waste Code 13 03 07*		Waste designation.			
Packaging		Mineral-ba	sed non-chlorinated insulating	and heat transmission oils.		
Methods of disposal		The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.				
Section 14: Transport Information						
International transport regulations						
	ADR / R	ID	ADN	IMO / IMDG Classification	ICAO / IATA Classification	
14.1 UN number	Not regul	ated	Not regulated	Not regulated	Not regulated	
14.2 UN proper shipping name	_		_	_	_	
14.3 Transport hazard class(es)	_		-	_	_	
14.4 Packing group	_		-	_	_	
14.5 Environmental hazards	No		No	No	No	
Additional Information	_		-	-	-	
14.6 Special precautions for user oils						
14.7 Transport in bulk according to An	nex   of MARPOL	73/78 and th	e IBC Code			
Section 15: Regulatory Informatio						
15.1 Safety, health and environmental		slation speci	fic for the substance or mixture	e EU Regulation (EC) No. 1907/	2006 (REACH)	
Annex XIV – List of substances subject to authorisation Annex XIV Substances of very high concern		None of the components are listed				
Annex XVII – Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles.		Not applicable				
International Lists National Inventory		Inventory name				
Australia		Australian I	nventory of Chemical Substanc	es (AICS) – Yes		
Canada		Domestic Substances List (DSL) – Yes Non-Domestic Substances List (NDSL) – No				
China			f Existing Chemical Substances			
		inventory o	. Easting chemical substances			







	European Inventory of Existing Commercial Chemical Substances (EINECS) – Yes				
Europe	European List of Notified Chemical Substances (ELINCS) – No				
Japan	Inventory of Existing and New Chemical Substances (ENCS) – Yes				
Korea	Existing Chemicals List (ECL) – Yes				
New Zealand	New Zealand Inventory – Yes				
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS) – Yes				
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory – Yes				
	oly with the inventory requirements administered by the governing country(s) uct are not listed or exempt from listing on the inventory administered by the governing country(s).				
Section 16: Other Information					
Revision comments					
Legend to abbreviations					
ADR	European agreement concerning the international carriage of dangerous good by road.				
RID	Regulations agreement concerning the international carriage of dangerous good by rail.				
IMDG Code	International Maritime Dangerous Goods Code.				
ICAO	International Civil Aviation Organization.				
IATA	International Air Transport Association.				
GHS	Globally Harmonized System of Classification and Labeling of Chemicals.				
CLP	Classification, Labelling and Packaging Regulation [Regulation (EC) No.1272/2008].				
SCBA	Self-Contained Breathing Apparatus.				
REACH	Registration, Evaluation, Authorization and Restriction of Chemicals Regulation [Regulation (EC) No. 1907/2006].				
LC 50	Median lethal concentration.				
LD 50	Median lethal dose.				
PBT	Persistent, Bio accumulative and Toxic.				

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Silvassa Plant	Plot No. 2, Survey No. 678/1/3, Village Naroli, Near Naroli Check Post, Silvassa, Dadra & Nagar Haveli, Union Territory 396230, India.			
Emergency / Info Phone No.	Phone: +91-22-40635600 • Fax: +91-22-40635601			
Email	info@gandharoil.com			





### **DIVYOL MP2 GREASE**

Section 1: Identification of the Substance / Mixt	ture					
1.1 Product identifier						
Product name	Divyol MP2 Grease					
Product description		Multi Purpose Grease				
Product type	Grease					
MARPOL Annex-1	****					
1.2 Identified uses						
Distribution of substance	Automotive & Inc	dustrial Grease				
Formulation & (re)packing of substance & mixtures	Automotive & Inc					
Manufacture of substance	Automotive & Inc					
Functional fluids	Automotive & Inc					
Section 2: Hazard Identification	Automotive a m					
4-Extreme	Health		1			
			1			
3-High	Flammability					
2-Moderate	Reactivity		0			
1-Slight	Special		-			
Section 3: Compostion / Information on Ingredi	lents					
Chemical Name / Ingredients	% by wt.	Hazardous		No.		
Lithium Hydroxide	0.5 - 2	Yes		-66-3		
Mineral Oil 12 HSA	80 - 93 4 - 10	Yes No		, 64742-54-7, 64742-01-4 14-9		
НСО	2-6	No		-78-3		
Additives	0 - 2	Yes		ry Mixture		
Zinc dialkyldithiophosphate	0 - 3	Yes		7-79-4		
Product / Ingredient name	Lithium soaps fro	om natural fatty su	ostances			
Section 4: First Aid Measures	•					
Inhalation exposure	Inhalation exposure Remove to fresh air & provide oxygen, if breathing is difficult. Contact physician					
Skin contact		Remove contaminated clothing. Flush skin with water. Wash skin thoroughly with mild soap & water. If irritation occurs, call a physician.				
Swallowing or other		Do not induce vomiting. In general no treatment is necessary unless large quantities are ingested. Get medical advice.				
Eye contact	Rinse continuous	sly with water for	everal minutes. Get medical attentio	n, if irritation persists.		
Protection first-aiders	5	ectrical supply. Er entry into confine	sure adequate ventilation and check l spaces.	that a safe and breathing area is		
Section 5: Fire Fighting Measures						
5.1 Extinguishing media						
Unsuitable extinguishing media			de. Do not use direct water and wet the fire. Use foam simultaneously or			
5.2 Special hazards arising from the substance or mix	ture					
Hazards from the substance or mixture	Flammable liquio flammable vapor		ntainers may rupture and when exp	osed to heat, creating a highly		
Hazardous thermal decomposition products	particulates, gase	Incomplete combustion is likely to give rise to a complex mixture of airborne solid and liquid particulates, gases, including carbon monoxide, $H_2S$ , $SO_x$ (sulphur oxides) or sulphuric acid and unidentified organic and inorganic compounds.				
5.3 Advice for firefighters						
Special precautions for firefighters			ving all persons from the vicinity of personal risk or without suitable trai			
Special protective equipment for firefighters	(SCBA) with a ful helmets, protect	face-piece operative boots and glov	ed in positive pressure mode. Cloth es) conforming to European standar	action shall be taken involving any personal risk or without suitable training. Firefighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face- piece operated in positive pressure mode. Clothing for firefighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.		





6.1 Personal precautions, protective equipment and em	ergency procedures			
Keep non-involved personnel away from the area of spillage.				
For non-emergency personnel	Alert emergency personnel. Except in case of small spillages, the feasibility of any actions should always be assessed and advised, if possible, by a trained, competent person in charge of managing the emergency. Stop leak if safe to do so. Avoid direct contact with the product. Stay upwind / keep distance from source. In case of large spillages, alert occupants in downwind areas. Eliminate all ignition sources if safe to do so. Spillages of limited amounts of product, especially in the open air when vapours will be usually quickly dispersed, are dynamic situations, which will presumably limit the exposure to dangerous concentrations. Note : Recommended measures are based on the most likely spillage scenarios for this material; however, local conditions (wind, air temperature, wave / current direction and speed) may significantly influence the choice of appropriate actions.			
For emergency responders	For this reason, local experts should be consulted when necessary. Local regulations may also prescribe or limit actions to be taken. Small spillages: Normal antistatic working clothes are usually adequate. Large spillages: Full body suit of chemically resistant and thermal resistant material should be used. Work gloves providing adequate chemical resistance, specifically to aromatic hydrocarbons. Note: Gloves made of PVA are not water-resistant, and are not suitable for emergency use. Safety helmet, antistatic non-skid safety shoes or boots. Goggles and / or face shield, if splashes or contact with eyes is possible or anticipated. Respiratory Protection : A half or full-face respirator with filter(s) for organic vapours (and when applicable for H <sub>2</sub> S) a Self Contained Breathing Apparatus (SCBA) can be used according to the extent of spill and predictable amount of exposure. If the situation cannot be completely assessed, or if an oxygen deficiency is possible, only SCBA's should be used.			
6.2 Environmental precautions	Prevent product from entering sewers, rivers or other bodies of water. If necessary dike the product with dry earth, sand or similar non-combustible materials. In case of soil contamination, remove contaminated soil and treat in accordance with local regulations. In case of small spillages in closed waters (i.e. ports), contain product with floating barriers or other equipment. Collect spilled product by absorbing with specific floating absorbents. If possible, large spillages in open waters should be contained with floating barriers or other mechanical means. If this is not possible, control the spreading of the spillage, and collect the product by skimming or other suitable mechanical means. The use of dispersants should be advised by an expert, and, if required, approved by local authorities.			
6.3 Methods and material for containment and cleaning	l up			
Small spill	Stop leak if without risk. Absorb spilled product with suitable non-combustible materials.			
Large spill	Large spillages may be cautiously covered with foam, if available, to limit vapour cloud formation. Do not use water jet. When inside buildings or confined spaces, ensure adequate ventilation. Transfer collected product and other contaminated materials to suitable containers for recovery or safe disposal.			
6.4 Reference to other sections	See Section 1: For emergency contact information. See Section 8: For information on appropriate personal protective equipment. See Section 13: For additional waste treatment information.			
Section 7: Handling and Storage				
7.1 Advice on general information – hygiene, storage	Obtain special instructions before use. Keep away from heat / sparks / open flames/hot surfaces. No smoking. Use and store only outdoors or in a well-ventilated area. Hazard of slipping on spilt product. Avoid release to the environment.			
7.2 Conditions for safe storage including any incompatibilities	Storage area layout, tank design, equipment and operating procedures must comply with the relevant regional, national or local legislation. Storage installations should be designed with adequate bunds in case of leaks or spills. Cleaning, inspection and maintenance of internal structure of storage tanks must be done only by properly equipped and qualified personnel as defined by national, local or company regulations. Store separately from oxidising agents. Keep only in the original container or in a suitable container for this kind of product. Keep container tightly closed and sealed until ready for use. Do not store in unlabelled containers. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Empty containers may contain harmful, flammable / combustible or explosive residue or vapours. Do not cut, grind, drill, weld, reuse or dispose of containers unless adequate precautions are taken against these hazards.			
	Protect from sunlight.			



Density Solubility (ies)



Section 8: Exposure Controls / Personal Protection	ction
The list of Identified Uses in Section 1 should be const	ulted for any available use-specific information provided in the Exposure Scenario(s).
8.1 Control parameters	
Occupational exposure limits	
Product / Ingredient name	Distillates, mixture of hydrocarbons
Exposure limits values	AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m <sup>3</sup> 8 hours. Form: mist and fume STEL: 3 mg/m <sup>3</sup> 15 minutes. Form: mist and fume [Air contaminant]. AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m <sup>3</sup> 8 hours. Form: mist and fume STEL: 3 mg/m <sup>3</sup> 15 minutes. Form: mist and fume.
Recommended monitoring procedures	If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres – Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres – Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres – General requirements for the performance of procedures for the measurement of chemical agents). Reference to national guidance documents for methods for the determination of hazardous substances will also be required.
8.2 Exposure control Appropriate engineering controls	Mechanical ventilation and local exhaust will reduce exposure via the air. Use oil resistant material in construction of handling equipment. Store under recommended conditions and if heated, temperature control equipment should be used to avoid overheating.
Individual protection measures	
Hygiene measures	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Ensure that eyewash stations and safety showers are close to the workstation location. Wash contaminated clothing before reuse.
Eye / face protection	Recommended: Safety glasses with side shields.
Skin protection	
Hand protection	4 – 8 hours (breakthrough time): nitrile rubber.
Body protection	Wear protective clothing if there is a risk of skin contact. Change contaminated clothes at the end of working shift.
Other skin protection	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary.
Environmental exposure control	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.
Section 9: Physical and Chemical Properties	
Appearance	Clear
Physical state	Smooth & Tacky
Colour	Pale Yellow
Odor	Petroleum odor
Odour threshold	Not available
Dropping point	> 190 °C (ASTM D 2265)
Flash point	> 204 °C (Mineral Oil)
Evaporation rate	Not available
Flammability (solid, gas)	Not available
Flammability limits in air (lower), % by volume	Not available
Flammability limits in air (upper), % by volume	Not available
Vapour pressure	Not volatile







Solubility (water)		Insoluble in wat	ter		
Partition coefficient (n-octanol/water)		Not available			
· · · · · · · · · · · · · · · · · · ·		No data			
Auto-ignition temperature		Not available			
Worked Penetration at 25°C		265 – 295 (ASTN	M D 217)		
Explosive properties		No data			
Oxidising properties		No data			
DMSO extractable compounds for	r base oil substance(s)	Not available			
according to IP346		<3 %			
Section 10: Stability and Rea	ctivity	1			
10.1 Reactivity		No specific test	data related to reactivity avail	able for this product or its ingr	edients.
10.2 Chemical stability			ormal conditions		
10.3 Possibility of hazardous rea	octions	Under normal c	conditions of storage and use, I	hazardous reactions will not o	ccur. Oxidising agent.
10.4 Conditions to avoid		Keep away from	n extreme heat and oxidising a	igents.	
10.5 Incompatible materials		Incomplete con particulates, ga	nbustion is likely to give rise to ses, including carbon monoxic	a complex mixture of airborn de. H. S. SO (sulphur oxides) or	e solid and liquid sulphuric acid and
10.6 Hazardous decomposition	products		ganic and inorganic compound		
SECTION 11: Toxicological In	formation				
11.1 Information on toxicologica	al effects				
Acute toxicity					
Product / ingredient name	Result		Species	Dose	Exposure
	LC 50 Inhalation due	sts and mists	Rat	>2.18mg/l	4 hours
Distillate (Petroleum), hydro	LD 50 Derr	mal	Rabbit	> 5000 mg/kg	_
treated heavy paraffinic	LD 50 Ora	al	Rat	>15000 mg/kg	-
Irritation / corrosion					
Skin					
Eye		No known significant effects or critical hazards.			
Respiratory		No known significant encets of encet hazards.			
Sensation					
Skin					
Respiratory		No known significant effects or critical hazards.			
nespiratory		No data available to indicate product or any components present prostor than 0.1.0/ are			
Mutagenicity		No data available to indicate product or any components present greater than 0.1 % are multigene or genotoxic.			
Carcinogenicity		The base oil(s) i	n this product is based on an s	everely hydrotreated distillate	<b>.</b>
Reproductive toxicity			ould not be regarded as a carc gredient listed as toxic to repro	5	
Specific target organ toxicity – sin	igle exposure		,		
Specific target organ toxicity – rep		Not classified			
Aspiration hazard		Aspiration hazard – Category 1			
Information on likely routes of exp	oosure	Not available			
Potential acute health effects					
Eye contact		Eye contact may cause redness and transient pain.			
Inhalation			Inhalation of oil mist or vapours at elevated temperatures may cause respiratory irritation.		
Skin contact			ificant effects or critical hazard		
Ingestion			wallowed and enters airways.		
Potential chronic health effects		may be latar if S	manowed and enters an wdys.		
General		No known signi	ificant effects or critical hazard	s	
					The product chould not be
Carcinogenicity		regarded as a ca	n this product is based on an s arcinogen.	everely hydrotreated distillate	. The product should not be







Mutagenicity						
Teratogenicity		No known s	significant effects or critical haz	ards.		
Product / ingredient name						
Fertility effects		Not such the la	1-			
Other information Specific hazard		Not availab	le			
Section 12: Ecological Information						
12.1 Toxicity			Not expected to be harmful to aquatic organisms.			
12.2 Persistence and degradability		Not inherently biodegradable.				
12.3 Bioaccumulative potential		Bioaccumulation is unlikely to be significant because of the low water solubility of this product.				
12.4 Mobility in soil			ered mobile.			
12.5 Results of PBT & vPvB assessment	:	Not applica				
12.6 Other adverse effects			n water. Spills may form a film of nsfer could also be impaired.	n water surfaces causing physica	al damage to organisms.	
Section 13: Disposal Consideration						
The information in this section contains information provided in the Exposure So	generic advice and enario(s).	d guidance. T	he list of Identified Uses in Sect	ion 1 should be consulted for ar	ny available use-specific	
Product Methods of disposal Where possible (e.g. in the absence of relevant contamination), recycling of used substance is feasible and recommended. This substance can be burned or incinerated, subject to national authorisations, relevant contamination limits, safety regulations and air quality legislation. Co or waste substance (not directly recyclable): Disposal can be carried out directly, or by deliver qualified waste handlers. National legislation may identify a specific organisation, and/or precomposition limits and methods for recovery or disposal			subject to national/local ality legislation. Contaminated rectly, or by delivery to			
Hazardous waste		Yes				
European waste catalogue (EWC) Waste	European waste catalogue (EWC) Waste Code 13 03 07*		Waste designation.			
Packaging		Mineral-ba	sed non-chlorinated insulating	and heat transmission oils.		
Methods of disposal		The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.				
Section 14: Transport Information						
International transport regulations						
	ADR / R	ID	ADN	IMO / IMDG Classification	ICAO / IATA Classification	
14.1 UN number	Not regul	ated	Not regulated	Not regulated	Not regulated	
14.2 UN proper shipping name	_		_	_	_	
14.3 Transport hazard class(es)	_		-	_	_	
14.4 Packing group	_		-	_	_	
14.5 Environmental hazards	No		No	No	No	
Additional Information	_		-	-	-	
14.6 Special precautions for user oils						
14.7 Transport in bulk according to An	nex   of MARPOL	73/78 and th	e IBC Code			
Section 15: Regulatory Informatio						
15.1 Safety, health and environmental		slation speci	fic for the substance or mixture	e EU Regulation (EC) No. 1907/	2006 (REACH)	
Annex XIV – List of substances subject to authorisation Annex XIV Substances of very high concern		None of the components are listed				
Annex XVII – Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles.		Not applicable				
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Canada		Domestic Substances List (DSL) – Yes Non-Domestic Substances List (NDSL) – No				
China			f Existing Chemical Substances			
		inventory o	. Easting chemical substances			







	European Inventory of Existing Commercial Chemical Substances (EINECS) – Yes				
Europe	European List of Notified Chemical Substances (ELINCS) – No				
Japan	Inventory of Existing and New Chemical Substances (ENCS) – Yes				
Korea	Existing Chemicals List (ECL) – Yes				
New Zealand	New Zealand Inventory – Yes				
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS) – Yes				
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory – Yes				
	oly with the inventory requirements administered by the governing country(s) uct are not listed or exempt from listing on the inventory administered by the governing country(s).				
Section 16: Other Information					
Revision comments					
Legend to abbreviations					
ADR	European agreement concerning the international carriage of dangerous good by road.				
RID	Regulations agreement concerning the international carriage of dangerous good by rail.				
IMDG Code	International Maritime Dangerous Goods Code.				
ICAO	International Civil Aviation Organization.				
IATA	International Air Transport Association.				
GHS	Globally Harmonized System of Classification and Labeling of Chemicals.				
CLP	Classification, Labelling and Packaging Regulation [Regulation (EC) No.1272/2008].				
SCBA	Self-Contained Breathing Apparatus.				
REACH	Registration, Evaluation, Authorization and Restriction of Chemicals Regulation [Regulation (EC) No. 1907/2006].				
LC 50	Median lethal concentration.				
LD 50	Median lethal dose.				
РВТ	Persistent, Bio accumulative and Toxic.				

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Emergency / Info Phone No.	Phone: +91-22-40635600 • Fax: +91-22-40635601			
Email	info@gandharoil.com			





### **DIVYOL MP3 GREASE**

Section 1: Identification of the Substance / Mixt	ture				
1.1 Product identifier					
Product name	Divyol MP3 Grea	se			
Product description		Multi Purpose Grease			
Product type	Grease				
MARPOL Annex-1	****				
1.2 Identified uses					
Distribution of substance	Automotive & Inc	dustrial Grease			
Formulation & (re)packing of substance & mixtures	Automotive & Inc				
Manufacture of substance	Automotive & Inc				
Functional fluids	Automotive & Inc				
Section 2: Hazard Identification	Automotive a m				
4-Extreme	Health		1		
3-High	Flammability		1		
2-Moderate			0		
2-Moderate 1-Slight	Reactivity		-		
	Special		-		
Section 3: Compostion / Information on Ingredi					
Chemical Name / Ingredients	% by wt.	Hazardous		CAS No.	
Lithium Hydroxide Mineral Oil	0.5 - 2 80 - 93	Yes Yes		1310-66-3	
12 HSA	4 - 10	No		64742-52-5, 64741-88-4, 64742-54-7, 64742-01-4 106-14-9	
НСО	2-6	No		8001-78-3	
Additives	0 - 2	Yes		Proprietary Mixture	
Zinc dialkyldithiophosphate	0 - 3	Yes		68457-79-4	
Product / Ingredient name	Lithium soaps fro	om natural fatty su	ubstances		
Section 4: First Aid Measures					
Inhalation exposure	Remove to fresh	air & provide oxy	gen, if breathi	ng is difficult. Contact physician	
Skin contact		Remove contaminated clothing. Flush skin with water. Wash skin thoroughly with mild soap & water. If irritation occurs, call a physician.			
Swallowing or other	Do not induce vo Get medical advi		l no treatmer	nt is necessary unless large quantities are ingested.	
Eye contact	Rinse continuous	sly with water for	several minut	es. Get medical attention, if irritation persists.	
Protection first-aiders	5	Disconnecting electrical supply. Ensure adequate ventilation and check that a safe and breathing area is available before entry into confined spaces.			
Section 5: Fire Fighting Measures					
5.1 Extinguishing media					
Unsuitable extinguishing media				ise direct water and wet chemicals, or water on the foam simultaneously on the surface.	
5.2 Special hazards arising from the substance or mix	ture				
Hazards from the substance or mixture		Flammable liquids in pressurised containers may rupture and when exposed to heat, creating a highly flammable vapour cloud.			
Hazardous thermal decomposition products	particulates, gase	Incomplete combustion is likely to give rise to a complex mixture of airborne solid and liquid particulates, gases, including carbon monoxide, H <sub>2</sub> S, SO <sub>x</sub> (sulphur oxides) or sulphuric acid and unidentified organic and inorganic compounds.			
5.3 Advice for firefighters					
Special precautions for firefighters				ons from the vicinity of the incident if there is a fire. No c or without suitable training.	
Special protective equipment for firefighters	(SCBA) with a ful helmets, protect	l face- piece opera	ated in positiv ves) conformi	equipment and self-contained breathing apparatus <i>r</i> e pressure mode. Clothing for firefighters (including ng to European standard EN 469 will provide a basic level	





6.1 Personal precautions, protective equipment and em	ergency procedures
stri ersonal precautions, protective equipment and em	Keep non-involved personnel away from the area of spillage.
For non-emergency personnel	Alert emergency personnel away from the area of spillage. Alert emergency personnel. Except in case of small spillages, the feasibility of any actions should always be assessed and advised, if possible, by a trained, competent person in charge of managing the emergency. Stop leak if safe to do so. Avoid direct contact with the product. Stay upwind / keep distance from source. In case of large spillages, alert occupants in downwind areas. Eliminate all ignition sources if safe to do so. Spillages of limited amounts of product, especially in the open air when vapours will be usually quickly dispersed, are dynamic situations, which will presumably limit the exposure to dangerous concentrations. Note : Recommended measures are based on the most likely spillage scenarios for this material; however, local conditions (wind, air temperature, wave / current direction and speed) may significantly influence the choice of appropriate actions.
For emergency responders	For this reason, local experts should be consulted when necessary. Local regulations may also prescribe or limit actions to be taken. Small spillages: Normal antistatic working clothes are usually adequate. Large spillages: Full body suit of chemically resistant and thermal resistant material should be used. Work gloves providing adequate chemical resistance, specifically to aromatic hydrocarbons. Note: Gloves made of PVA are not water-resistant, and are not suitable for emergency use. Safety helmet, antistatic non-skid safety shoes or boots. Goggles and / or face shield, if splashes or contact with eyes is possible or anticipated. Respiratory Protection : A half or full-face respirator with filter(s) for organic vapours (and when applicable for H <sub>2</sub> S) a Self Contained Breathing Apparatus (SCBA) can be used according to the extent of spill and predictable amount of exposure. If the situation cannot be completely assessed, or if an oxygen deficiency is possible, only SCBA's should be used.
6.2 Environmental precautions	Prevent product from entering sewers, rivers or other bodies of water. If necessary dike the product with dry earth, sand or similar non-combustible materials. In case of soil contamination, remove contaminated soil and treat in accordance with local regulations. In case of small spillages in closed waters (i.e. ports), contain product with floating barriers or other equipment. Collect spilled product by absorbing with specific floating absorbents. If possible, large spillages in open waters should be contained with floating barriers or other mechanical means. If this is not possible, control the spreading of the spillage, and collect the product by skimming or other suitable mechanical means. The use of dispersants should be advised by an expert, and, if required, approved by local authorities.
6.3 Methods and material for containment and cleaning	up
Small spill	Stop leak if without risk. Absorb spilled product with suitable non-combustible materials.
Large spill	Large spillages may be cautiously covered with foam, if available, to limit vapour cloud formation. Do not use water jet. When inside buildings or confined spaces, ensure adequate ventilation. Transfer collected product and other contaminated materials to suitable containers for recovery or safe disposal.
6.4 Reference to other sections	See Section 1: For emergency contact information. See Section 8: For information on appropriate personal protective equipment. See Section 13: For additional waste treatment information.
Section 7: Handling and Storage	
7.1 Advice on general information – hygiene, storage	Obtain special instructions before use. Keep away from heat / sparks / open flames/hot surfaces. No smoking. Use and store only outdoors or in a well-ventilated area. Hazard of slipping on spilt product. Avoid release to the environment.
7.2 Conditions for safe storage including any incompatibilities	Storage area layout, tank design, equipment and operating procedures must comply with the relevant regional, national or local legislation. Storage installations should be designed with adequate bunds in case of leaks or spills. Cleaning, inspection and maintenance of internal structure of storage tanks must be done only by properly equipped and qualified personnel as defined by national, local or company regulations. Store separately from oxidising agents. Keep only in the original container or in a suitable container for this kind of product. Keep container tightly closed and sealed until ready for use. Do not store in unlabelled containers. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Empty containers may contain harmful, flammable / combustible or explosive residue or vapours. Do not cut, grind, drill, weld, reuse or dispose of containers unless adequate precautions are taken against these hazards. Protect from sunlight.
7.3 Specific end use(s) – Recommendations	Not available



Density Solubility (ies)



Section 8: Exposure Controls / Personal Protect	tion
The list of Identified Uses in Section 1 should be consu	Ited for any available use-specific information provided in the Exposure Scenario(s).
8.1 Control parameters	
Occupational exposure limits	
Product / Ingredient name	Distillates, mixture of hydrocarbons
Exposure limits values	AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m <sup>3</sup> 8 hours. Form: mist and fume STEL: 3 mg/m <sup>3</sup> 15 minutes. Form: mist and fume [Air contaminant]. AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m <sup>3</sup> 8 hours. Form: mist and fume STEL: 3 mg/m <sup>3</sup> 15 minutes. Form: mist and fume.
Recommended monitoring procedures	If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres – Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres – Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres – General requirements for the performance of procedures for the measurement of chemical agents). Reference to national guidance documents for methods for the determination of hazardous substances will also be required.
8.2 Exposure control Appropriate engineering controls	Mechanical ventilation and local exhaust will reduce exposure via the air. Use oil resistant material in construction of handling equipment. Store under recommended conditions and if heated, temperature control equipment should be used to avoid overheating.
Individual protection measures	
Hygiene measures	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Ensure that eyewash stations and safety showers are close to the workstation location. Wash contaminated clothing before reuse.
Eye / face protection	Recommended: Safety glasses with side shields.
Skin protection	
Hand protection	4 – 8 hours (breakthrough time): nitrile rubber.
Body protection	Wear protective clothing if there is a risk of skin contact. Change contaminated clothes at the end of working shift.
Other skin protection	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary.
Environmental exposure control	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.
Section 9: Physical and Chemical Properties	
Appearance	Clear
Physical state	Smooth & Tacky
Colour	Pale Yellow
Odor	Petroleum odor
Odour threshold	Not available
Dropping point	> 190 °C (ASTM D 2265)
Flash point	> 204 °C (Mineral Oil)
Evaporation rate	Not available
Flammability (solid, gas)	Not available
Flammability limits in air (lower), % by volume	Not available
Flammability limits in air (upper), % by volume	Not available
Vapour pressure	Not volatile





Solubility (water)		Insoluble in wat	ter			
Partition coefficient (n-octanol/water)		Not available				
Decomposition temperature		No data				
Auto-ignition temperature		Not available				
Worked Penetration at 25°C		220 – 250 (ASTN	A D 217)			
Explosive properties		No data				
Oxidising properties		No data				
DMSO extractable compounds for	r base oil substance(s)	Not available				
according to IP346		<3 %				
Section 10: Stability and Reactivity						
10.1 Reactivity		No specific test	data related to reactivity avail	able for this product or its ingr	edients.	
10.2 Chemical stability			ormal conditions			
10.3 Possibility of hazardous rea	octions	Under normal c	onditions of storage and use, I	hazardous reactions will not o	ccur. Oxidising agent.	
10.4 Conditions to avoid		Keep away from	n extreme heat and oxidising a	igents.		
10.5 Incompatible materials		Incomplete con particulates, ga	nbustion is likely to give rise to ses, including carbon monoxic	a complex mixture of airborn de, H <sub>2</sub> S, SO. (sulphur oxides) or	e solid and liquid sulphuric acid and	
10.6 Hazardous decomposition	products		ganic and inorganic compound			
SECTION 11: Toxicological In	formation					
11.1 Information on toxicologica	al effects					
Acute toxicity						
Product / ingredient name	Result		Species	Dose	Exposure	
	LC 50 Inhalation dusts and mists		Rat	>2.18mg/l	4 hours	
Distillate (Petroleum), hydro treated heavy paraffinic	LD 50 Dermal		Rabbit	> 5000 mg/kg	-	
treated neavy paraminic	LD 50 Ora	al	Rat	>15000 mg/kg	-	
Irritation / corrosion						
Skin						
Eye		No known signi	No known significant effects or critical hazards.			
Respiratory		איז אויזאיז אין אוויגמווג כווכנוג טו כווגנמו וומצמועג.				
Sensation						
Skin						
Respiratory		No known significant effects or critical hazards.				
nespiratory		No data availab	le to indicate product or any c	omponents present greater th	an 0.1% are	
Mutagenicity		No data available to indicate product or any components present greater than 0.1 % are multigene or genotoxic.				
Carcinogenicity			n this product is based on an s		•	
Reproductive toxicity			ould not be regarded as a carc redient listed as toxic to repro	5		
Specific target organ toxicity – sin	gle exposure					
Specific target organ toxicity – rep		Not classified				
Aspiration hazard		Aspiration hazard – Category 1				
Information on likely routes of exp	oosure	Not available				
Potential acute health effects						
Eye contact may cause redness and transient pain.						
· · · · · · · · · · · · · · · · · · ·			Inhalation of oil mist or vapours at elevated temperatures may cause respiratory irritation.			
			No known significant effects or critical hazards.			
Ingestion May be fatal if swallowed and enters airways.						
Potential chronic health effects			transwed and enters an ways.			
General		No known signi	ficant effects or critical hazard	c		
General			n this product is based on an s		The product should not be	
Carcinogenicity		regarded as a ca		everely hydrotreated distillate	. The product should not be	







Mutagenicity						
Teratogenicity		No known s	significant effects or critical haz	ards.		
Product / ingredient name		-				
Fertility effects		Not available				
Other information Specific hazard						
Section 12: Ecological Information						
12.1 Toxicity	Not expected to be harmful to aquatic organisms.					
12.2 Persistence and degradability		Not inherently biodegradable.				
12.3 Bioaccumulative potential		Bioaccumulation is unlikely to be significant because of the low water solubility of this product.				
12.4 Mobility in soil			ered mobile.			
12.5 Results of PBT & vPvB assessment	:	Not applica				
12.6 Other adverse effects			n water. Spills may form a film of nsfer could also be impaired.	n water surfaces causing physica	al damage to organisms.	
Section 13: Disposal Consideration						
The information in this section contains information provided in the Exposure So	generic advice and enario(s).	d guidance. T	he list of Identified Uses in Sect	ion 1 should be consulted for ar	ny available use-specific	
Product Methods of disposal	Where possible (e.g. in the absence of relevant contamination), recycling of used substance is feasible and recommended. This substance can be burned or incinerated, subject to national/l authorisations, relevant contamination limits, safety regulations and air quality legislation. Cor or waste substance (not directly recyclable): Disposal can be carried out directly, or by delivery qualified waste handlers. National legislation may identify a specific organisation, and/or preso composition limits and methods for recovery or disposal				subject to national/local ality legislation. Contaminated rectly, or by delivery to	
Hazardous waste		Yes				
European waste catalogue (EWC) Waste	Code 13 03 07*	Waste designation.				
Packaging		Mineral-ba	sed non-chlorinated insulating	and heat transmission oils.		
Methods of disposal				d or minimised wherever possib y be considered when recycling	1 3 3	
Section 14: Transport Information						
International transport regulations						
	ADR / R	ID	ADN	IMO / IMDG Classification	ICAO / IATA Classification	
14.1 UN number	Not regul	ated	Not regulated	Not regulated	Not regulated	
14.2 UN proper shipping name	_		_	_	_	
14.3 Transport hazard class(es)	_		-	_	_	
14.4 Packing group	_		-	_	_	
14.5 Environmental hazards	No		No	No	No	
Additional Information	_		-	-	-	
14.6 Special precautions for user oils						
14.7 Transport in bulk according to An	nex   of MARPOL	73/78 and th	e IBC Code			
Section 15: Regulatory Informatio						
		slation speci	fic for the substance or mixture	e EU Regulation (EC) No. 1907/	2006 (REACH)	
Annex XIV – List of substances subject to Annex XIV Substances of very high concern	islation specific for the substance or mixture EU Regulation (EC) No. 1907/2006 (REACH) None of the components are listed					
Annex XVII – Restrictions on the manufa on the market and use of certain danger mixtures and articles.	Not applicable					
International Lists National Inventory		Inventory name				
Australia		Australian I	nventory of Chemical Substanc	es (AICS) – Yes		
Canada		Domestic Substances List (DSL) – Yes Non-Domestic Substances List (NDSL) – No				
China			f Existing Chemical Substances			
		inventory o	. Easting chemical substances			







_	European Inventory of Existing Commercial Chemical Substances (EINECS) – Yes			
Europe	European List of Notified Chemical Substances (ELINCS) – No			
Japan	Inventory of Existing and New Chemical Substances (ENCS) – Yes			
Korea	Existing Chemicals List (ECL) – Yes			
New Zealand	New Zealand Inventory – Yes			
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS) – Yes			
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory – Yes			
	oly with the inventory requirements administered by the governing country(s) uct are not listed or exempt from listing on the inventory administered by the governing country(s).			
Section 16: Other Information				
Revision comments				
Legend to abbreviations				
ADR	European agreement concerning the international carriage of dangerous good by road.			
RID	Regulations agreement concerning the international carriage of dangerous good by rail.			
IMDG Code	International Maritime Dangerous Goods Code.			
ICAO	International Civil Aviation Organization.			
IATA	International Air Transport Association.			
GHS	Globally Harmonized System of Classification and Labeling of Chemicals.			
CLP	Classification, Labelling and Packaging Regulation [Regulation (EC) No.1272/2008].			
SCBA	Self-Contained Breathing Apparatus.			
REACH	Registration, Evaluation, Authorization and Restriction of Chemicals Regulation [Regulation (EC) No. 1907/2006].			
LC 50	Median lethal concentration.			
LD 50	Median lethal dose.			
РВТ	Persistent, Bio accumulative and Toxic.			

GANDHAR OIL REFINERY (INDIA) LTD.				
Taloja Plant	Plot No.10, MIDC, Main Road, Taloja, Taluka Panvel, District - Raigad 410208, India.			
Silvassa Plant	Plot No. 2, Survey No. 678/1/3, Village Naroli, Near Naroli Check Post, Silvassa, Dadra & Nagar Haveli, Union Territory 396230, India.			
Emergency / Info Phone No.	Phone: +91-22-40635600 • Fax: +91-22-40635601			
Email	info@gandharoil.com			





# **DIVYOL MPX - 2 GREASE**

Section 1: Identification of the Substance / Mixt	ture				
1.1 Product identifier					
Product name	Divyol MPX – 2 G	irease			
Product description		Multi Purpose Grease			
Product type	Grease				
MARPOL Annex-1	****				
1.2 Identified uses					
Distribution of substance	Automotive & In	dustrial Grease			
Formulation & (re)packing of substance & mixtures	Automotive & In				
Manufacture of substance	Automotive & In				
Functional fluids	Automotive & In				
Section 2: Hazard Identification	Automotive & m	uustilai Glease			
	11		1		
4-Extreme	Health		1		
3-High	Flammability		1		
2-Moderate	Reactivity		0		
1-Slight	Special		-		
Section 3: Compostion / Information on Ingredi	ients				
Chemical Name / Ingredients	% by wt.	Hazardous		CAS No.	
Lithium Hydroxide	0.5 - 2	Yes		1310-66-3	
Mineral Oil	80 - 93	Yes	64742-52-5, 64741	-88-4, 64742-54-7, 64742-01-4	
12 HSA HCO	4 - 10 2 - 6	No No		106-14-9 8001-78-3	
Additives	0-2	Yes	Proc	prietary Mixture	
Zinc dialkyldithiophosphate	0 - 3	Yes		68457-79-4	
Product / Ingredient name	Lithium soaps fro	om natural fatty su	bstances		
Section 4: First Aid Measures					
Inhalation exposure Remove to fresh air & provide oxygen, if breathing is difficult. Contact physician					
Skin contact	Remove contam			horoughly with mild soap & water.	
Swallowing or other	Do not induce vo	Do not induce vomiting. In general no treatment is necessary unless large quantities are ingested. Get medical advice.			
Eye contact	Rinse continuou	sly with water for	everal minutes. Get medical att	ention, if irritation persists.	
Protection first-aiders	5	Disconnecting electrical supply. Ensure adequate ventilation and check that a safe and breathing area is available before entry into confined spaces.			
Section 5: Fire Fighting Measures					
5.1 Extinguishing media					
Unsuitable extinguishing media			de. Do not use direct water and the fire. Use foam simultaneou:	d wet chemicals, or water on the sly on the surface.	
5.2 Special hazards arising from the substance or mix	ture				
Hazards from the substance or mixture		Flammable liquids in pressurised containers may rupture and when exposed to heat, creating a highly flammable vapour cloud.			
Hazardous thermal decomposition products	Incomplete combustion is likely to give rise to a complex mixture of airborne solid and liquid particulates, gases, including carbon monoxide, $H_2S$ , $SO_x$ (sulphur oxides) or sulphuric acid and unidentified organic and inorganic compounds.				
5.3 Advice for firefighters					
Special precautions for firefighters			ving all persons from the vicini personal risk or without suitabl	ty of the incident if there is a fire. No e training.	
Special protective equipment for firefighters	(SCBA) with a ful helmets, protect	l face- piece opera	ed in positive pressure mode. ( es) conforming to European sta	lf-contained breathing apparatus Clothing for firefighters (including ndard EN 469 will provide a basic level	





6.1 Personal precautions, protective equipment and emergency procedures						
Keep non-involved personnel away from the area of spillage.						
For non-emergency personnel	Alert emergency personnel. Except in case of small spillages, the feasibility of any actions should always be assessed and advised, if possible, by a trained, competent person in charge of managing the emergency. Stop leak if safe to do so. Avoid direct contact with the product. Stay upwind / keep distance from source. In case of large spillages, alert occupants in downwind areas. Eliminate all ignition sources if safe to do so. Spillages of limited amounts of product, especially in the open air when vapours will be usually quickly dispersed, are dynamic situations, which will presumably limit the exposure to dangerous concentrations. Note : Recommended measures are based on the most likely spillage scenarios for this material; however, local conditions (wind, air temperature, wave / current direction and speed) may significantly influence the choice of appropriate actions.					
For emergency responders	For this reason, local experts should be consulted when necessary. Local regulations may also prescribe or limit actions to be taken. Small spillages: Normal antistatic working clothes are usually adequate. Large spillages: Full body suit of chemically resistant and thermal resistant material should be used. Work gloves providing adequate chemical resistance, specifically to aromatic hydrocarbons. Note: Gloves made of PVA are not water-resistant, and are not suitable for emergency use. Safety helmet, antistatic non-skid safety shoes or boots. Goggles and / or face shield, if splashes or contact with eyes is possible or anticipated. Respiratory Protection : A half or full-face respirator with filter(s) for organic vapours (and when applicable for H <sub>2</sub> S) a Self Contained Breathing Apparatus (SCBA) can be used according to the extent of spill and predictable amount of exposure. If the situation cannot be completely assessed, or if an oxygen deficiency is possible, only SCBA's should be used.					
6.2 Environmental precautions	Prevent product from entering sewers, rivers or other bodies of water. If necessary dike the product with dry earth, sand or similar non-combustible materials. In case of soil contamination, remove contaminated soil and treat in accordance with local regulations. In case of small spillages in closed waters (i.e. ports), contain product with floating barriers or other equipment. Collect spilled product by absorbing with specific floating absorbents. If possible, large spillages in open waters should be contained with floating barriers or other mechanical means. If this is not possible, control the spreading of the spillage, and collect the product by skimming or other suitable mechanical means. The use of dispersants should be advised by an expert, and, if required, approved by local authorities.					
6.3 Methods and material for containment and cleaning up						
Small spill	Stop leak if without risk. Absorb spilled product with suitable non-combustible materials.					
Large spill	Large spillages may be cautiously covered with foam, if available, to limit vapour cloud formation. Do not use water jet. When inside buildings or confined spaces, ensure adequate ventilation. Transfer collected product and other contaminated materials to suitable containers for recovery or safe disposal.					
6.4 Reference to other sections	See Section 1: For emergency contact information. See Section 8: For information on appropriate personal protective equipment. See Section 13: For additional waste treatment information.					
Section 7: Handling and Storage						
7.1 Advice on general information – hygiene, storage	Obtain special instructions before use. Keep away from heat / sparks / open flames/hot surfaces. No smoking. Use and store only outdoors or in a well-ventilated area. Hazard of slipping on spilt product. Avoid release to the environment.					
7.2 Conditions for safe storage including any incompatibilities	Storage area layout, tank design, equipment and operating procedures must comply with the relevant regional, national or local legislation. Storage installations should be designed with adequate bunds in case of leaks or spills. Cleaning, inspection and maintenance of internal structure of storage tanks must be done only by properly equipped and qualified personnel as defined by national, local or company regulations. Store separately from oxidising agents. Keep only in the original container or in a suitable container for this kind of product. Keep container tightly closed and sealed until ready for use. Do not store in unlabelled containers. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Empty containers may contain harmful, flammable / combustible or explosive residue or vapours. Do not cut, grind, drill, weld, reuse or dispose of containers unless adequate precautions are taken against these hazards. Protect from sunlight.					
7.3 Specific end use(s) – Recommendations	Not available					



Vapour pressure

Density Solubility (ies)



Section 8: Exposure Controls / Personal Protect	tion
The list of Identified Uses in Section 1 should be consu	Ited for any available use-specific information provided in the Exposure Scenario(s).
8.1 Control parameters	
Occupational exposure limits	
Product / Ingredient name	Distillates, mixture of hydrocarbons
Exposure limits values	AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m <sup>3</sup> 8 hours. Form: mist and fume STEL: 3 mg/m <sup>3</sup> 15 minutes. Form: mist and fume [Air contaminant]. AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m <sup>3</sup> 8 hours. Form: mist and fume STEL: 3 mg/m <sup>3</sup> 15 minutes. Form: mist and fume.
Recommended monitoring procedures	If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres – Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres – Guide for the application and use of procedures for the assessment of exposure to chemical agents for the performance of procedures for the measurement of chemical agents). Reference to national guidance documents for methods for the determination of hazardous substances will also be required.
8.2 Exposure control Appropriate engineering controls	Mechanical ventilation and local exhaust will reduce exposure via the air. Use oil resistant material in construction of handling equipment. Store under recommended conditions and if heated, temperature control equipment should be used to avoid overheating.
Individual protection measures	
Hygiene measures	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Ensure that eyewash stations and safety showers are close to the workstation location. Wash contaminated clothing before reuse.
Eye / face protection	Recommended: Safety glasses with side shields.
Skin protection	
Hand protection	4 – 8 hours (breakthrough time): nitrile rubber.
Body protection	Wear protective clothing if there is a risk of skin contact. Change contaminated clothes at the end of working shift.
Other skin protection	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary.
Environmental exposure control	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.
Section 9: Physical and Chemical Properties	
Appearance	Clear
Physical state	Smooth, Homogeneous
Colour	Pale Yellow
	Petroleum odor
Odor	
Odor Odour threshold	Not available
	Not available       > 190 °C (ASTM D 566)
Odour threshold	
Odour threshold Dropping point	> 190 °C (ASTM D 566)
Odour threshold Dropping point Flash point	> 190 °C (ASTM D 566) > 204 °C (Mineral Oil)
Odour threshold Dropping point Flash point Evaporation rate	<ul> <li>&gt; 190 °C (ASTM D 566)</li> <li>&gt; 204 °C (Mineral Oil)</li> <li>Not available</li> </ul>
Odour threshold Dropping point Flash point Evaporation rate Flammability (solid, gas)	<ul> <li>&gt; 190 °C (ASTM D 566)</li> <li>&gt; 204 °C (Mineral Oil)</li> <li>Not available</li> <li>Not available</li> </ul>

Not volatile





Solubility (water)		Insoluble in wat	ter			
Partition coefficient (n-octanol/water)		Not available				
Decomposition temperature		No data				
Auto-ignition temperature		Not available				
Worked Penetration at 25°C		265 – 295 (ASTN	M D 217)			
Explosive properties		No data				
Oxidising properties		No data				
DMSO extractable compounds for	r base oil substance(s)	Not available				
according to IP346		<3 %				
	tion 10: Stability and Reactivity					
10.1 Reactivity		No specific test	data related to reactivity avail	able for this product or its ingr	edients.	
10.2 Chemical stability			ormal conditions			
10.3 Possibility of hazardous rea	octions	Under normal c	conditions of storage and use, I	hazardous reactions will not o	ccur. Oxidising agent.	
10.4 Conditions to avoid		Keep away from	n extreme heat and oxidising a	igents.		
10.5 Incompatible materials		Incomplete con particulates, ga	nbustion is likely to give rise to ses, including carbon monoxic	a complex mixture of airborn de. H. S. SO (sulphur oxides) or	e solid and liquid sulphuric acid and	
10.6 Hazardous decomposition	products		ganic and inorganic compound			
SECTION 11: Toxicological In	formation					
11.1 Information on toxicologica	al effects					
Acute toxicity						
Product / ingredient name	Result		Species	Dose	Exposure	
	LC 50 Inhalation dusts and mists		Rat	>2.18mg/l	4 hours	
Distillate (Petroleum), hydro	LD 50 Dermal		Rabbit	> 5000 mg/kg	_	
treated heavy paraffinic	LD 50 Ora	al	Rat	>15000 mg/kg	-	
Irritation / corrosion						
Skin						
Eye		No known significant effects or critical hazards.				
Respiratory						
Sensation						
Skin						
Respiratory		No known significant effects or critical hazards.				
nespiratory		No data availab	le to indicate product or any c	omponents present greater th	an 0 1 % are	
Mutagenicity		No data available to indicate product or any components present greater than 0.1 % are multigene or genotoxic.				
Carcinogenicity		The base oil(s) i	n this product is based on an s	everely hydrotreated distillate	<b>.</b>	
Reproductive toxicity			ould not be regarded as a carc gredient listed as toxic to repro	5		
Specific target organ toxicity – sin	igle exposure		,			
Specific target organ toxicity – rep		Not classified				
Aspiration hazard		Aspiration haza	rd – Category 1			
Information on likely routes of exp	oosure	Not available				
Potential acute health effects						
Eye contact     Eye contact may cause redness and transient pain.						
Inhalation Inhalation Inhalation of oil mist or vapours at elevated tempera			•	atory irritation.		
Skin contact         No known significant effects or critical hazards.						
Ingestion May be fatal if swallowed and enters airways.						
Potential chronic health effects		may be latar if S	manowed and enters an wdys.			
General		No known signi	ificant effects or critical hazard	s		
					The product chould not be	
Carcinogenicity	regarded as a ca	n this product is based on an s arcinogen.	everely hydrotreated distillate	. The product should not be		







Mutagenicity						
Teratogenicity		No known s	significant effects or critical haz	ards.		
Product / ingredient name		-				
Fertility effects		Not available				
Other information Specific hazard						
Section 12: Ecological Information						
12.1 Toxicity	Not expected to be harmful to aquatic organisms.					
12.2 Persistence and degradability		Not inherently biodegradable.				
12.3 Bioaccumulative potential		Bioaccumulation is unlikely to be significant because of the low water solubility of this product.				
12.4 Mobility in soil			ered mobile.			
12.5 Results of PBT & vPvB assessment	:	Not applica				
12.6 Other adverse effects			n water. Spills may form a film of nsfer could also be impaired.	n water surfaces causing physica	al damage to organisms.	
Section 13: Disposal Consideration						
The information in this section contains information provided in the Exposure So	generic advice and enario(s).	d guidance. T	he list of Identified Uses in Sect	ion 1 should be consulted for ar	ny available use-specific	
Product Methods of disposal	Where possible (e.g. in the absence of relevant contamination), recycling of used substance is feasible and recommended. This substance can be burned or incinerated, subject to national/l authorisations, relevant contamination limits, safety regulations and air quality legislation. Cor or waste substance (not directly recyclable): Disposal can be carried out directly, or by delivery qualified waste handlers. National legislation may identify a specific organisation, and/or preso composition limits and methods for recovery or disposal				subject to national/local ality legislation. Contaminated rectly, or by delivery to	
Hazardous waste		Yes				
European waste catalogue (EWC) Waste	Code 13 03 07*	Waste designation.				
Packaging		Mineral-ba	sed non-chlorinated insulating	and heat transmission oils.		
Methods of disposal				d or minimised wherever possib y be considered when recycling	1 3 3	
Section 14: Transport Information						
International transport regulations						
	ADR / R	ID	ADN	IMO / IMDG Classification	ICAO / IATA Classification	
14.1 UN number	Not regul	ated	Not regulated	Not regulated	Not regulated	
14.2 UN proper shipping name	_		_	_	_	
14.3 Transport hazard class(es)	_		-	_	_	
14.4 Packing group	_		-	_	_	
14.5 Environmental hazards	No		No	No	No	
Additional Information	_		-	-	-	
14.6 Special precautions for user oils						
14.7 Transport in bulk according to An	nex   of MARPOL	73/78 and th	e IBC Code			
Section 15: Regulatory Informatio						
		slation speci	fic for the substance or mixture	e EU Regulation (EC) No. 1907/	2006 (REACH)	
Annex XIV – List of substances subject to Annex XIV Substances of very high concern	islation specific for the substance or mixture EU Regulation (EC) No. 1907/2006 (REACH) None of the components are listed					
Annex XVII – Restrictions on the manufa on the market and use of certain danger mixtures and articles.	Not applicable					
International Lists National Inventory		Inventory name				
Australia		Australian I	nventory of Chemical Substanc	es (AICS) – Yes		
Canada		Domestic Substances List (DSL) – Yes Non-Domestic Substances List (NDSL) – No				
China			f Existing Chemical Substances			
		inventory o	. Easting chemical substances			







	European Inventory of Existing Commercial Chemical Substances (EINECS) – Yes			
Europe	European List of Notified Chemical Substances (ELINCS) – No			
Japan	Inventory of Existing and New Chemical Substances (ENCS) – Yes			
Korea	Existing Chemicals List (ECL) – Yes			
New Zealand	New Zealand Inventory – Yes			
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS) – Yes			
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory – Yes			
	oly with the inventory requirements administered by the governing country(s) uct are not listed or exempt from listing on the inventory administered by the governing country(s).			
Section 16: Other Information				
Revision comments				
Legend to abbreviations				
ADR	European agreement concerning the international carriage of dangerous good by road.			
RID	Regulations agreement concerning the international carriage of dangerous good by rail.			
IMDG Code	International Maritime Dangerous Goods Code.			
ICAO	International Civil Aviation Organization.			
IATA	International Air Transport Association.			
GHS	Globally Harmonized System of Classification and Labeling of Chemicals.			
CLP	Classification, Labelling and Packaging Regulation [Regulation (EC) No.1272/2008].			
SCBA	Self-Contained Breathing Apparatus.			
REACH	Registration, Evaluation, Authorization and Restriction of Chemicals Regulation [Regulation (EC) No. 1907/2006].			
LC 50	Median lethal concentration.			
LD 50	Median lethal dose.			
РВТ	Persistent, Bio accumulative and Toxic.			

GANDHAR OIL REFINERY (INDIA) LTD.		
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Silvassa Plant	Plot No. 2, Survey No. 678/1/3, Village Naroli, Near Naroli Check Post, Silvassa, Dadra & Nagar Haveli, Union Territory 396230, India.	
Emergency / Info Phone No.	Phone: +91-22-40635600 • Fax: +91-22-40635601	
Email	info@gandharoil.com	





# **DIVYOL MPX - 3 GREASE**

Section 1: Identification of the Substance / Mixt	ture			
1.1 Product identifier				
Product name	Divyol MPX – 3 Grease			
Product description	Multi Purpose Grease			
Product type	Grease			
MARPOL Annex-1	****			
1.2 Identified uses				
Distribution of substance	Automotive & Inc	dustrial Grease		
Formulation & (re)packing of substance & mixtures	Automotive & Inc			
Manufacture of substance	Automotive & Inc			
Functional fluids	Automotive & Inc			
Section 2: Hazard Identification	Automotive a m			
4-Extreme	Health		1	
3-High	Flammability		1	
2-Moderate			0	
	Reactivity			
1-Slight	Special		-	
Section 3: Compostion / Information on Ingredi				
Chemical Name / Ingredients	% by wt.	Hazardous		CAS No.
Lithium Hydroxide Mineral Oil	0.5 - 2 80 - 93	Yes Yes		1310-66-3
12 HSA	4 - 10	No		64742-52-5, 64741-88-4, 64742-54-7, 64742-01-4 106-14-9
НСО	2-6	No		8001-78-3
Additives	0 - 2	Yes		Proprietary Mixture
Zinc dialkyldithiophosphate	0 - 3	Yes		68457-79-4
Product / Ingredient name	Lithium soaps fro	Lithium soaps from natural fatty substances		
Section 4: First Aid Measures				
Inhalation exposure	Remove to fresh	Remove to fresh air & provide oxygen, if breathing is difficult. Contact physician		
Skin contact		Remove contaminated clothing. Flush skin with water. Wash skin thoroughly with mild soap & water. If irritation occurs, call a physician.		
Swallowing or other		Do not induce vomiting. In general no treatment is necessary unless large quantities are ingested. Get medical advice.		
Eye contact	Rinse continuous	Rinse continuously with water for several minutes. Get medical attention, if irritation persists.		
Protection first-aiders	5	Disconnecting electrical supply. Ensure adequate ventilation and check that a safe and breathing area is available before entry into confined spaces.		
Section 5: Fire Fighting Measures				
5.1 Extinguishing media				
Unsuitable extinguishing media				ot use direct water and wet chemicals, or water on the Ise foam simultaneously on the surface.
5.2 Special hazards arising from the substance or mix	ture			
Hazards from the substance or mixture		Flammable liquids in pressurised containers may rupture and when exposed to heat, creating a highly flammable vapour cloud.		
Hazardous thermal decomposition products	particulates, gase	Incomplete combustion is likely to give rise to a complex mixture of airborne solid and liquid particulates, gases, including carbon monoxide, $H_2S$ , $SO_x$ (sulphur oxides) or sulphuric acid and unidentified organic and inorganic compounds.		
5.3 Advice for firefighters				
Special precautions for firefighters		Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.		
Special protective equipment for firefighters	(SCBA) with a ful helmets, protect	Firefighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face- piece operated in positive pressure mode. Clothing for firefighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.		





6.1 Personal precautions, protective equipment and emergency procedures				
For non-emergency personnel	Keep non-involved personnel away from the area of spillage. Alert emergency personnel. Except in case of small spillages, the feasibility of any actions should always be assessed and advised, if possible, by a trained, competent person in charge of managing the emergency. Stop leak if safe to do so. Avoid direct contact with the product. Stay upwind / keep distance from source. In case of large spillages, alert occupants in downwind areas. Eliminate all ignition sources if safe to do so. Spillages of limited amounts of product, especially in the open air when vapours will be usually quickly dispersed, are dynamic situations, which will presumably limit the exposure to dangerous concentrations. Note : Recommended measures are based on the most likely spillage scenarios for this material; however, local conditions (wind, air temperature, wave / current direction and speed) may significantly influence the choice of appropriate actions.			
For emergency responders	For this reason, local experts should be consulted when necessary. Local regulations may also prescribe or limit actions to be taken. Small spillages: Normal antistatic working clothes are usually adequate. Large spillages: Full body suit of chemically resistant and thermal resistant material should be used. Work gloves providing adequate chemical resistance, specifically to aromatic hydrocarbons. Note: Gloves made of PVA are not water-resistant, and are not suitable for emergency use. Safety helmet, antistatic non-skid safety shoes or boots. Goggles and / or face shield, if splashes or contact with eyes is possible or anticipated. Respiratory Protection : A half or full-face respirator with filter(s) for organic vapours (and when applicable for H <sub>2</sub> S) a Self Contained Breathing Apparatus (SCBA) can be used according to the extent of spill and predictable amount of exposure. If the situation cannot be completely assessed, or if an oxygen deficiency is possible, only SCBA's should be used.			
6.2 Environmental precautions	Prevent product from entering sewers, rivers or other bodies of water. If necessary dike the product with dry earth, sand or similar non-combustible materials. In case of soil contamination, remove contaminated soil and treat in accordance with local regulations. In case of small spillages in closed waters (i.e. ports), contain product with floating barriers or other equipment. Collect spilled product by absorbing with specific floating absorbents. If possible, large spillages in open waters should be contained with floating barriers or other mechanical means. If this is not possible, control the spreading of the spillage, and collect the product by skimming or other suitable mechanical means. The use of dispersants should be advised by an expert, and, if required, approved by local authorities.			
6.3 Methods and material for containment and cleaning	up			
Small spill	Stop leak if without risk. Absorb spilled product with suitable non-combustible materials.			
Large spill	Large spillages may be cautiously covered with foam, if available, to limit vapour cloud formation. Do not use water jet. When inside buildings or confined spaces, ensure adequate ventilation. Transfer collected product and other contaminated materials to suitable containers for recovery or safe disposal.			
6.4 Reference to other sections	See Section 1: For emergency contact information. See Section 8: For information on appropriate personal protective equipment. See Section 13: For additional waste treatment information.			
Section 7: Handling and Storage				
7.1 Advice on general information – hygiene, storage	Obtain special instructions before use. Keep away from heat / sparks / open flames/hot surfaces. No smoking. Use and store only outdoors or in a well-ventilated area. Hazard of slipping on spilt product. Avoid release to the environment.			
7.2 Conditions for safe storage including any incompatibilities	Storage area layout, tank design, equipment and operating procedures must comply with the relevant regional, national or local legislation. Storage installations should be designed with adequate bunds in case of leaks or spills. Cleaning, inspection and maintenance of internal structure of storage tanks must be done only by properly equipped and qualified personnel as defined by national, local or company regulations. Store separately from oxidising agents. Keep only in the original container or in a suitable container for this kind of product. Keep container tightly closed and sealed until ready for use. Do not store in unlabelled containers. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Empty containers may contain harmful, flammable / combustible or explosive residue or vapours. Do not cut, grind, drill, weld, reuse or dispose of containers unless adequate precautions are taken against these hazards. Protect from sunlight.			
7.3 Specific end use(s) – Recommendations	Not available			



Vapour pressure Density Solubility (ies)



· · · · · · · · · · · · · · · · · · ·	ction
The list of Identified Uses in Section 1 should be cons	ulted for any available use-specific information provided in the Exposure Scenario(s).
8.1 Control parameters	
Occupational exposure limits	
Product / Ingredient name	Distillates, mixture of hydrocarbons
Exposure limits values	AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m <sup>3</sup> 8 hours. Form: mist and fume STEL: 3 mg/m <sup>3</sup> 15 minutes. Form: mist and fume [Air contaminant]. AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m <sup>3</sup> 8 hours. Form: mist and fume STEL: 3 mg/m <sup>3</sup> 15 minutes. Form: mist and fume.
Recommended monitoring procedures	If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres – Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres – Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres – General requirements for the performance of procedures for the measurement of chemical agents). Reference to national guidance documents for methods for the determination of hazardous substances will also be required.
8.2 Exposure control Appropriate engineering controls	Mechanical ventilation and local exhaust will reduce exposure via the air. Use oil resistant material in construction of handling equipment. Store under recommended conditions and if heated, temperature control equipment should be used to avoid overheating.
Individual protection measures	
Hygiene measures	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Ensure that eyewash stations and safety showers are close to the workstation location. Wash contaminated clothing before reuse.
Eye / face protection	Recommended: Safety glasses with side shields.
Skin protection	
Hand protection	4 – 8 hours (breakthrough time): nitrile rubber.
Body protection	Wear protective clothing if there is a risk of skin contact. Change contaminated clothes at the end of working shift.
Other skin protection	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary.
Environmental exposure control	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.
Section 9: Physical and Chemical Properties	
Appearance	Clear
Physical state	Smooth, Homogeneous
Colour	Pale Yellow
Odor	Petroleum odor
Odour threshold	Not available
Dropping point	> 190 °C (ASTM D 566)
Flach paint	> 204 °C (Mineral Oil)
Flash point	
Evaporation rate	Not available
	Not available       Not available
Evaporation rate Flammability (solid, gas) Flammability limits in air (lower), % by volume	Not available       Not available
Evaporation rate Flammability (solid, gas)	Not available



Not volatile





Solubility (water)		Insoluble in wat	er			
		Insoluble in water Not available				
· · · · · · · · · · · · · · · · · · ·		Not available No data				
· · · · · · · · · · · · · · ·		Not available				
Worked Penetration at 25°C		220 – 250 (ASTN	A D 217)			
Explosive properties		No data	n U 217)			
· · · ·		No data				
Oxidising properties DMSO extractable compounds for	(hace oil substance(s)					
according to IP346		Not available <3 %				
Section 10: Stability and Rea	ctivity	1				
10.1 Reactivity		No specific test	data related to reactivity availa	able for this product or its ingr	edients.	
10.2 Chemical stability		Stable under no	ormal conditions			
10.3 Possibility of hazardous rea	ctions	Under normal c	onditions of storage and use, I	nazardous reactions will not o	ccur. Oxidising agent.	
10.4 Conditions to avoid		Keep away from	n extreme heat and oxidising a	gents.		
10.5 Incompatible materials		Incomplete con particulates, gas	nbustion is likely to give rise to ses, including carbon monoxic	a complex mixture of airborn le, H <sub>2</sub> S, SO, (sulphur oxides) or	e solid and liquid sulphuric acid and	
10.6 Hazardous decomposition	products		ganic and inorganic compound			
SECTION 11: Toxicological In	formation					
11.1 Information on toxicologica	al effects					
Acute toxicity						
Product / ingredient name	Result		Species	Dose	Exposure	
	LC 50 Inhalation due	sts and mists	Rat	>2.18mg/l	4 hours	
Distillate (Petroleum), hydro	LD 50 Derr	mal	Rabbit	> 5000 mg/kg	_	
treated heavy paraffinic	LD 50 Or	al	Rat	>15000 mg/kg	-	
Irritation / corrosion						
Skin						
Eye		No known significant effects or critical hazards.				
Respiratory		No known significant cheets of childrand.				
Sensation						
Skin						
Respiratory		No known signi	b known significant effects or critical hazards.			
		No data availab	No data available to indicate product or any components present greater than 0.1 % are			
Mutagenicity		multigene or genotoxic.				
Carcinogenicity			The base oil(s) in this product is based on an severely hydrotreated distillate.			
Reproductive toxicity		· ·	product should not be regarded as a carcinogen. ains no ingredient listed as toxic to reproduction.			
Specific target organ toxicity – sin	gle exposure	Not classified				
Specific target organ toxicity – rep	eated exposure	Not classified				
Aspiration hazard		Aspiration hazard – Category 1				
Information on likely routes of exp	oosure	Not available				
Potential acute health effects						
Eye contact		Eye contact may	y cause redness and transient	pain.		
Inhalation		Inhalation of oil	mist or vapours at elevated te	emperatures may cause respira	itory irritation.	
Skin contact			ficant effects or critical hazard			
Ingestion						
Potential chronic health effects						
		No known signi	ficant effects or critical hazard	S.		
General	General		The base oil(s) in this product is based on an severely hydrotreated distillate. The product should not be			
General Carcinogenicity		-		everely hydrotreated distillate	. The product should not be	







Mutagenicity						
Teratogenicity		No known s	significant effects or critical haz	ards.		
Product / ingredient name						
Fertility effects		Not such the la	1-			
Other information Specific hazard		Not availab	le			
Section 12: Ecological Information						
12.1 Toxicity			ed to be harmful to aquatic org	anisms.		
12.2 Persistence and degradability			ntly biodegradable.			
12.3 Bioaccumulative potential				nt because of the low water solu	bility of this product.	
12.4 Mobility in soil			ered mobile.			
12.5 Results of PBT & vPvB assessment	:	Not applica				
12.6 Other adverse effects			n water. Spills may form a film of nsfer could also be impaired.	n water surfaces causing physica	al damage to organisms.	
Section 13: Disposal Consideration						
The information in this section contains information provided in the Exposure So	generic advice and enario(s).	d guidance. T	he list of Identified Uses in Sect	ion 1 should be consulted for ar	ny available use-specific	
Product Methods of disposal		feasible and authorisatio or waste su qualified w	Where possible (e.g. in the absence of relevant contamination), recycling of used substance is feasible and recommended. This substance can be burned or incinerated, subject to national/local authorisations, relevant contamination limits, safety regulations and air quality legislation. Contaminated or waste substance (not directly recyclable): Disposal can be carried out directly, or by delivery to qualified waste handlers. National legislation may identify a specific organisation, and/or prescribe composition limits and methods for recovery or disposal			
Hazardous waste		Yes				
European waste catalogue (EWC) Waste	Code 13 03 07*	Waste designation.				
Packaging		Mineral-based non-chlorinated insulating and heat transmission oils.				
Methods of disposal		The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.				
Section 14: Transport Information						
International transport regulations						
	ADR / R	ID	ADN	IMO / IMDG Classification	ICAO / IATA Classification	
14.1 UN number	Not regul	ated	Not regulated	Not regulated	Not regulated	
14.2 UN proper shipping name	_		_	_	_	
14.3 Transport hazard class(es)	_		-	_	_	
14.4 Packing group	_		-	_	_	
14.5 Environmental hazards	No		No	No	No	
Additional Information	_		-	-	-	
14.6 Special precautions for user oils						
14.7 Transport in bulk according to An	nex   of MARPOL	73/78 and th	e IBC Code			
Section 15: Regulatory Informatio						
15.1 Safety, health and environmental		slation speci	fic for the substance or mixture	e EU Regulation (EC) No. 1907/	2006 (REACH)	
Annex XIV – List of substances subject to Annex XIV Substances of very high concern	None of the components are listed					
Annex XVII – Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles.		Not applicable				
International Lists National Inventory		Inventory name				
Australia		Australian Inventory of Chemical Substances (AICS) – Yes				
Canada		Domestic Substances List (DSL) – Yes Non-Domestic Substances List (NDSL) – No				
China		Inventory of Existing Chemical Substances in China (IECSC) – Yes				
		inventory o	. Easting chemical substances			





_	European Inventory of Existing Commercial Chemical Substances (EINECS) – Yes
Europe	European List of Notified Chemical Substances (ELINCS) – No
Japan	Inventory of Existing and New Chemical Substances (ENCS) – Yes
Korea	Existing Chemicals List (ECL) – Yes
New Zealand	New Zealand Inventory – Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS) – Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory – Yes
	oly with the inventory requirements administered by the governing country(s) uct are not listed or exempt from listing on the inventory administered by the governing country(s).
Section 16: Other Information	
Revision comments	
Legend to abbreviations	
ADR	European agreement concerning the international carriage of dangerous good by road.
RID	Regulations agreement concerning the international carriage of dangerous good by rail.
IMDG Code	International Maritime Dangerous Goods Code.
ICAO	International Civil Aviation Organization.
IATA	International Air Transport Association.
GHS	Globally Harmonized System of Classification and Labeling of Chemicals.
CLP	Classification, Labelling and Packaging Regulation [Regulation (EC) No.1272/2008].
SCBA	Self-Contained Breathing Apparatus.
REACH	Registration, Evaluation, Authorization and Restriction of Chemicals Regulation [Regulation (EC) No. 1907/2006].
LC 50	Median lethal concentration.
LD 50	Median lethal dose.
РВТ	Persistent, Bio accumulative and Toxic.

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Emergency / Info Phone No.	Phone: +91-22-40635600 • Fax: +91-22-40635601	
Email	info@gandharoil.com	





# **DIVYOL SGX 2 GREASE**

Section 1: Identification of the Substance / Mixt	ture				
1.1 Product identifier					
Product name	Divyol SGX 2 Grease				
Product description	Multi Purpose Grease	Multi Purpose Grease			
Product type	Grease	• •			
MARPOL Annex-1	****				
1.2 Identified uses					
Distribution of substance	Automotive & Industrial Grease				
Formulation & (re)packing of substance & mixtures	Automotive & Industrial Grease				
Manufacture of substance	Automotive & Industrial Grease				
Functional fluids	Automotive & Industrial Grease				
Section 2: Hazard Identification					
4-Extreme	Health	1			
3-High	Flammability	1			
2-Moderate	Reactivity	0			
1-Slight	Special	-			
Section 3: Compostion / Information on Ingred	·				
Chemical Name / Ingredients	% by wt.	Hazardous	CAS No.		
Mix Fatty Acid	10 - 20	No	Proprietary Mixture		
Calcium Hydroxide	1 - 3	Yes	1305-62-0		
Mineral Oil	70 - 85	Yes	68990-65-8, 64741-88-4		
		No	Proprietary Mixture		
Stearate	0-7	No	14807-96-6		
Additives	0-2	Yes	Proprietary Mixture		
Product / Ingredient name	Calcium soaps from natural fatty substances				
Section 4: First Aid Measures					
Inhalation exposure	Remove to fresh air & provide oxygen, if breathing is difficult. Contact physician				
Skin contact	Remove contaminated clothing. Flush skin with water. Wash skin thoroughly with mild soap & water. If irritation occurs, call a physician.				
Swallowing or other	Do not induce vomiting. In gener Get medical advice.				
Eye contact	Rinse continuously with water for	Rinse continuously with water for several minutes. Get medical attention, if irritation persists.			
Protection first-aiders	Disconnecting electrical supply. Ensure adequate ventilation and check that a safe and breathing area is available before entry into confined spaces.				
Section 5: Fire Fighting Measures					
5.1 Extinguishing media					
Unsuitable extinguishing media	Use dry powder, foam, carbon dioxide. Do not use direct water and wet chemicals, or water on the burning product. They may spread the fire. Use foam simultaneously on the surface.				
5.2 Special hazards arising from the substance or mix	ture				
Hazards from the substance or mixture	Flammable liquids in pressurised flammable vapour cloud.	Flammable liquids in pressurised containers may rupture and when exposed to heat, creating a highly			
Hazardous thermal decomposition products	Incomplete combustion is likely to give rise to a complex mixture of airborne solid and liquid particulates, gases, including carbon monoxide, $H_2S$ , $SO_x$ (sulphur oxides) or sulphuric acid and unidentified organic and inorganic compounds.				
5.3 Advice for firefighters					
Special precautions for firefighters		noving all persons from the vicinity ny personal risk or without suitable t			
Special protective equipment for firefighters	Firefighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face- piece operated in positive pressure mode. Clothing for firefighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.				





6.1 Personal precautions, protective equipment and emergency procedures				
For non-emergency personnel	Keep non-involved personnel away from the area of spillage. Alert emergency personnel. Except in case of small spillages, the feasibility of any actions should always be assessed and advised, if possible, by a trained, competent person in charge of managing the emergency. Stop leak if safe to do so. Avoid direct contact with the product. Stay upwind / keep distance from source. In case of large spillages, alert occupants in downwind areas. Eliminate all ignition sources if safe to do so. Spillages of limited amounts of product, especially in the open air when vapours will be usually quickly dispersed, are dynamic situations, which will presumably limit the exposure to dangerous concentrations. Note : Recommended measures are based on the most likely spillage scenarios for this material; however, local conditions (wind, air temperature, wave / current direction and speed) may significantly influence the choice of appropriate actions.			
For emergency responders	For this reason, local experts should be consulted when necessary. Local regulations may also prescribe or limit actions to be taken. Small spillages: Normal antistatic working clothes are usually adequate. Large spillages: Full body suit of chemically resistant and thermal resistant material should be used. Work gloves providing adequate chemical resistance, specifically to aromatic hydrocarbons. Note: Gloves made of PVA are not water-resistant, and are not suitable for emergency use. Safety helmet, antistatic non-skid safety shoes or boots. Goggles and / or face shield, if splashes or contact with eyes is possible or anticipated. Respiratory Protection : A half or full-face respirator with filter(s) for organic vapours (and when applicable for H <sub>2</sub> S) a Self Contained Breathing Apparatus (SCBA) can be used according to the extent of spill and predictable amount of exposure. If the situation cannot be completely assessed, or if an oxygen deficiency is possible, only SCBA's should be used.			
6.2 Environmental precautions	Prevent product from entering sewers, rivers or other bodies of water. If necessary dike the product with dry earth, sand or similar non-combustible materials. In case of soil contamination, remove contaminated soil and treat in accordance with local regulations. In case of small spillages in closed waters (i.e. ports), contain product with floating barriers or other equipment. Collect spilled product by absorbing with specific floating absorbents. If possible, large spillages in open waters should be contained with floating barriers or other mechanical means. If this is not possible, control the spreading of the spillage, and collect the product by skimming or other suitable mechanical means. The use of dispersants should be advised by an expert, and, if required, approved by local authorities.			
6.3 Methods and material for containment and cleaning up				
Small spill	Stop leak if without risk. Absorb spilled product with suitable non-combustible materials.			
Large spill	Large spillages may be cautiously covered with foam, if available, to limit vapour cloud formation. Do not use water jet. When inside buildings or confined spaces, ensure adequate ventilation. Transfer collected product and other contaminated materials to suitable containers for recovery or safe disposal.			
6.4 Reference to other sections	See Section 1: For emergency contact information. See Section 8: For information on appropriate personal protective equipment. See Section 13: For additional waste treatment information.			
Section 7: Handling and Storage				
7.1 Advice on general information – hygiene, storage	Obtain special instructions before use. Keep away from heat / sparks / open flames/hot surfaces. No smoking. Use and store only outdoors or in a well-ventilated area. Hazard of slipping on spilt product. Avoid release to the environment.			
7.2 Conditions for safe storage including any incompatibilities	Storage area layout, tank design, equipment and operating procedures must comply with the relevant regional, national or local legislation. Storage installations should be designed with adequate bunds in case of leaks or spills. Cleaning, inspection and maintenance of internal structure of storage tanks must be done only by properly equipped and qualified personnel as defined by national, local or company regulations. Store separately from oxidising agents. Keep only in the original container or in a suitable container for this kind of product. Keep container tightly closed and sealed until ready for use. Do not store in unlabelled containers. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Empty containers may contain harmful, flammable / combustible or explosive residue or vapours. Do not cut, grind, drill, weld, reuse or dispose of containers unless adequate precautions are taken against these hazards. Protect from sunlight.			
7.3 Specific end use(s) – Recommendations	Not available			



Density Solubility (ies)



Section 8: Exposure Controls / Personal Protec	tion
The list of Identified Uses in Section 1 should be consu	Ited for any available use-specific information provided in the Exposure Scenario(s).
8.1 Control parameters	
Occupational exposure limits	
Product / Ingredient name	Distillates, mixture of hydrocarbons
Exposure limits values	<ul> <li>AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m<sup>3</sup> 8 hours. Form: mist and fume STEL: 3 mg/m<sup>3</sup> 15 minutes.</li> <li>Form: mist and fume [Air contaminant].</li> <li>AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m<sup>3</sup> 8 hours. Form: mist and fume STEL: 3 mg/m<sup>3</sup> 15 minutes.</li> <li>Form: mist and fume.</li> </ul>
Recommended monitoring procedures	If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres – Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres – Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres – General requirements for the performance of procedures for the measurement of chemical agents). Reference to national guidance documents for methods for the determination of hazardous substances will also be required.
8.2 Exposure control Appropriate engineering controls	Mechanical ventilation and local exhaust will reduce exposure via the air. Use oil resistant material in construction of handling equipment. Store under recommended conditions and if heated, temperature control equipment should be used to avoid overheating.
Individual protection measures	
Hygiene measures	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Ensure that eyewash stations and safety showers are close to the workstation location. Wash contaminated clothing before reuse.
Eye / face protection	Recommended: Safety glasses with side shields.
Skin protection	
Hand protection	4 – 8 hours (breakthrough time): nitrile rubber.
Body protection	Wear protective clothing if there is a risk of skin contact. Change contaminated clothes at the end of working shift.
Other skin protection	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary.
Environmental exposure control	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.
Section 9: Physical and Chemical Properties	
Appearance	Clear
Physical state	Smooth & Uniform
Colour	Light Yellow
Odor	Petroleum odor
Odour threshold	Not available
Dropping point	> 105 °C (ASTM D 2265)
Flash point	> 175 °C (Mineral Oil)
Evaporation rate	Not available
Flammability (solid, gas)	Not available
Flammability limits in air (lower), % by volume	Not available
Flammability limits in air (upper), % by volume	Not available
Vapour pressure	Not volatile



0.86 – 0.99 kg/L





Solubility (water)		Insoluble in wat	ter		
Partition coefficient (n-octanol/water)		Not available			
Decomposition temperature		No data			
Auto-ignition temperature		Not available			
Worked Penetration at 25°C		265 – 295 (ASTN	M D 217)		
Explosive properties		No data			
Oxidising properties		No data			
DMSO extractable compounds for	r base oil substance(s)	Not available			
according to IP346		<3%			
Section 10: Stability and Rea	ctivity				
10.1 Reactivity		No specific test	data related to reactivity avail	able for this product or its ingr	edients.
10.2 Chemical stability		Stable under normal conditions			
10.3 Possibility of hazardous rea	octions	Under normal c	conditions of storage and use, I	nazardous reactions will not o	ccur. Oxidising agent.
10.4 Conditions to avoid		Keep away from	n extreme heat and oxidising a	gents.	
10.5 Incompatible materials		Incomplete con	nbustion is likely to give rise to ses, including carbon monoxic	a complex mixture of airborn le H.S. SO. (sulphur oxides) or	e solid and liquid sulphuric acid and
10.6 Hazardous decomposition	products		ganic and inorganic compound		
SECTION 11: Toxicological In	formation				
11.1 Information on toxicologica	al effects				
Acute toxicity					
Product / ingredient name	Result		Species	Dose	Exposure
	LC 50 Inhalation due	sts and mists	Rat	>2.18mg/l	4 hours
Distillate (Petroleum), hydro treated heavy paraffinic	LD 50 Dermal		Rabbit	> 5000 mg/kg	_
treated heavy paraminic	LD 50 Oral		Rat	>15000 mg/kg	_
Irritation / corrosion					
Skin					
Eye		No known significant effects or critical hazards.			
Respiratory					
Sensation					
Skin					
Respiratory		No known significant effects or critical hazards.			
Mutagenicity		No data available to indicate product or any components present greater than 0.1 % are			
		multigene or genotoxic.			
Carcinogenicity		The base oil(s) in this product is based on an severely hydrotreated distillate.			
Reproductive toxicity		The product should not be regarded as a carcinogen. Contains no ingredient listed as toxic to reproduction.			
Specific target organ toxicity – single exposure		Not classified			
Specific target organ toxicity – repeated exposure		Not classified			
Aspiration hazard		Aspiration hazard – Category 1			
Information on likely routes of exposure		Not available			
Potential acute health effects					
Eye contact		Eye contact may cause redness and transient pain.			
Inhalation		Inhalation of oil mist or vapours at elevated temperatures may cause respiratory irritation.			
Skin contact		No known significant effects or critical hazards.			
Ingestion		May be fatal if swallowed and enters airways.			
Potential chronic health effects					
General		No known significant effects or critical hazards.			
Carcinogenicity		The base oil(s) in this product is based on an severely hydrotreated distillate. The product should not be regarded as a carcinogen.			







Tearing ending Product / ingredient name Fully effects or critical hazards.Product / ingredient name Fully effects or critical hazards.Other information Specific hazard Section 12: Ecological Information12.1 TotakityNot expected to be harmful to aquatic organism.12.2 Presistence and degradability Constrained production is unlikely to be significant because of the low water solubility of this product.12.3 Feasure of PTA Veb assessmentNot expected to be harmful to aquatic organism.12.6 Constra degradability in solNot expected to be significant because of the low water solubility of this product.12.6 Total of PTA Veb assessmentNot expected to be significant because of the low water solubility of this product.12.6 Total of PTA Veb assessmentNot expected to be significant because of the low water solubility of this product.12.6 Total of PTA Veb assessmentNot expected to be inpaired in or water solubility of using the consultation or expected to provide in the Expected Society and the because of elevant commination/, recycling of user solubility and the total solub impaired in this solver constrained or water solubility or indereset solubility of this substance is a be burned or incinered solubility. Constrained or water solubility or presche constrained in this solver constrained or water solubility or excellent or vater solubility or presche constrained or water solubility or indereset solubility of the excellent or incinered solubility. Non or excellent or vater solubility or solubility or presche constrained or water solubility or indereset solubility of the excellent or incinered solubility. Solubility of the excellent or incinered solubility or indereset solubility of the excellent or incinered solubility. Solubility of the excellent or incinered solubility. No	Mutagenicity					
<form>          Image: Product Program Provides Provides</form>			No known significant effects or critical hazards.			
intermation Specific hazard         Not available           Other information Specific hazard         Not available           12.1 Toticky         Not expected to be harmful to aquatic organicm.           12.2 Presistence and degradability in oli         Not inhiserently holiolity isol isolargamme.           12.3 Bioaccumulative potential         Not inhiserently holiolity isol isolargamme.           12.4 Mubility in oli         Not applicable           12.5 Beautics OPE a/VP3 assessement         Not applicable           12.5 Destits OPE a/VP3 assessement         Not applicable           12.6 Differed SP4 available sequencing         Work applicable           12.6 Differed SP4 available sequencing         Not applicable           12.6 Differed SP4 available         Not applicable           12.6 Differed SP4 available sequencing         Not applicable           12.6 Differed SP4 available         Not applicable						
Other Information Specific hazard         Not available           Section 12: Ecological Informative 21: Toxicity         Not expected to be harmful to aquatic organisms.           12: Presistence and degradability         Not considered mobile.           12: A Mobility in soil         Not considered mobile.           12: A Bioaccumulation is unikely to be significant because of the low water solubility of this product.           12: A Mobility in soil         Not considered mobile.           12: A Book in the section contain generic advices of the low water solubility of maging physical damage to organisms.           12: A formation in this section contain generic advices of the low moter suffaces causing physical damage to organisms.           Product Methods of disposal         Where possible (e.g. in the absence of relevant contamination), necycling of used substance i. fessible and economended. This substance can be humed or interinsets, subject to national/ocal moter or mode product bible (sognal to commended This substance in the function on trans water is and the shared or function (sognal substance in the substance in the function on transet substance in the substance of relevant contamination), necycling of used substance i feesible and economended. This substance can be humed or interinsets, subject to national/ocal moter or mode interinsets, subject to national/						
Section 12: Ecological Information         Not expected to be harmful to aquatic organisms.           12.1 Toxicity         Not expected to be harmful to aquatic organisms.           12.3 Broistnee and degradability         Not expected to be harmful to aquatic organisms.           12.4 Mobility is soll         Not expected mobile.           12.4 Mobility is soll         Not expected mobile.           12.5 Results of PET & vPVB assessment         Not expected mobile.           12.6 Other adverse effects         Oxygen transfer could also be impaired.           Section 13: Disposal Considerations         The information insigneenic advected and belies in Section 1 should be consulted for any available use specific information provided in the Exposure Scenario(s).           Product Methods of disposal         Where possible (eq. in the absence or relevant commanication), recycling of used substance is feesible and recommended. This substance can be burned or incinerated, subject to national/coal authorision insits, addre pruvations and and used is possal           Product Methods of disposal         Yos           Hazardous swate         Yos           European waste catalogue (EWC) Waste Code 13 03 07°         Waste expected incident invulsion and hear transmission oils.           Feesible expected incident invulsion of waste should be avoided or minimised wherever possible. Waste packaging should be invected in advected or minimised wherever possible. Waste packaging should be invected.           Feesible expected in Dave advected in the result of adve			Not availab	le		
1.2.1 relation     Not respected to be harmful to aquatic organisms.       12.2 Pesitance and degradability     Not relative to be dignificant to be significant to be assume of the low water solubility of this product.       12.3 Reaccumulative potential     Not considered mobile.       12.4 Other diverse effects     Not considered mobile.       2.5 Other diverse effects     Not application water. Spills may form a film on water surfaces assuing physical damage to organisms. Not application water surfaces assuing physical damage to organisms. Not applicati	•	1				
12.2 Persistence and degradability       Not therently biodegradable.         12.3 Bioacumulative potential       Bioaccumulation is unlikely to be significant because of the low water solubility of this product.         12.4 Mobility in sold       Not considered mobile.         12.5 Results of PBT & vPvB assessment       Insolubie in water. Spills may form a film on water surfaces causing physical danage to organisms. Oxygen transfer coald also be impaired.         Section 13: Disposal Considerations:       Insolubie in water. Spills may form a film on water surfaces causing physical danage to organisms. Oxygen transfer coald also be impaired.         Product Methods of disposal       Where possible (e.g. in the absence of relevant contamination) recycling or used substance in freewate contamination limits, stering contacting using legislation. may likely legislation. The product legislation may recycling or used substance in freewate contamination limits. stering contacting using legislation. may likely legislation.         Product Methods of disposal       Ves         European waste catalogue (EWC) Water Code 13 03 07*       Water designation.         Packaging       Merenzibased non-chioritated insulating and heat transmission lesis. The selection or transferidue de avoided or minimised wherever possible.         Section 14: Transport Information       DAPR/RID       MON (IMOC IMDS Cassification in the selection or limitication or limitication or limitication lesistification or limitication o			Not expect	ed to be harmful to aquatic org	anisms.	
12.3 Biocarmulative potential       Not considered mobile.         12.4 Mobility in soil of PTE 4-VPI assessmet       Not applicable         12.6 Other adverse effects       Not applicable         2.6 Other adverse effects       Not applicable         2.6 Motio of PTE 4-VPI assessmet       Not applicable         Section 2.5 Section contains genetic advice-to-to-to-to-to-to-to-to-to-to-to-to-to-	· · · · · · · · · · · · · · · · · · ·					
12.4 Mobility in soll       Not considered mobile.         12.5 Results of PGT & VPR assessment       Insolubile inwater. Spills may form a film on water surfaces causing physical damage to organisms. Consenting the water. Spills may form a film on water surfaces causing physical damage to organisms. Consenting the information in this section contains generic advice and used to e impaired.         Section 13: Disposal Consideration:       The information in this section contains generic advice and used to explice (e.g. in the absence of relevant contamination) invested in the Exposure Scenario(S).         Product Methods of disposal       Where possible (e.g. in the absence of relevant contamination) invested or galified values in Section 1 should be consulted for any available use-specific organisation, and/or prescribe composition linits and methods for recovery or disposal         Hazardous waste       Yes         European waste catalogue (EWC) Waste Code 13 03 07*       Waste designation.         Packaging       Yes         Kethods of disposal       The generation of vaste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not facesifies.         Packaging       ADR / R/D       ADN / MO/ IMDG Classification       CAO / IAA Classification         14.1 UN number       Not regulated       Not regulated       Not regulated         14.3 Parking group       -       -       -         14.3 Low proper shipping name       -       - <td></td> <td></td> <td colspan="4"></td>						
12.6 Other adverse effects     Soluble in water. Splis may form a fitm on water surfaces causing physical damage to organisms. Novigen transfer could also be impaired.       Section 13: Disposal Considerations:       Section 13: Disposal Considerations:       Section 13: Disposal Considerations:       Section 13: Disposal Considerations:       Section 20: Sec						
Autone during attransport       Oxygen transfer could also be impaired.         Section 13: Disposal Consideration       Oxygen transfer could also be impaired.         Section 13: Disposal Consideration       Oxygen transfer could also be impaired.         Product Methods of disposal       Where possible (e.g. in the absence of relevant contamination dimeted in increated, subject to national/local authorisation, relevant contamination dimits, safery regulations and an quality legislation. Contamination dimits, safery regulation and an quality legislation. Contamination dimits, safery regulations and an quality legislation. Contamination dimits, safery regulations and an quality legislation. Contamination dimits, safery regulation and and quality legislation. Contamination dimits, safery regulation and and quality legislation. Contamination dimits, safery regulation and and quality legislation. Contamination dimits and methods for recovery or disposal         Hazardous waste       Yes       Temperation of vaste estimation and in quality legislation. Contamination dimits and methods for recovery or disposal         Hazardous waste       ADB / IMD method or minimated metro provided in minimated there possible.       Not application on charital insulting and heat transport legislation. Contamination dimits and methods for recovery or disposal         Hazardous	12.5 Results of PBT & vPvB assessment	:	Not applica	ble		
The information in this section contains generic advice and guidance. The list of identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(S).         Product Methods of disposal       Where possible (e.g. in the absence of relevant contamination), recycling of used substance is a behavior on incinerated, subject to national/local autoinal/local autoinal/instance, requesting and incine safety regulations and air qualified uses thandlers. National legislation. Contaminated or wase substance (not directly recyclabic): Disposal can be carried out directly, or by delivery to composition limits and methods for recovery or disposal can be carried out directly, or by delivery to composition limits and methods for recovery or disposal can be carried out directly, or by delivery to composition limits and methods for recovery or disposal can be carried out directly, or by delivery to composition limits and methods for recovery or disposal can be carried out directly, or by delivery to composition limits and methods for recovery or disposal can be carried out directly, or by delivery to composition limits and methods for recovery or disposal.         Hazardous waste       Yes         European waste catalogue (EWC) Waste Code 13 03 07*       Waste designation.         Methods of disposal       Mineral-based non-chlorinated insulating and heat transmission oils.         Tansport Information       Deprevation of Yaste should be avoided or minimised where recycling is not feasible.         Section 15:       ADR / RID       ADN       IMO / IMDG Classification       ICAO / IATA Classification         14.1 UN number       ADR / RID       ADN       <	12.6 Other adverse effects		Insoluble in water. Spills may form a film on water surfaces causing physical damage to organisms.			
information provided in the Exposure Scenario(s).  Where possible (e.g. in the absence of relevant contamination), recycling of used substance (an be burned or inclinerated, subject to national/local authorisations, relevant contamination limits, safety regulations and air quality legislation. Contaminated or qualified waste handlers. National legislation may describe composition. Imits and the directly recycluble): Disposal can be carried out directly, recycling egulations and air quality legislation. Contaminated or qualified waste handlers. National legislation may describe composition. Imits and methods for recovery or disposal Hazardous waste  Ves European waste catalogue (EWC) Waste Code 13 03 07* Mineral-based non-chlorinated insulating and heat transmission oils. The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Inclineration of vaste should be avoided or minimised wherever possible. Waste packaging should be recycled. Inclineration of vaste should be avoided or minimised wherever possible. Waste packaging should be recycled. Inclineration or landfill should on ye considered when recycling. Vaste packaging should be recycled. Inclineration or landfill should on ye considered when recycling. Vaste packaging should be recycled. Inclinerated assesses in the should on tregulated Not regulated Not Point Point (ES) Po	Section 13: Disposal Consideration	าร				
Appendix Methods of disposal         Sesible and recommended. This subtance can be burned or incineated, subject on attional/local fuely subjects on a subject of a subj			d guidance. T	he list of Identified Uses in Secti	ion 1 should be consulted for ar	ny available use-specific
European waste catalogue (EWC) Waste Code 13 03 07*       Mieral-based non-chlorinated insulating and heat transmission oils.         Methods of disposal       The generation of waste should be avoideded or minimised wherever possible. Waste packaging should be crecicled are minimised wherever possible. Waste packaging should be avoidered when recycling is not feasible.         Section 14: Transport Information:         Termational transport regulation:         INMOV (MDG Classification (CAO / IATA Cl	Product Methods of disposal		feasible and recommended. This substance can be burned or incinerated, subject to national/local authorisations, relevant contamination limits, safety regulations and air quality legislation. Contaminated or waste substance (not directly recyclable): Disposal can be carried out directly, or by delivery to qualified waste handlers. National legislation may identify a specific organisation, and/or prescribe			
Packaging       Mineral-based non-chlorinated insulating and heat transmission oils.         Methods of disposal       The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.         Section 14: Transport Information       ADR / RID       ADN       IMO / IMDG Classification       ICAO / IATA Classification         14.1 UN number       Not regulated       Not regulated       Not regulated       Not regulated         14.2 UN proper shipping name       -       -       -       -         14.3 Transport hazard class(es)       -       -       -       -         14.4 Packing group       -	Hazardous waste		Yes			
Methods of disposal       The generation of waste should be avoided or minimised wherever possible.       Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.         Section 14: Transport Information         International transport regulations         International transport regulations       ADR / RID       ADN       IMO / IMDG Classification       ICAO / IATA Classification         14.1 UN number       Not regulated       Not regulated       Not regulated       Not regulated         14.2 UN proper shipping name       -       -       -       -         14.3 Transport hazard class(es)       - <t< td=""><td colspan="2">European waste catalogue (EWC) Waste Code 13 03 07*</td><td colspan="4">Waste designation.</td></t<>	European waste catalogue (EWC) Waste Code 13 03 07*		Waste designation.			
Methods of disposal       recycled. Incineration or landfill should only be considered when recycling is not feasible.         Section 14: Transport Information         International transport regulations         Methods of disposal       ICAO / IATA Classification         IADR / RID       ADD / RID       MOV (PAL) ADD / IATA Classification         IADR / RID       ADD / RID       MOV (PAL) ADD / IATA Classification         IADR / RID       ADD / RID       MOV (PAL) ADD / IATA Classification         IADR / RID       ADD / RID       MOV (PAL) ADD / IATA Classification         IADR / RID       MOV (PAL) ADD / IATA Classification         IADR / RID       MOV (PAL) ADD / IATA Classification         IADR / RID       MOV (PAL) ADD / IATA Classification         IADR / RID       MOV (PAL) Classification       IADA / IATA Classification         IADR / RID       MOV (PAL) Classification         IATA / Space /	Packaging		Mineral-based non-chlorinated insulating and heat transmission oils.			
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Annex XIV - List of substances subject to authorisation Annex XIV Substances of very high concernNone of the components are listedAnnex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles.Not applicableInternational Lists National InventoryInventory nameAustraliaAustralian Inventory of Chemical Substances (AICS) - YesCanadaDomestic Substances List (DSL) - Yes Non-Domestic Substances List (NDSL) - No	Section 15: Regulatory Informatio	n				
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	Canada					
	China		Inventory of Existing Chemical Substances in China (IECSC) – Yes			







_	European Inventory of Existing Commercial Chemical Substances (EINECS) – Yes		
Europe	European List of Notified Chemical Substances (ELINCS) – No		
Japan	Inventory of Existing and New Chemical Substances (ENCS) – Yes		
Korea	Existing Chemicals List (ECL) – Yes		
New Zealand	New Zealand Inventory – Yes		
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS) – Yes		
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory – Yes		
	oly with the inventory requirements administered by the governing country(s) uct are not listed or exempt from listing on the inventory administered by the governing country(s).		
Section 16: Other Information			
Revision comments			
Legend to abbreviations			
ADR	European agreement concerning the international carriage of dangerous good by road.		
RID	Regulations agreement concerning the international carriage of dangerous good by rail.		
IMDG Code	International Maritime Dangerous Goods Code.		
ICAO	International Civil Aviation Organization.		
IATA	International Air Transport Association.		
GHS	Globally Harmonized System of Classification and Labeling of Chemicals.		
CLP	Classification, Labelling and Packaging Regulation [Regulation (EC) No.1272/2008].		
SCBA	Self-Contained Breathing Apparatus.		
REACH	Registration, Evaluation, Authorization and Restriction of Chemicals Regulation [Regulation (EC) No. 1907/2006].		
LC 50	Median lethal concentration.		
LD 50	Median lethal dose.		
РВТ	Persistent, Bio accumulative and Toxic.		

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Emergency / Info Phone No.	Phone: +91-22-40635600 • Fax: +91-22-40635601	
Email	info@gandharoil.com	





# **DIVYOL SGX 3 GREASE**

Section 1: Identification of the Substance / Mixt	ture				
1.1 Product identifier					
Product name	Divyol SGX 2 Grease				
Product description	Multi Purpose Grease	· ·			
Product type	Grease	· · · · · · · · · · · · · · · · · · ·			
MARPOL Annex-1	****				
1.2 Identified uses					
Distribution of substance	Automotive & Industrial Grease				
Formulation & (re)packing of substance & mixtures	Automotive & Industrial Grease				
Manufacture of substance	Automotive & Industrial Grease				
Functional fluids	Automotive & Industrial Grease				
Section 2: Hazard Identification					
4-Extreme	Health	1			
3-High	Flammability	1			
2-Moderate	Reactivity	0			
1-Slight	Special	-			
Section 3: Compostion / Information on Ingred	·				
Chemical Name / Ingredients	% by wt.	Hazardous	CAS No.		
Mix Fatty Acid	10 - 20	No	Proprietary Mixture		
Calcium Hydroxide	1 - 3	Yes	1305-62-0		
Mineral Oil	70 - 85	Yes	68990-65-8, 64741-88-4		
		No	Proprietary Mixture		
Stearate	0-7	No	14807-96-6		
Additives	0-2	Yes	Proprietary Mixture		
Product / Ingredient name	Calcium soaps from natural fatty	substances			
Section 4: First Aid Measures					
Inhalation exposure		ygen, if breathing is difficult. Contac			
Skin contact		Remove contaminated clothing. Flush skin with water. Wash skin thoroughly with mild soap & water. If irritation occurs, call a physician.			
Swallowing or other	Do not induce vomiting. In gener Get medical advice.	Do not induce vomiting. In general no treatment is necessary unless large quantities are ingested. Get medical advice.			
Eye contact	Rinse continuously with water for	Rinse continuously with water for several minutes. Get medical attention, if irritation persists.			
Protection first-aiders		Disconnecting electrical supply. Ensure adequate ventilation and check that a safe and breathing area is available before entry into confined spaces.			
Section 5: Fire Fighting Measures					
5.1 Extinguishing media					
Use dry powder, foam, carbon dioxide. Do not use direct water and wet chemicals, or water on the burning product. They may spread the fire. Use foam simultaneously on the surface.					
5.2 Special hazards arising from the substance or mix	ture				
Hazards from the substance or mixture	Flammable liquids in pressurised containers may rupture and when exposed to heat, creating a highly flammable vapour cloud.				
Hazardous thermal decomposition products	Incomplete combustion is likely to give rise to a complex mixture of airborne solid and liquid particulates, gases, including carbon monoxide, H <sub>2</sub> S, SO <sub>x</sub> (sulphur oxides) or sulphuric acid and unidentified organic and inorganic compounds.				
5.3 Advice for firefighters					
Special precautions for firefighters	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.				
pecial protective equipment for firefighters helmets, protective boots and gloves) conforming to European standard EN 469 will provid of protection for chemical incidents.		othing for firefighters (including			





6.1 Personal precautions, protective equipment and emergency procedures				
Keep non-involved personnel away from the area of spillage.				
For non-emergency personnel	Alert emergency personnel. Except in case of small spillage. Alert emergency personnel. Except in case of small spillages, the feasibility of any actions should always be assessed and advised, if possible, by a trained, competent person in charge of managing the emergency. Stop leak if safe to do so. Avoid direct contact with the product. Stay upwind / keep distance from source. In case of large spillages, alert occupants in downwind areas. Eliminate all ignition sources if safe to do so. Spillages of limited amounts of product, especially in the open air when vapours will be usually quickly dispersed, are dynamic situations, which will presumably limit the exposure to dangerous concentrations. Note : Recommended measures are based on the most likely spillage scenarios for this material; however, local conditions (wind, air temperature, wave / current direction and speed) may significantly influence the choice of appropriate actions.			
For emergency responders	For this reason, local experts should be consulted when necessary. Local regulations may also prescribe or limit actions to be taken. Small spillages: Normal antistatic working clothes are usually adequate. Large spillages: Full body suit of chemically resistant and thermal resistant material should be used. Work gloves providing adequate chemical resistance, specifically to aromatic hydrocarbons. Note: Gloves made of PVA are not water-resistant, and are not suitable for emergency use. Safety helmet, antistatic non-skid safety shoes or boots. Goggles and / or face shield, if splashes or contact with eyes is possible or anticipated. Respiratory Protection : A half or full-face respirator with filter(s) for organic vapours (and when applicable for H <sub>2</sub> S) a Self Contained Breathing Apparatus (SCBA) can be used according to the extent of spill and predictable amount of exposure. If the situation cannot be completely assessed, or if an oxygen deficiency is possible, only SCBA's should be used.			
6.2 Environmental precautions	Prevent product from entering sewers, rivers or other bodies of water. If necessary dike the product with dry earth, sand or similar non-combustible materials. In case of soil contamination, remove contaminated soil and treat in accordance with local regulations. In case of small spillages in closed waters (i.e. ports), contain product with floating barriers or other equipment. Collect spilled product by absorbing with specific floating absorbents. If possible, large spillages in open waters should be contained with floating barriers or other mechanical means. If this is not possible, control the spreading of the spillage, and collect the product by skimming or other suitable mechanical means. The use of dispersants should be advised by an expert, and, if required, approved by local authorities.			
6.3 Methods and material for containment and cleaning	l up			
Small spill	Stop leak if without risk. Absorb spilled product with suitable non-combustible materials.			
Large spill	Large spillages may be cautiously covered with foam, if available, to limit vapour cloud formation. Do not use water jet. When inside buildings or confined spaces, ensure adequate ventilation. Transfer collected product and other contaminated materials to suitable containers for recovery or safe disposal.			
6.4 Reference to other sections	See Section 1: For emergency contact information. See Section 8: For information on appropriate personal protective equipment. See Section 13: For additional waste treatment information.			
Section 7: Handling and Storage				
7.1 Advice on general information – hygiene, storage	Obtain special instructions before use. Keep away from heat / sparks / open flames/hot surfaces. No smoking. Use and store only outdoors or in a well-ventilated area. Hazard of slipping on spilt product. Avoid release to the environment.			
7.2 Conditions for safe storage including any	Storage area layout, tank design, equipment and operating procedures must comply with the relevant regional, national or local legislation. Storage installations should be designed with adequate bunds in case of leaks or spills. Cleaning, inspection and maintenance of internal structure of storage tanks must be done only by properly equipped and qualified personnel as defined by national, local or company regulations. Store separately from oxidising agents. Keep only in the original container or in a suitable container for this kind of product. Keep container tightly closed and sealed until ready for use. Do not store in unlabelled containers. Containers that have			
incompatibilities	been opened must be carefully resealed and kept upright to prevent leakage. Empty containers may contain harmful, flammable / combustible or explosive residue or vapours. Do not cut, grind, drill, weld, reuse or dispose of containers unless adequate precautions are taken against these hazards. Protect from sunlight.			



Density Solubility (ies)



Section 8: Exposure Controls / Personal Protect	ction			
The list of Identified Uses in Section 1 should be consu	Ilted for any available use-specific information provided in the Exposure Scenario(s).			
8.1 Control parameters				
Occupational exposure limits				
Product / Ingredient name	Distillates, mixture of hydrocarbons			
Exposure limits values	AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m <sup>3</sup> 8 hours. Form: mist and fume STEL: 3 mg/m <sup>3</sup> 15 minutes. Form: mist and fume [Air contaminant]. AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m <sup>3</sup> 8 hours. Form: mist and fume STEL: 3 mg/m <sup>3</sup> 15 minutes. Form: mist and fume.			
Recommended monitoring procedures	If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres – Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres – Guide for the application and use of procedures for the assessment of exposure to chemical agents for the performance of procedures for the measurement of chemical agents). Reference to national guidance documents for methods for the determination of hazardous substances will also be required.			
8.2 Exposure control Appropriate engineering controls	Mechanical ventilation and local exhaust will reduce exposure via the air. Use oil resistant material in construction of handling equipment. Store under recommended conditions and if heated, temperature control equipment should be used to avoid overheating.			
Individual protection measures				
Hygiene measures	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Ensure that eyewash stations and safety showers are close to the workstation location. Wash contaminated clothing before reuse.			
Eye / face protection	Recommended: Safety glasses with side shields.			
Skin protection				
Hand protection	4 – 8 hours (breakthrough time): nitrile rubber.			
Body protection	Wear protective clothing if there is a risk of skin contact. Change contaminated clothes at the end of working shift.			
Other skin protection	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.			
Respiratory protection	Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary.			
Environmental exposure control	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.			
Section 9: Physical and Chemical Properties				
Appearance	Clear			
Physical state	Smooth & Uniform			
Colour	Light Yellow			
Odor	Petroleum odor			
Odour threshold	Not available			
Dropping point	> 106 °C (ASTM D 2265)			
Flash point	> 175 °C (Mineral Oil)			
Evaporation rate	Not available			
Flammability (solid, gas)	Not available			
Flammability limits in air (lower), % by volume	Not available			
Flammability limits in air (upper), % by volume	Not available			
Vapour pressure	Not volatile			



0.86 – 0.99 kg/L





Solubility (water)		Insoluble in wat	ter		
		Not available			
, , , , , , , , , , , , , , , , , , , ,		No data			
Auto-ignition temperature		Not available			
Worked Penetration at 25°C		220 – 250 (ASTN	A D 217)		
Explosive properties		No data			
Oxidising properties		No data			
DMSO extractable compounds for	r base oil substance(s)	Not available			
according to IP346		<3 %			
Section 10: Stability and Rea	ctivity	1			
10.1 Reactivity		No specific test	data related to reactivity avail	able for this product or its ingr	edients.
10.2 Chemical stability			ormal conditions		
10.3 Possibility of hazardous rea	octions	Under normal c	onditions of storage and use, I	hazardous reactions will not o	ccur. Oxidising agent.
10.4 Conditions to avoid		Keep away from	n extreme heat and oxidising a	igents.	
10.5 Incompatible materials		Incomplete con particulates, ga	nbustion is likely to give rise to ses, including carbon monoxic	a complex mixture of airborn de, H <sub>2</sub> S, SO. (sulphur oxides) or	e solid and liquid sulphuric acid and
10.6 Hazardous decomposition	products		ganic and inorganic compound		
SECTION 11: Toxicological In	formation				
11.1 Information on toxicologica	al effects				
Acute toxicity					
Product / ingredient name	Result		Species	Dose	Exposure
	LC 50 Inhalation due	sts and mists	Rat	>2.18mg/l	4 hours
Distillate (Petroleum), hydro treated heavy paraffinic	LD 50 Derr	nal	Rabbit	> 5000 mg/kg	-
treated neavy paraminic	LD 50 Ora	al	Rat	>15000 mg/kg	-
Irritation / corrosion					
Skin					
Eye		No known significant effects or critical hazards.			
Respiratory					
Sensation					
Skin					
Respiratory		No known significant effects or critical hazards.			
nespiratory		No data available to indicate product or any components present greater than 0.1.04 are			
Mutagenicity		No data available to indicate product or any components present greater than 0.1 % are multigene or genotoxic.			
Carcinogenicity			n this product is based on an s		•
Reproductive toxicity		The product should not be regarded as a carcinogen. Contains no ingredient listed as toxic to reproduction.			
Specific target organ toxicity – sin	gle exposure				
Specific target organ toxicity – rep		Not classified			
Aspiration hazard		Aspiration hazard – Category 1			
Information on likely routes of exposure		Not available			
Potential acute health effects					
Eye contact		Eye contact may cause redness and transient pain.			
Inhalation		Inhalation of oil mist or vapours at elevated temperatures may cause respiratory irritation.			
Skin contact		No known significant effects or critical hazards.			
Ingestion			wallowed and enters airways.		
Potential chronic health effects			transwed and enters an ways.		
General		No known signi	ficant effects or critical bazard	c	
General		No known significant effects or critical hazards. The base oil(s) in this product is based on an severely hydrotreated distillate. The product should not be			
Carcinogenicity		regarded as a carcinogen.			







Autagenicity		No known significant effects or critical hazards.					
Teratogenicity							
Product / ingredient name	·						
Fertility effects							
Other information Specific hazard		Not availab	le				
Section 12: Ecological Information	1						
12.1 Toxicity			ed to be harmful to aquatic org	anisms.			
12.2 Persistence and degradability		Not inherently biodegradable.					
12.3 Bioaccumulative potential		Bioaccumulation is unlikely to be significant because of the low water solubility of this product.					
12.4 Mobility in soil			ered mobile.				
12.5 Results of PBT & vPvB assessment	1	Not applica		<i>.</i>			
12.6 Other adverse effects			n water. Spills may form a film of nsfer could also be impaired.	n water surfaces causing physic	al damage to organisms.		
Section 13: Disposal Consideration	ns						
The information in this section contains information provided in the Exposure Sc		d guidance. T	he list of Identified Uses in Sect	ion 1 should be consulted for ar	ny available use-specific		
Product Methods of disposal Where possible (e.g. in the absence of relevant contamination), recycling of used substance is feasible and recommended. This substance can be burned or incinerated, subject to national/local authorisations, relevant contamination limits, safety regulations and air quality legislation. Contaminate or waste substance (not directly recyclable): Disposal can be carried out directly, or by delivery to qualified waste handlers. National legislation may identify a specific organisation, and/or prescribe composition limits and methods for recovery or disposal				subject to national/local uality legislation. Contaminated irectly, or by delivery to			
Hazardous waste Yes							
European waste catalogue (EWC) Waste Code 13 03 07*		Waste designation.					
Packaging		Mineral-based non-chlorinated insulating and heat transmission oils.					
Methods of disposal	The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.						
Section 14: Transport Information							
International transport regulations							
	ADR / RID ADN IMO / IMDG Classification ICAO / IATA Classification				ICAO / IATA Classification		
14.1 UN number	Not regulated		Not regulated	Not regulated	Not regulated		
14.2 UN proper shipping name	-		-	_	-		
14.3 Transport hazard class(es)	-		-	-	-		
14.4 Packing group	-		-	-	-		
14.5 Environmental hazards	No		No	No	No		
Additional Information	_		-	-	-		
14.6 Special precautions for user oils							
14.7 Transport in bulk according to An	nex   of MARPOL	73/78 and th	e IBC Code				
Section 15: Regulatory Informatio							
15.1 Safety, health and environmental		slation speci	fic for the substance or mixtur	e EU Regulation (EC) No. 1907/	(2006 (REACH)		
Annex XIV – List of substances subject to Annex XIV Substances of very high concern	None of the components are listed						
Annex XVII – Restrictions on the manufa on the market and use of certain danger mixtures and articles.	Not applicable						
International Lists National Inventory Inv			Inventory name				
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Canada		Domestic Substances List (DSL) – Yes Non-Domestic Substances List (NDSL) – No					
China		Inventory of Existing Chemical Substances in China (IECSC) – Yes					
Crima		inventory o	a chisting chemical substances	(IECSC) = TeS			







	European Inventory of Existing Commercial Chemical Substances (EINECS) – Yes				
Europe	European List of Notified Chemical Substances (ELINCS) – No				
Japan	Inventory of Existing and New Chemical Substances (ENCS) – Yes				
Korea	Existing Chemicals List (ECL) – Yes				
New Zealand	New Zealand Inventory – Yes				
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS) – Yes				
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory – Yes				
	oly with the inventory requirements administered by the governing country(s) uct are not listed or exempt from listing on the inventory administered by the governing country(s).				
Section 16: Other Information					
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SCBA	Self-Contained Breathing Apparatus.				
REACH	Registration, Evaluation, Authorization and Restriction of Chemicals Regulation [Regulation (EC) No. 1907/2006].				
LC 50	Median lethal concentration.				
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РВТ	Persistent, Bio accumulative and Toxic.				

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Emergency / Info Phone No.	Phone: +91-22-40635600 • Fax: +91-22-40635601			
Email	info@gandharoil.com			





# **DIVYOL TRAILER AXLE GREASE**

Section 1: Identification of the Substance / Mix	ture				
1.1 Product identifier					
Product name	Divyol Trailer Axl	e Grease			
Product description	Trailer Axle Grea	·			
Product type	Grease				
MARPOL Annex-1	****				
1.2 Identified uses					
Distribution of substance	Croace				
	Grease				
Formulation & (re)packing of substance & mixtures	Grease				
Manufacture of substance	Grease				
Functional fluids	Grease				
Section 2: Hazard Identification					
4-Extreme	Health		1		
3-High	Flammability		1		
2-Moderate	Reactivity		0		
1-Slight	Special		-		
Section 3: Compostion / Information on Ingred	· ·				
Chemical Name / Ingredients	% by wt.	Hazardous	CAS No.		
Lithium Hydroxide	0.5 - 3	Yes	1310-66-3		
Mineral Oil	80 - 90	Yes	64742-52-5, 64741-88-4, 64742-54-7, 64742-01-4		
12 HSA	5 - 10	No	106-14-9		
НСО	2 - 5	No	8001-78-3		
Complexing Acid	1 - 3	No	Proprietary Mixture		
Additive Package	0 - 4	Yes	Proprietary Mixture		
Zincdialkyl dithiophosphate	0 - 4	Yes	68457-79-4		
Butene, Homopolymer	0-4	No	9003-27-4		
Product / Ingredient name	Lithium soaps fro	om natural fatty su	ubstances		
Section 4: First Aid Measures					
Inhalation exposure	Remove to fresh air & provide oxygen, if breathing is difficult. Contact physician				
Skin contact		Remove contaminated clothing. Flush skin with water. Wash skin thoroughly with mild soap & water. If irritation occurs, call a physician.			
Swallowing or other		Do not induce vomiting. In general no treatment is necessary unless large quantities are ingested. Get medical advice.			
Eye contact	Rinse continuou	Rinse continuously with water for several minutes. Get medical attention, if irritation persists.			
Protection first-aiders	Disconnecting e	Disconnecting electrical supply. Ensure adequate ventilation and check that a safe and breathing area is available before entry into confined spaces.			
Section 5: Fire Fighting Measures					
5.1 Extinguishing media					
Unsuitable extinguishing media		Use dry powder, foam, carbon dioxide. Do not use direct water and wet chemicals, or water on the burning product. They may spread the fire. Use foam simultaneously on the surface.			
5.2 Special hazards arising from the substance or mix	ture				
Hazards from the substance or mixture		Flammable liquids in pressurised containers may rupture and when exposed to heat, creating a highly flammable vapour cloud.			
Hazardous thermal decomposition products	particulates, gas	Incomplete combustion is likely to give rise to a complex mixture of airborne solid and liquid particulates, gases, including carbon monoxide, H <sub>2</sub> S, SO <sub>x</sub> (sulphur oxides) or sulphuric acid and unidentified organic and inorganic compounds.			
5.3 Advice for firefighters					
Special precautions for firefighters			noving all persons from the vicinity of the incident if there is a fire. No y personal risk or without suitable training.		
Special protective equipment for firefighters	(SCBA) with a ful helmets, protect	Firefighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face- piece operated in positive pressure mode. Clothing for firefighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.			





6.1 Personal precautions, protective equipment and emergency procedures				
Keep non-involved personnel away from the area of spillage.				
For non-emergency personnel	Alert emergency personnel. Except in case of small spillages, the feasibility of any actions should always be assessed and advised, if possible, by a trained, competent person in charge of managing the emergency. Stop leak if safe to do so. Avoid direct contact with the product. Stay upwind / keep distance from source. In case of large spillages, alert occupants in downwind areas. Eliminate all ignition sources if safe to do so. Spillages of limited amounts of product, especially in the open air when vapours will be usually quickly dispersed, are dynamic situations, which will presumably limit the exposure to dangerous concentrations. Note : Recommended measures are based on the most likely spillage scenarios for this material; however, local conditions (wind, air temperature, wave / current direction and speed) may significantly influence the choice of appropriate actions.			
For emergency responders	For this reason, local experts should be consulted when necessary. Local regulations may also prescribe or limit actions to be taken. Small spillages: Normal antistatic working clothes are usually adequate. Large spillages: Full body suit of chemically resistant and thermal resistant material should be used. Work gloves providing adequate chemical resistance, specifically to aromatic hydrocarbons. Note: Gloves made of PVA are not water-resistant, and are not suitable for emergency use. Safety helmet, antistatic non-skid safety shoes or boots. Goggles and / or face shield, if splashes or contact with eyes is possible or anticipated. Respiratory Protection : A half or full-face respirator with filter(s) for organic vapours (and when applicable for H <sub>2</sub> S) a Self Contained Breathing Apparatus (SCBA) can be used according to the extent of spill and predictable amount of exposure. If the situation cannot be completely assessed, or if an oxygen deficiency is possible, only SCBA's should be used.			
6.2 Environmental precautions	Prevent product from entering sewers, rivers or other bodies of water. If necessary dike the product with dry earth, sand or similar non-combustible materials. In case of soil contamination, remove contaminated soil and treat in accordance with local regulations. In case of small spillages in closed waters (i.e. ports), contain product with floating barriers or other equipment. Collect spilled product by absorbing with specific floating absorbents. If possible, large spillages in open waters should be contained with floating barriers or other mechanical means. If this is not possible, control the spreading of the spillage, and collect the product by skimming or other suitable mechanical means. The use of dispersants should be advised by an expert, and, if required, approved by local authorities.			
6.3 Methods and material for containment and cleaning	l up			
Small spill	Stop leak if without risk. Absorb spilled product with suitable non-combustible materials.			
Large spill	Large spillages may be cautiously covered with foam, if available, to limit vapour cloud formation. Do not use water jet. When inside buildings or confined spaces, ensure adequate ventilation. Transfer collected product and other contaminated materials to suitable containers for recovery or safe disposal.			
6.4 Reference to other sections	See Section 1: For emergency contact information. See Section 8: For information on appropriate personal protective equipment. See Section 13: For additional waste treatment information.			
Section 7: Handling and Storage				
7.1 Advice on general information – hygiene, storage	Obtain special instructions before use. Keep away from heat / sparks / open flames/hot surfaces. No smoking. Use and store only outdoors or in a well-ventilated area. Hazard of slipping on spilt product. Avoid release to the environment.			
7.2 Conditions for safe storage including any incompatibilities	Storage area layout, tank design, equipment and operating procedures must comply with the relevant regional, national or local legislation. Storage installations should be designed with adequate bunds in case of leaks or spills. Cleaning, inspection and maintenance of internal structure of storage tanks must be done only by properly equipped and qualified personnel as defined by national, local or company regulations. Store separately from oxidising agents. Keep only in the original container or in a suitable container for this kind of product. Keep container tightly closed and sealed until ready for use. Do not store in unlabelled containers. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Empty containers may contain harmful, flammable / combustible or explosive residue or vapours. Do not cut, grind, drill, weld, reuse or dispose of containers unless adequate precautions are taken against these hazards.			
	Protect from sunlight.			



Vapour pressure Density Solubility (ies)



Section 8: Exposure Controls / Personal Protect				
The list of Identified Uses in Section 1 should be consul	ted for any available use-specific information provided in the Exposure Scenario(s).			
8.1 Control parameters				
Occupational exposure limits				
Product / Ingredient name	Distillates, mixture of hydrocarbons			
Exposure limits values	AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m <sup>3</sup> 8 hours. Form: mist and fume STEL: 3 mg/m <sup>3</sup> 15 minutes Form: mist and fume [Air contaminant]. AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m <sup>3</sup> 8 hours. Form: mist and fume STEL: 3 mg/m <sup>3</sup> 15 minutes Form: mist and fume.			
Recommended monitoring procedures	If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres – Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres – Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres – General requirements for the performance of procedures for the measurement of chemical agents). Reference to national guidance documents for methods for the determination of hazardous substances will also be required.			
8.2 Exposure control Appropriate engineering controls	Mechanical ventilation and local exhaust will reduce exposure via the air. Use oil resistant material in construction of handling equipment. Store under recommended conditions and if heated, temperature control equipment should be used to avoid overheating.			
Individual protection measures				
Hygiene measures	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Ensure that eyewash stations and safety showers are close to the workstation location. Wash contaminated clothing before reuse.			
Eye / face protection	Recommended: Safety glasses with side shields.			
Skin protection				
Hand protection	4 – 8 hours (breakthrough time): nitrile rubber.			
Body protection	Wear protective clothing if there is a risk of skin contact. Change contaminated clothes at the end of working shift.			
Other skin protection	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.			
Respiratory protection	Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary.			
Environmental exposure control	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.			
Section 9: Physical and Chemical Properties				
Appearance	Clear			
Physical state	Smooth & Tacky			
Colour	Yellow			
Odor	Petroleum odor			
Odour threshold	Not available			
Dropping point	> 270 °C (ASTM D 2265)			
Flash point	> 230 °C (Mineral Oil)			
Evaporation rate	Not available			
Flammability (solid, gas)	Not available			
Flammability limits in air (lower), % by volume	Not available			
Flammability limits in air (upper), % by volume	Not available			
Vapour pressure	Not volatile			



0.88 – 0.95 kg/L





Not available No data			
roduct or its ing	redients		
Toddet of its ing	cultures.		
actions will not o	ccur Oxidising agent		
ictions will not of	ccul. Oxidising agent.		
	e solid and liquid		
ulphur oxides) or	sulphuric acid and		
Dose	Exposure		
18mg/l	4 hours		
)0 mg/kg	_		
00 mg/kg	_		
No known significant effects or critical hazards.			
No known significant effects or critical hazards.			
No data available to indicate product or any components present greater than 0.1 % are multigene or genotoxic.			
معتمل مانمدنال م			
meated distillate			
The product should not be regarded as a carcinogen. Contains no ingredient listed as toxic to reproduction.			
Not classified			
Aspiration hazard – Category 1			
Not available			
Eye contact may cause redness and transient pain.			
Inhalation of oil mist or vapours at elevated temperatures may cause respiratory irritation.			
May be fatal if swallowed and enters airways.			
No known significant effects or critical hazards. The base oil(s) in this product is based on an severely hydrotreated distillate. The product should not be regarded as a carcinogen.			
	Iphur oxides) or lose l8mg/l 0 mg/kg 0 mg/kg resent greater th treated distillate		







<form>          Tendsgenighing         Network significant effects or critical hazards.           Product / ingredient name         Network significant effects or critical hazards.           Tenting effects         Network significant effects or critical hazards.           Other information Specific hazard         Net valuale           Table information Specific hazard         Net valuale           12.1 Prosider of Specific hazard         Net valuale           12.3 Bioaccumulation is unlikely to be significant because of the low water solubility of this product.         Net considered mobile.           12.3 Bioaccumulation is unlikely to be significant decause of the low water solubility of this product.         Net considered mobile.           12.4 Bottion GPT &amp; VeP assess         Net considered mobile.         Net considered mobile.           12.5 Bottion GPT &amp; VeP assess         Net considered mobile.         Net applicable.           12.6 Control GPT &amp; VeP asses         Vent applicable in value. Specific hazards.         Net applicable.           Section 13: Disposal Considerations:         Vent applicable in value. Specific hazards.         Net applicable.           Section 13: Disposal Considerations:         Went applicable in value. Specific hazards.         Net applicable.           Section 13: Disposal Considerations:         Went applicable in the formation inverside specific hazards.         Net applicable.           Section 14: Disposal Considerations:<th>Mutagenicity</th><th></th><th></th><th></th><th></th><th></th></form>	Mutagenicity						
<form>          Product, rignedient name         Not available           fertility effects         Not available           Other information Specific hazards         Not available           Section 12: Ecological Information         Not available           12.1 Toxicity         Not expected to be harmful to aquatic organisms.           12.2 Fersitence and degradability         Not inherently biodegradable.           12.3 Bioaccumulative potential         Not aplicable           12.4 Mobility in soil         Not considered mobile.           12.5 Eaclust of PBT &amp; VP&amp; assessmet         Not aplicable           12.6 Other adverse effects         Not aplicable           Theodoffer number on this section contains generic achieve and opticable in the section and adverse and degradability.         Not applicable           Information in this section contains generic adverse and (Equi in the absence of relevant contamination, recycling of used subtance is informations, recycling of used subtance is information and record availy below to use and adverse and used subtance is information and record availy below to use and adverse of relevant contamination.           Product Methods of disposal         Ves         Section 3: social adverse errife our direct(s) recycling adverse or adverse of the section and adverse and adverse and adverse adverse or adverse</form>	,						
<form>          Internation Specific hazard         Net available           Other information Specific hazard         Not available           12.1 Toxicity         Not expected to be harmful to aquatic organisms.           12.2 Presistence and degradability in all         Not inherently biologengradability.           12.3 Bioaccumulative potential         Bioaccumulation is unikely to be significant because of the low water solubility of this product.           12.5 Reutis OFPE a/Vba assessment         Not applicable           12.6 Toxicity OFPE a/Vba assessment         Wore possible (on in the abnerso of relevant containition), expecting or evaluable use specific torganisms.           Product Methods of disposal         Wore possible (on in the abnerso of relevant containition), expecting or evaluable use specific organisms.           Product Methods of disposal         Were possible (on in the abnerso of relevant containition), expecting or evaluable use specific organisms.           Notardiplicable         Notar evaluable         Notar evaluable or evaluable.           Reading Methods of disposal         Were possible (on in the abnerso of relevant containition), expecting assessment or unatificable and recommended. This substance on the unrend or information organities and recomaninated particity aspectific organisation organid eva</form>	<u> </u>		No known s	significant effects or critical haza	ards.		
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12.1 privation     Not expected to be harmful to aquatic organisms.       12.2 Prestance and legand bill.     Not anotal-construction is unlikely to be significant to be assue of the low water sub-likely of this product.       12.4 Obtaining the point of the sub-sub-sub-sub-sub-sub-sub-sub-sub-sub-	•	1					
12.2 Persistence and degradability       Not inherently biodegradable.         12.3 Bioaccumulative potential       Bioaccumulation is unlikely to be significant because of the low water solubility of this product.         12.4 Mobility is and       Not considered mobile.         12.5 Results of PBT & vPvB assessment       Not applicable         Insoluble in water. Spills may form a film on water surfaces causing physical damage to organisms. Oxygen transfer could also be impaired.         Section 13: Disposal Considerations       Where possible (eg. in the absence of relevant contamination) recycling of used substance is feasible and recommended. This substance can be burned or indirected, subject to national/local authorisation, relevant contamination limits, stering contamination, and/or prescribe composition limits and methods for recovery or disposal         Product Methods of disposal       Where possible (eg. in the absence of relevant contamination) intrescriber qualified vases burned or indirectly cryptelible (biposal can be carried out directly, or ty delivery to requalified vases bandles n. National legislation may lightly legislation. Contaminated or waste substance incort directly ercyclable in basice or indirectly applicable.         Hazardous waste       Yes         European waste catalogue (EWC) Waste Code 13 03 07*       Waste designation.         Rethods of disposal       De MO / IMDC Classification       ICAO / IATA Classification         Not regulated       Not regulated       Not regulated       Not regulated         Section 14: Transport Informatio <td< td=""><td></td><td></td><td>Not expect</td><td>ed to be harmful to aquatic org</td><td>anisms.</td><td></td></td<>			Not expect	ed to be harmful to aquatic org	anisms.		
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12.4 Mobility in soil       Not considered mobile.         12.5 Results of PRT & VPR assessment       Not applicable         12.6 Other adverse effects       Unsoluble in water. Spills may form a film on water surfaces causing physical damage to organisms. Oxygen transfer could also be impaired.         Section 13: Disposal Considerations       The information in this section contains generic advice and guidance. The list of identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).         Product Methods of disposal       Where possible (e.g. in the absence of relevant contamination limits, adjett regulations, and ang inquality (edjaticn, contamination), recycling of used substance is trassible and recommended. This substance can be bured on indinerated. Subject to national/local authorisation, relevant contamination limits, adjett regulations and ang inquality (edjaticn, contamination)         Hazardous waste       Yes         European waste catalogue (EWC) Waste Code 13 03 07*       Waste disgination.         Packaging       Mineral-based non -chlorinated insulting and heat transmission ells.         The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or indinities during a specific organisation, and/or prescribe composition in recycled. Incineration or indinities during a specific advecting is not faesible.         Section 13: Transport Information       The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineratin subult on yo faesification in CAO / IATA Classificatio			, ,				
12.6 Other adverse effects     Nonludie in water. Splits may form a fitm on water surfaces causing physical damage to organisms. Nongen transfer could also be impaired.       Section 13: Disposal Considerations:       Section 13: Disposal Considerations:       Section 13: Disposal Considerations:       The information in this section contains generic advices undividual and be impaired.       Section 13: Disposal Considerations:       The information in this section contains generic advices on tabulation of relevant contamination intervices. Job et or tabulations and arguality legislation.       Note the providual disposal on the commendo of this substance contations and arguality legislation.       Product Methods of disposal       Yes       European waste catalogue (KPC) Waste Code 13 03 07*       Waste designation.       Recidention of waste should be avoided or minimised wherever possible. Waste packaging should be recided when recycling in feasible.       Recidention tabuscent colspan="4">Colspan="4"       Colspan= 4				· · ·			
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14.7 Transport in bulk according to Annex I of MARPOL 778 and the IBC Code         Section 15: Regulatory Information         15.1 Safety, health and environmental regulations / legitron specific for the substance or mixture EU Regulation (EC) No. 1907/2006 (REACH)         Annex XIV - List of substances subject to authorisation Annex XIV - Sestrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles.       None of the components are listed         International Lists National Inventory       Inventory name         Australia       Australian Inventory of Chemical Substances (AICS) – Yes         Canada       Domestic Substances List (NDSL) – No	Additional Information	_		-	-	-	
Section 15: Regulatory Information         15.1 Safety, health and environmental regulations / legistion specific for the substance or mixture EU Regulation (EC) No. 1907/2006 (REACH)         Annex XIV – List of substances subject to authorisation Annex XIV       None of the components are listed         Substances of very high concern       None of the components are listed         Annex XVII – Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles.       Not applicable         International Lists National Inventory       Inventory name         Australia       Australian Inventory of Chemical Substances (AICS) – Yes         Canada       Domestic Substances List (DSL) – Yes         Non-Domestic Substances List (NDSL) – No	14.6 Special precautions for user oils						
15.1 Safety, health and environmental regulations / legistion specific for the substance or mixture EU Regulation (EC) No. 1907/2006 (REACH)         Annex XIV - List of substances subject to authorisation Annex XIV Substances of very high concern       None of the components are listed         Annex XVI - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles.       Not applicable         International Lists National Inventory       Inventory name         Australia       Australian Inventory of Chemical Substances (AICS) – Yes         Canada       Domestic Substances List (DSL) – Yes         Non-Domestic Substances List (NDSL) – No	14.7 Transport in bulk according to An	nex I of MARPOL	73/78 and th	e IBC Code			
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Australia     Australian Inventory of Chemical Substances (AICS) – Yes       Canada     Domestic Substances List (DSL) – Yes       Non-Domestic Substances List (NDSL) – No	on the market and use of certain dangerous substances,		Not applicable				
Canada Domestic Substances List (DSL) – Yes Non-Domestic Substances List (NDSL) – No	International Lists National Inventory	Inventory name					
Canada Non-Domestic Substances List (NDSL) – No	Australia		Australian I	ian Inventory of Chemical Substances (AICS) – Yes			
	Canada	Canada					
	China		Inventory of Existing Chemical Substances in China (IECSC) – Yes				







	European Inventory of Existing Commercial Chemical Substances (EINECS) – Yes				
Europe	European List of Notified Chemical Substances (ELINCS) – No				
Japan	Inventory of Existing and New Chemical Substances (ENCS) – Yes				
Korea	Existing Chemicals List (ECL) – Yes				
New Zealand	New Zealand Inventory – Yes				
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS) – Yes				
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory – Yes				
	oly with the inventory requirements administered by the governing country(s) uct are not listed or exempt from listing on the inventory administered by the governing country(s).				
Section 16: Other Information					
Revision comments					
Legend to abbreviations					
ADR	European agreement concerning the international carriage of dangerous good by road.				
RID	Regulations agreement concerning the international carriage of dangerous good by rail.				
IMDG Code	International Maritime Dangerous Goods Code.				
ICAO	International Civil Aviation Organization.				
IATA	International Air Transport Association.				
GHS	Globally Harmonized System of Classification and Labeling of Chemicals.				
CLP	Classification, Labelling and Packaging Regulation [Regulation (EC) No.1272/2008].				
SCBA	Self-Contained Breathing Apparatus.				
REACH	Registration, Evaluation, Authorization and Restriction of Chemicals Regulation [Regulation (EC) No. 1907/2006].				
LC 50	Median lethal concentration.				
LD 50	Median lethal dose.				
РВТ	Persistent, Bio accumulative and Toxic.				

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Silvassa Plant	lot No. 2, Survey No. 678/1/3, Village Naroli, Near Naroli Check Post, Silvassa, Dadra & Nagar Haveli, Union Territory 396230, India.			
Emergency / Info Phone No.	Phone: +91-22-40635600 • Fax: +91-22-40635601			
Email	info@gandharoil.com			





## **DIVYOL TRIBOROL BX 222 GREASE**

Section 1: Identification of the Substance / Mixt	ure				
1.1 Product identifier					
Product name	Divyol Triborol B	X 222 Grease			
Product description	Extreme Pressure				
Product type	Grease	Clease			
	****				
MARPOL Annex-1					
1.2 Identified uses					
Distribution of substance	Automotive & Inc				
Formulation & (re)packing of substance & mixtures	Automotive & Inc				
Manufacture of substance	Automotive & Inc	dustrial Grease			
Functional fluids	Automotive & Inc	dustrial Grease			
Section 2: Hazard Identification					
4-Extreme	Health		1		
3-High	Flammability		1		
2-Moderate	Reactivity		0		
1-Slight	Special		-		
Section 3: Compostion / Information on Ingredi	ents		1		
Chemical Name / Ingredients	% by wt.	Hazardous	CAS No.		
Lithium Hydroxide	1 - 3	Yes	1310-66-3		
Mineral Oil	80 - 88	Yes	64742-52-5,64741-88-4, 64742-54-7, 64742-01-4		
12 HSA	4 - 10	No	106-14-9		
НСО	2 - 6	No	8001-78-3		
Zincdialkyl dithiophosphate	1 - 4	Yes	68457-79-4		
Complexing Acid	0 - 3.5	Yes	Proprietary Mixture		
Butene, Homopolymer	1 - 3	No	9003-27-4		
Additives	0.5 - 2	Yes	Proprietary Mixture		
Product / Ingredient name	Lithium soaps fro	om natural fatty su	ubstances		
Section 4: First Aid Measures					
Inhalation exposure	Remove to fresh	air & provide oxy	gen, if breathing is difficult. Contact physician		
Skin contact		Remove contaminated clothing. Flush skin with water. Wash skin thoroughly with mild soap & water. If irritation occurs, call a physician.			
Swallowing or other		Do not induce vomiting. In general no treatment is necessary unless large quantities are ingested. Get medical advice.			
Eye contact	Rinse continuous	Rinse continuously with water for several minutes. Get medical attention, if irritation persists.			
Protection first-aiders		Disconnecting electrical supply. Ensure adequate ventilation and check that a safe and breathing area is available before entry into confined spaces.			
Section 5: Fire Fighting Measures					
5.1 Extinguishing media					
Unsuitable extinguishing media			xide. Do not use direct water and wet chemicals, or water on the d the fire. Use foam simultaneously on the surface.		
5.2 Special hazards arising from the substance or mix	ture				
Hazards from the substance or mixture		Flammable liquids in pressurised containers may rupture and when exposed to heat, creating a highly flammable vapour cloud.			
Hazardous thermal decomposition products	particulates, gase	Incomplete combustion is likely to give rise to a complex mixture of airborne solid and liquid particulates, gases, including carbon monoxide, $H_2S$ , $SO_x$ (sulphur oxides) or sulphuric acid and unidentified organic and inorganic compounds.			
5.3 Advice for firefighters					
Special precautions for firefighters		Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.			
Special protective equipment for firefighters	(SCBA) with a ful helmets, protect	Firefighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face- piece operated in positive pressure mode. Clothing for firefighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.			





6.1 Personal precautions, protective equipment and emergency procedures						
Keep non-involved personnel away from the area of spillage.						
For non-emergency personnel	Alert emergency personnel. Except in case of small spillages, the feasibility of any actions should always be assessed and advised, if possible, by a trained, competent person in charge of managing the emergency. Stop leak if safe to do so. Avoid direct contact with the product. Stay upwind / keep distance from source. In case of large spillages, alert occupants in downwind areas. Eliminate all ignition sources if safe to do so. Spillages of limited amounts of product, especially in the open air when vapours will be usually quickly dispersed, are dynamic situations, which will presumably limit the exposure to dangerous concentrations. Note : Recommended measures are based on the most likely spillage scenarios for this material; however, local conditions (wind, air temperature, wave / current direction and speed) may significantly influence the choice of appropriate actions.					
For emergency responders	For this reason, local experts should be consulted when necessary. Local regulations may also prescribe or limit actions to be taken. Small spillages: Normal antistatic working clothes are usually adequate. Large spillages: Full body suit of chemically resistant and thermal resistant material should be used. Work gloves providing adequate chemical resistance, specifically to aromatic hydrocarbons. Note: Gloves made of PVA are not water-resistant, and are not suitable for emergency use. Safety helmet, antistatic non-skid safety shoes or boots. Goggles and / or face shield, if splashes or contact with eyes is possible or anticipated. Respiratory Protection : A half or full-face respirator with filter(s) for organic vapours (and when applicable for H <sub>2</sub> S) a Self Contained Breathing Apparatus (SCBA) can be used according to the extent of spill and predictable amount of exposure. If the situation cannot be completely assessed, or if an oxygen deficiency is possible, only SCBA's should be used.					
6.2 Environmental precautions	Prevent product from entering sewers, rivers or other bodies of water. If necessary dike the product with dry earth, sand or similar non-combustible materials. In case of soil contamination, remove contaminated soil and treat in accordance with local regulations. In case of small spillages in closed waters (i.e. ports), contain product with floating barriers or other equipment. Collect spilled product by absorbing with specific floating absorbents. If possible, large spillages in open waters should be contained with floating barriers or other mechanical means. If this is not possible, control the spreading of the spillage, and collect the product by skimming or other suitable mechanical means. The use of dispersants should be advised by an expert, and, if required, approved by local authorities.					
6.3 Methods and material for containment and cleaning up						
Small spill	Stop leak if without risk. Absorb spilled product with suitable non-combustible materials.					
Large spill	Large spillages may be cautiously covered with foam, if available, to limit vapour cloud formation. Do not use water jet. When inside buildings or confined spaces, ensure adequate ventilation. Transfer collected product and other contaminated materials to suitable containers for recovery or safe disposal.					
6.4 Reference to other sections	See Section 1: For emergency contact information. See Section 8: For information on appropriate personal protective equipment. See Section 13: For additional waste treatment information.					
Section 7: Handling and Storage						
7.1 Advice on general information – hygiene, storage	Obtain special instructions before use. Keep away from heat / sparks / open flames/hot surfaces. No smoking. Use and store only outdoors or in a well-ventilated area. Hazard of slipping on spilt product. Avoid release to the environment.					
7.2 Conditions for safe storage including any incompatibilities	Storage area layout, tank design, equipment and operating procedures must comply with the relevant regional, national or local legislation. Storage installations should be designed with adequate bunds in case of leaks or spills. Cleaning, inspection and maintenance of internal structure of storage tanks must be done only by properly equipped and qualified personnel as defined by national, local or company regulations. Store separately from oxidising agents. Keep only in the original container or in a suitable container for this kind of product. Keep container tightly closed and sealed until ready for use. Do not store in unlabelled containers. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Empty containers may contain harmful, flammable / combustible or explosive residue or vapours. Do not cut, grind, drill, weld, reuse or dispose of containers unless adequate precautions are taken against these hazards. Protect from sunlight.					
7.3 Specific end use(s) – Recommendations	Not available					



Density Solubility (ies)



Section 8: Exposure Controls / Personal Prote	ction
The list of Identified Uses in Section 1 should be cons	ulted for any available use-specific information provided in the Exposure Scenario(s).
8.1 Control parameters	
Occupational exposure limits	
Product / Ingredient name	Distillates, mixture of hydrocarbons
Exposure limits values	AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m <sup>3</sup> 8 hours. Form: mist and fume STEL: 3 mg/m <sup>3</sup> 15 minutes. Form: mist and fume [Air contaminant]. AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m <sup>3</sup> 8 hours. Form: mist and fume STEL: 3 mg/m <sup>3</sup> 15 minutes. Form: mist and fume.
Recommended monitoring procedures	If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres – Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres – Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres – General requirements for the performance of procedures for the measurement of chemical agents). Reference to national guidance documents for methods for the determination of hazardous substances will also be required.
8.2 Exposure control Appropriate engineering controls	Mechanical ventilation and local exhaust will reduce exposure via the air. Use oil resistant material in construction of handling equipment. Store under recommended conditions and if heated, temperature control equipment should be used to avoid overheating.
Individual protection measures	
Hygiene measures	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Ensure that eyewash stations and safety showers are close to the workstation location. Wash contaminated clothing before reuse.
Eye / face protection	Recommended: Safety glasses with side shields.
Skin protection	
Hand protection	4 – 8 hours (breakthrough time): nitrile rubber.
Body protection	Wear protective clothing if there is a risk of skin contact. Change contaminated clothes at the end of working shift.
Other skin protection	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary.
Environmental exposure control	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.
Section 9: Physical and Chemical Properties	
Appearance	Clear
Physical state	Smooth, Homogenous & Tacky
Colour	Dark Blue
Odor	Petroleum odor
Odour threshold	Not available
Dropping point	> 270 °C (ASTM D 2265)
Flash point	> 230 °C (Mineral Oil)
Evaporation rate	Not available
Flammability (solid, gas)	Not available
Flammability limits in air (lower), % by volume	Not available
Flammability limits in air (upper), % by volume	Not available
Vapour pressure	Not volatile



0.88 – 0.95 kg/L





Colubility (water)		luce hile in week			
Solubility (water)		Insoluble in water			
Partition coefficient (n-octanol/water)		Not available			
		No data			
Auto-ignition temperature		Not available	1.0.017)		
Worked Penetration at 25°C		265 – 295 (ASTN	A D 217)		
Explosive properties		No data			
Oxidising properties		No data			
DMSO extractable compounds for according to IP346	base oil substance(s)	Not available <3 %			
Section 10: Stability and Rea	ctivity				
10.1 Reactivity		No specific test	data related to reactivity availa	able for this product or its ingr	edients.
10.2 Chemical stability		Stable under no	ormal conditions		
10.3 Possibility of hazardous rea	ctions	Under normal c	onditions of storage and use, I	nazardous reactions will not o	ccur. Oxidising agent.
10.4 Conditions to avoid		Keep away from	n extreme heat and oxidising a	gents.	
10.5 Incompatible materials		Incomplete con	nbustion is likely to give rise to ses, including carbon monoxic	a complex mixture of airborn	e solid and liquid sulphuric acid and
10.6 Hazardous decomposition	products		ganic and inorganic compound		
SECTION 11: Toxicological In	formation				
11.1 Information on toxicologica	al effects				
Acute toxicity					
Product / ingredient name	Result		Species	Dose	Exposure
	LC 50 Inhalation due	sts and mists	Rat	>2.18mg/l	4 hours
Distillate (Petroleum), hydro	LD 50 Dermal		Rabbit	> 5000 mg/kg	_
treated heavy paraffinic	LD 50 Ora	al	Rat	>15000 mg/kg	-
Irritation / corrosion					
Skin					
Eye		No known signi	ficant offects or critical bazard	-	
•		No known significant effects or critical hazards.			
Respiratory Sensation					
Skin		No known significant effects or critical hazards.			
Respiratory					<b>•</b> • • • •
Mutagenicity		No data available to indicate product or any components present greater than 0.1 % are multigene or genotoxic.			
Carcinogenicity		The base oil(s) i	n this product is based on an s	everely hydrotreated distillate	
Reproductive toxicity			he product should not be regarded as a carcinogen. ontains no ingredient listed as toxic to reproduction.		
Specific target organ toxicity – sin	gle exposure				
Specific target organ toxicity – rep		Not classified			
Aspiration hazard		Aspiration hazard – Category 1			
Information on likely routes of exp	oosure	Not available			
Potential acute health effects					
Eye contact may cause redness and transient pain.					
Inhalation Inhalation of oil mist or vapours at elevated temperatures may cause respiratory irritation.			itory irritation.		
Skin contact No known significant effects or critical hazards.			,		
Ingestion May be fatal if swallowed and enters airways.					
Potential chronic health effects		may be latar if S	manowed and enters an wdys.		
General		No known signi	ficant effects or critical bazard	c	
General		No known significant effects or critical hazards.			
Carcinogenicity The base oil(s) in this product is based on an severely hydrotreated distillate. The product should r regarded as a carcinogen.			The product should not be		







Mutagenicity						
Teratogenicity		No known s	significant effects or critical haz	ards.		
Product / ingredient name						
Fertility effects		Not such the la	1-			
Other information Specific hazard		Not availab	le			
Section 12: Ecological Information						
12.1 Toxicity			Not expected to be harmful to aquatic organisms.			
12.2 Persistence and degradability		Not inherently biodegradable. Bioaccumulation is unlikely to be significant because of the low water solubility of this product.				
12.3 Bioaccumulative potential				nt because of the low water solu	bility of this product.	
12.4 Mobility in soil			ered mobile.			
12.5 Results of PBT & vPvB assessment	:	Not applica				
12.6 Other adverse effects			n water. Spills may form a film of nsfer could also be impaired.	n water surfaces causing physica	al damage to organisms.	
Section 13: Disposal Consideration						
The information in this section contains information provided in the Exposure So	generic advice and enario(s).	d guidance. T	he list of Identified Uses in Sect	ion 1 should be consulted for ar	ny available use-specific	
Product Methods of disposal		feasible and authorisatio or waste su qualified w	d recommended. This substance ons, relevant contamination lim bstance (not directly recyclable	vant contamination), recycling o e can be burned or incinerated, its, safety regulations and air qu ): Disposal can be carried out di on may identify a specific organ ery or disposal	subject to national/local ality legislation. Contaminated rectly, or by delivery to	
Hazardous waste Yes						
European waste catalogue (EWC) Waste	Code 13 03 07*	Waste designation.				
Packaging		Mineral-ba	sed non-chlorinated insulating	and heat transmission oils.		
Methods of disposal				d or minimised wherever possib y be considered when recycling	1 3 3	
Section 14: Transport Information						
International transport regulations						
	ADR / R	ID	ADN	IMO / IMDG Classification	ICAO / IATA Classification	
14.1 UN number	Not regul	ated	Not regulated	Not regulated	Not regulated	
14.2 UN proper shipping name	_		_	_	_	
14.3 Transport hazard class(es)	_		-	_	_	
14.4 Packing group	_		-	_	_	
14.5 Environmental hazards	No		No	No	No	
Additional Information	_		-	-	-	
14.6 Special precautions for user oils						
14.7 Transport in bulk according to An	nex   of MARPOL	73/78 and th	e IBC Code			
Section 15: Regulatory Informatio						
		slation speci	fic for the substance or mixture	e EU Regulation (EC) No. 1907/	2006 (REACH)	
15.1 Safety, health and environmental regulations / legislation specific for the substance or mixture EU Regulations         Annex XIV – List of substances subject to authorisation         Annex XIV         Substances of very high concern						
Annex XVII – Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles.						
International Lists National Inventory	ists National Inventory Inventory name					
Australia		Australian Inventory of Chemical Substances (AICS) – Yes				
Canada			ubstances List (DSL) – Yes stic Substances List (NDSL) – Nc	)		
China			f Existing Chemical Substances			
		inventory o	. Easting chemical substances			







_	European Inventory of Existing Commercial Chemical Substances (EINECS) – Yes			
Europe	European List of Notified Chemical Substances (ELINCS) – No			
Japan	Inventory of Existing and New Chemical Substances (ENCS) – Yes			
Korea	Existing Chemicals List (ECL) – Yes			
New Zealand	New Zealand Inventory – Yes			
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS) – Yes			
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory – Yes			
	oly with the inventory requirements administered by the governing country(s) uct are not listed or exempt from listing on the inventory administered by the governing country(s).			
Section 16: Other Information				
Revision comments				
Legend to abbreviations				
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RID	Regulations agreement concerning the international carriage of dangerous good by rail.			
IMDG Code	International Maritime Dangerous Goods Code.			
ICAO	International Civil Aviation Organization.			
IATA	International Air Transport Association.			
GHS	Globally Harmonized System of Classification and Labeling of Chemicals.			
CLP	Classification, Labelling and Packaging Regulation [Regulation (EC) No.1272/2008].			
SCBA	Self-Contained Breathing Apparatus.			
REACH	Registration, Evaluation, Authorization and Restriction of Chemicals Regulation [Regulation (EC) No. 1907/2006].			
LC 50	Median lethal concentration.			
LD 50	Median lethal dose.			
РВТ	Persistent, Bio accumulative and Toxic.			

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Emergency / Info Phone No.	Phone: +91-22-40635600 • Fax: +91-22-40635601			
Email	info@gandharoil.com			





# **DIVYOL TRIBOROL CS 2 GREASE**

Section 1: Identification of the Substance / Mixt	ture					
1.1 Product identifier						
Product name	Divyol Triborol CS 2 Grease					
Product description	Calcium Sulphonate Complex G	rease				
Product type	Grease					
MARPOL Annex-1	****					
1.2 Identified uses						
Distribution of substance	Automotive & Industrial Grease					
Formulation & (re)packing of substance & mixtures	Automotive & Industrial Grease					
Manufacture of substance	Automotive & Industrial Grease					
Functional fluids	Automotive & Industrial Grease					
Section 2: Hazard Identification						
4-Extreme	Health	1				
3-High	Flammability	1				
2-Moderate	Reactivity	0				
1-Slight	Special	-				
Section 3: Compostion / Information on Ingred	ients					
Chemical Name / Ingredients	% by wt.	Hazardous	CAS No.			
Mineral Oil	55 - 70	Yes	64742-01-4, 64741-88-4			
Calcium Dodecylbenzenesulfonate	25 - 35	No	26264-06-2			
Additives	0 - 6	Yes	Proprietary Mixture			
Product / Ingredient name	Calcium Sulphonate Complex so	aps from natural fatty substances				
Section 4: First Aid Measures						
Inhalation exposure	Remove to fresh air & provide o	ygen, if breathing is difficult. Contac	t physician			
Skin contact	Remove contaminated clothing. Flush skin with water. Wash skin thoroughly with mild soap & water. If irritation occurs, call a physician.					
Swallowing or other	Do not induce vomiting. In general no treatment is necessary unless large quantities are ingested. Get medical advice.					
Eye contact	Rinse continuously with water for several minutes. Get medical attention, if irritation persists.					
Protection first-aiders	Disconnecting electrical supply. available before entry into confi	Ensure adequate ventilation and chene of the spaces.	eck that a safe and breathing area is			
Section 5: Fire Fighting Measures						
5.1 Extinguishing media						
Unsuitable extinguishing media		oxide. Do not use direct water and v ad the fire. Use foam simultaneously				
5.2 Special hazards arising from the substance or mix	ture					
Hazards from the substance or mixture	Flammable liquids in pressurised flammable vapour cloud.	l containers may rupture and when e	exposed to heat, creating a highly			
Hazardous thermal decomposition products	Incomplete combustion is likely to give rise to a complex mixture of airborne solid and liquid particulates, gases, including carbon monoxide, $H_2S$ , $SO_x$ (sulphur oxides) or sulphuric acid and unidentified organic and inorganic compounds.					
5.3 Advice for firefighters						
Special precautions for firefighters	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.					
Special protective equipment for firefighters	Firefighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face- piece operated in positive pressure mode. Clothing for firefighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.					





6.1 Personal precautions, protective equipment and emergency procedures					
Keep non-involved personnel away from the area of spillage.					
For non-emergency personnel	Alert emergency personnel. Except in case of small spillages, the feasibility of any actions should always be assessed and advised, if possible, by a trained, competent person in charge of managing the emergency. Stop leak if safe to do so. Avoid direct contact with the product. Stay upwind / keep distance from source. In case of large spillages, alert occupants in downwind areas. Eliminate all ignition sources if safe to do so. Spillages of limited amounts of product, especially in the open air when vapours will be usually quickly dispersed, are dynamic situations, which will presumably limit the exposure to dangerous concentrations. Note : Recommended measures are based on the most likely spillage scenarios for this material; however, local conditions (wind, air temperature, wave / current direction and speed) may significantly influence the choice of appropriate actions.				
For emergency responders	For this reason, local experts should be consulted when necessary. Local regulations may also prescribe or limit actions to be taken. Small spillages: Normal antistatic working clothes are usually adequate. Large spillages: Full body suit of chemically resistant and thermal resistant material should be used. Work gloves providing adequate chemical resistance, specifically to aromatic hydrocarbons. Note: Gloves made of PVA are not water-resistant, and are not suitable for emergency use. Safety helmet, antistatic non-skid safety shoes or boots. Goggles and / or face shield, if splashes or contact with eyes is possible or anticipated. Respiratory Protection : A half or full-face respirator with filter(s) for organic vapours (and when applicable for H <sub>2</sub> S) a Self Contained Breathing Apparatus (SCBA) can be used according to the extent of spill and predictable amount of exposure. If the situation cannot be completely assessed, or if an oxygen deficiency is possible, only SCBA's should be used.				
6.2 Environmental precautions	Prevent product from entering sewers, rivers or other bodies of water. If necessary dike the product with dry earth, sand or similar non-combustible materials. In case of soil contamination, remove contaminated soil and treat in accordance with local regulations. In case of small spillages in closed waters (i.e. ports), contain product with floating barriers or other equipment. Collect spilled product by absorbing with specific floating absorbents. If possible, large spillages in open waters should be contained with floating barriers or other mechanical means. If this is not possible, control the spreading of the spillage, and collect the product by skimming or other suitable mechanical means. The use of dispersants should be advised by an expert, and, if required, approved by local authorities.				
6.3 Methods and material for containment and cleaning	l up				
Small spill	Stop leak if without risk. Absorb spilled product with suitable non-combustible materials.				
Large spill	Large spillages may be cautiously covered with foam, if available, to limit vapour cloud formation. Do not use water jet. When inside buildings or confined spaces, ensure adequate ventilation. Transfer collected product and other contaminated materials to suitable containers for recovery or safe disposal.				
6.4 Reference to other sections	See Section 1: For emergency contact information. See Section 8: For information on appropriate personal protective equipment. See Section 13: For additional waste treatment information.				
Section 7: Handling and Storage					
7.1 Advice on general information – hygiene, storage	Obtain special instructions before use. Keep away from heat / sparks / open flames/hot surfaces. No smoking. Use and store only outdoors or in a well-ventilated area. Hazard of slipping on spilt product. Avoid release to the environment.				
7.2 Conditions for safe storage including any incompatibilities	Storage area layout, tank design, equipment and operating procedures must comply with the relevant regional, national or local legislation. Storage installations should be designed with adequate bunds in case of leaks or spills. Cleaning, inspection and maintenance of internal structure of storage tanks must be done only by properly equipped and qualified personnel as defined by national, local or company regulations. Store separately from oxidising agents. Keep only in the original container or in a suitable container for this kind of product. Keep container tightly closed and sealed until ready for use. Do not store in unlabelled containers. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Empty containers may contain harmful, flammable / combustible or explosive residue or vapours. Do not cut, grind, drill, weld, reuse or dispose of containers unless adequate precautions are taken against these hazards.				
	Protect from sunlight.				



Vapour pressure Density Solubility (ies)



Section 8: Exposure Controls / Personal Protect	ulted for any available use-specific information provided in the Exposure Scenario(s).
	lited for any available use-specific information provided in the Exposure Scenario(s).
8.1 Control parameters	
Occupational exposure limits	Distillates with the offender scale and
Product / Ingredient name	Distillates, mixture of hydrocarbons
Exposure limits values	AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m <sup>3</sup> 8 hours. Form: mist and fume STEL: 3 mg/m <sup>3</sup> 15 minutes. Form: mist and fume [Air contaminant]. AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m <sup>3</sup> 8 hours. Form: mist and fume STEL: 3 mg/m <sup>3</sup> 15 minutes. Form: mist and fume.
Recommended monitoring procedures	If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres – Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres – Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres – General requirements for the performance of procedures for the measurement of chemical agents). Reference to national guidance documents for methods for the determination of hazardous substances will also be required.
8.2 Exposure control Appropriate engineering controls	Mechanical ventilation and local exhaust will reduce exposure via the air. Use oil resistant material in construction of handling equipment. Store under recommended conditions and if heated, temperature control equipment should be used to avoid overheating.
Individual protection measures	
Hygiene measures	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Ensure that eyewash stations and safety showers are close to the workstation location. Wash contaminated clothing before reuse.
Eye / face protection	Recommended: Safety glasses with side shields.
Skin protection	
Hand protection	4 – 8 hours (breakthrough time): nitrile rubber.
Body protection	Wear protective clothing if there is a risk of skin contact. Change contaminated clothes at the end of working shift.
Other skin protection	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary.
Environmental exposure control	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.
Section 9: Physical and Chemical Properties	
Appearance	Clear
Physical state	Smooth, Homogenous & Tacky
Colour	Brownish
Odor	Petroleum odor
Odour threshold	Not available
Dropping point	> 300 °C (ASTM D 566)
	> 265 °C (Mineral Oil)
Flash point	
Flash point Evaporation rate	Not available
	Not available       Not available
Evaporation rate	
Evaporation rate Flammability (solid, gas)	Not available



Not volatile

0.9 – 1.1 kg/L





Solubility (water)		Insoluble in wat	ter		
Partition coefficient (n-octanol/water)		Not available			
Decomposition temperature		No data			
Auto-ignition temperature	···· [···· [···· [···· [···· [···· [···· [···· [···· [···· [···· [···· [···· [·· [··· [· [				
Worked Penetration at 25°C		265 – 295 (ASTN	M D 217)		
Explosive properties		No data			
Oxidising properties		No data			
DMSO extractable compounds for according to IP346	base oil substance(s)	Not available			
Section 10: Stability and Rea	ctivity				
10.1 Reactivity		No specific test	data related to reactivity availa	able for this product or its ingr	edients.
10.2 Chemical stability		Stable under no	ormal conditions		
10.3 Possibility of hazardous rea	ctions	Under normal c	onditions of storage and use, I	nazardous reactions will not o	ccur. Oxidising agent.
10.4 Conditions to avoid			n extreme heat and oxidising a		
10.5 Incompatible materials		Incomplete con	nbustion is likely to give rise to ses, including carbon monoxic	a complex mixture of airborn le. H.S. SO (sulphur oxides) or	e solid and liquid sulphuric acid and
10.6 Hazardous decomposition p	products		ganic and inorganic compound		
SECTION 11: Toxicological Inf	formation				
11.1 Information on toxicologica	l effects				
Acute toxicity					
Product / ingredient name	Result		Species	Dose	Exposure
	LC 50 Inhalation due	sts and mists	Rat	>2.18mg/l	4 hours
Distillate (Petroleum), hydro	LD 50 Dermal		Rabbit	> 5000 mg/kg	_
treated heavy paraffinic	LD 50 Ora	al	Rat	>15000 mg/kg	_
Irritation / corrosion					
Skin					
Eye		No known significant effects or critical hazards.			
Respiratory					
Sensation					
Skin					
Respiratory		No known signi	ificant effects or critical hazard	S.	
Mutagenicity		No data available to indicate product or any components present greater than 0.1 % are multigene or genotoxic.			
Carcinogenicity			n this product is based on an s	everely hydrotreated distillate	
Reproductive toxicity		The product sho	ould not be regarded as a carci predient listed as toxic to repro	nogen.	
Specific target organ toxicity – sin	gle exposure		,		
Specific target organ toxicity – rep		Not classified			
Aspiration hazard	( · · · · · · ·	Aspiration haza	rd – Category 1		
Information on likely routes of exp	oosure	Not available			
Potential acute health effects					
Eye contact		Eye contact may	y cause redness and transient	pain.	
Inhalation		Inhalation of oil mist or vapours at elevated temperatures may cause respiratory irritation.			
Skin contact		No known significant effects or critical hazards.			
Ingestion			wallowed and enters airways.		
Potential chronic health effects					
General		No known siani	ificant effects or critical hazard	S.	
Carcinogenicity The base oil(s) in this product is based on an severely hydrotreated distillate. The product should no regarded as a carcinogen.			. The product should not be		







Intratagenicity increase of the second seco	Mutagenicity						
<form>          Product, rignedient name         Not available           fertility effects         Not available           Other information Specific hazards         Not available           Section 12: Ecological Information         Not available           12.1 Toxicity         Not expected to be harmful to aquatic organisms.           12.2 Fersitence and degradability         Not inherently biodegradable.           12.3 Bioaccumulative potential         Not aplicable           12.4 Mobility in soil         Not considered mobile.           12.5 Eaclust of PBT &amp; VP&amp; assessmet         Not aplicable           12.6 Other adverse effects         Not aplicable           Toxing the considered mobile.         Not applicable           12.6 Section 13: Disposit Considered and softward and guidance. The list of fertified Ubes in Section 13: should be consulted or any available use specific information provided in the Exposure Section 13: should be consulted or any available use specific information provided in the Exposure Section 13: should be consulted or any available use specific or available in any identify a specific organisation, recycling or any available use specific information intrody, skey regulations any identify a specific organisation, recycling organisation, and/or procesclip           Fordard Ecological Decological Decological Decological Decological Decological Decological Decological Decological Decolog</form>	,						
<form>          Internation Specific hazard         Net available           Other information Specific hazard         Not available           12.1 Toxicity         Not expected to be harmful to aquatic organisms.           12.2 Presistence and degradability in all         Not inherently biologengradability.           12.3 Bioaccumulative potential         Bioaccumulation is unikely to be significant because of the low water solubility of this product.           12.5 Reutis OFPE a/Vb2 assessment         Not applicable           12.6 Toxicity OFPE a/Vb2 assessment         Water possible (on in the absess on contain studin)           12.6 Toxicity OFPE a/Vb2 assessment         Water possible (on in the absess on contain studin)           Product Methods of disposal         Were possible (on in the absess on contain studin)           Product Methods of disposal         Wer</form>	<u> </u>		No known s	significant effects or critical haza	ards.		
Other Information Specific hazard         Net available           Section 12: Ecological Information         Not expected to be harmful to aquatic organisms.           12: Parsistence and degradability         Not expected to be harmful to aquatic organisms.           12: A Mobility in soil         Not considered mobile.           12: A Mobility in soil         Not considered mobile. </td <td>¥</td> <td></td> <td colspan="3"></td> <td></td>	¥						
Section 12: Ecological Information         Not expected to be harmful ta aquatic organisms.           12.1 Toxidity         Not expected to be harmful ta aquatic organisms.           12.3 Brostneer and degradability         Not expected to be harmful ta aquatic organisms.           12.4 Mobility notel         Not considered mobile.           12.4 Mobility notel         Not considered mobile.           12.5 Results of PBT & VP& assessment         Not applicable           12.6 Other adverse effects         Not applicable           Section 13: Disposal Considerations         The information in this section or talnes generic adverse and guidance. The list of identified Uses in Section 1 should be consulted for any available use specific information provided in the Exposure Scenario(s).           Product Methods of disposal         Where possible leg, in the absence of relevant contamination, recycling of used substance is freasible and recommended. This substance can be burned or innormated autification used substance is composition limits, and recommended. This substance can be burned or innormated autification and used substance is composition limits and methods for recovery or disposal           Hazardous waste         Vos           European waste catalogue (EWC) Wiste Code 13 03 07°         Woste designation.           Not interaction or landifit involution guided waste dusted where very disposal         Inconvertee construction or landifit involution guided waste for any available use specific organisacian.           14.1 UN number         Not /// NO Classification<			Not availab	le			
12.1 privation     Not expected to be harmful to aquatic organisms.       12.2 Prestance and legand bill.     Not anotal-construction is unlikely to be significant to be assue of the low water sub-likely of this product.       12.4 Obtaining the point of the sub-sub-sub-sub-sub-sub-sub-sub-sub-sub-	•	1					
12.2 Persistence and degradability       Not inherently biodegradable.         12.3 Bioaccumulative potential       Bioaccumulation is unlikely to be significant because of the low water solubility of this product.         12.4 Mobility in soil       Not considered mobile.         12.5 Results of PBT & vPvB assessment       Not applicable         Insoluble in vater. Spills may form a film on water surfaces causing physical damage to organisms. Oxygen transfer could also be impaired.         Section 13: Disposal Considerations       Where possible (eg. in the absence of relevant contamination) recycling of used substance is feasible and recommended. This substance can be burned or indirected, subject to national/local authorisation, relevant contamination limits, stering contamination, and/or prescribe composition limits and methods for recovery or disposal         Product Methods of disposal       Where possible (eg. in the absence of relevant contamination) intrescriber qualified vases burned or indirectly cryptelible (biposal can be carried out directly, or ty delivery to requalified vases bandles n. National legislation may lightly egistation. Contaminated or waste substance (not directly ercyclable): Disposal can be carried out directly, or ty delivery to requalified vases date non-chionated insulating and heat transmission or indirectly ercyclable.         Hazardous waste       Yes         European waste catalogue (EWC) Waste Code 13 03 07*       Waste designation.         Methods of disposal       De Mode (Marce 14: Code 14							
12.3 Bracum Jative potential       Not considered mobile.         12.4 Mobility in soil of PT 4 vVP assesmet       Not applicable         12.6 Guites of PT 4 vVP assesmet.       Not applicable.         12.6 Guites of PT 4 vVP assesmet.       Not applicable.         2.6 Guites of PT 4 vVP assesmet.       Not applicable.         2.6 Guites of PT 4 vVP assesmet.       Not applicable.         3.6 Guites adverse effects.       Not applicable.         3.7 Guites adverse effects.       VP recorded also be impaired.         3.7 Guites adverse effects.       VP averse solito to solito adverse effects.         3.7 Guites adverse effects.       VP averse solito.         1.8 Guites adverse advere	· · · · · · · · · · · · · · · · · · ·		•				
12.4 Mobility in soil       Not considered mobile.         12.5 Results of PRT & VPR assessment       Not applicable         12.6 Other adverse effects       Unsoluble in water. Spills may form a film on water surfaces causing physical damage to organisms. Oxygen transfer could also be impaired.         Section 13: Disposal Considerations       The information in this section contains generic advice and guidance. The list of identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).         Product Methods of disposal       Where possible (e.g. in the absence of relevant contamination limits, adjett regulations, and ang inquality (edjatic). Contaminatol or qualified water handles. Nationariation limits, adjett regulations, and ang inquality (edjatic). Contaminatol or qualified water handles. Nationariation limits, adjett regulation, and ang inquality (edjatic).         Hazardous waste       Yes         European waste catalogue (EWC) Waste Code 13 03 07*       Waste disgination.         Packaging       Mineral-based non-chlorinated insulting and heat transmission ells.         Methods of disposal       The generation of waste should be avoided or minimised wherever possible. Waste packaging should be cregided. Incineration or indihi should only be considered when recycling is not faesible.         Section 13: transport Information       -       -         Interational transport regulated       Not regulated       Not regulated         14.1 UN number       ADR /RID       ADN       MO/IMDG Cla						Ibility of this product.	
12.6 Other adverse effects     Nonludie in water. Splits may form a fitm on water surfaces causing physical damage to organisms. Nongen transfer could also be impaired.       Section 13: Disposal Considerations:       Section 13: Disposal Considerations:       Section 13: Disposal Considerations:       The information in this section contains generic advices undividual and be impaired.       Section 13: Disposal Considerations:       The information in this section contains generic advices on tabulation of relevant contamination intervices. Job et or tabulations and arguality legislation.       Note the providual disposal on the commendo of this substance contations and arguality legislation.       Product Methods of disposal       Yes       European waste catalogue (KPC) Waste Code 13 03 07*       Waste designation.       Recidention of waste should be avoided or minimised wherever possible. Waste packaging should be recided when recycling in feasible.       Recidention tabuscent colspan="4">Colspan="4"       Colspan= 4				· · ·			
Application adverse energy       Oxygen transfer could also be impaired.         Section 13: Disposal Considerations       Oxygen transfer could also be impaired.         Section 13: Disposal Considerations       Oxygen transfer could also be impaired.         Section 13: Disposal Considerations       Oxygen transfer could also be impaired.         The information in this section contains generic advice and year optimized in the Exposure Scenario(s).       Where possible (e.g. in the absence of relevant contamination finits, sefery regulations and ar quality explaisation. Contamination finits, sefery regulations and ar quality explaisation. Contamination finits, sefery regulations and ar quality explaisation. Contaminated the finits, sefery regulations and ar quality explaisation. Contaminated the finits, sefery regulations and ar quality explaisation. Contaminated the finits, sefery regulations and ar quality explaisation. The quarter of the explashes on orchorinated insulating and heat transmission and ar quality explaisation. The quarter operation of vaste existion may identify a specific organisation, and/or prescribe composition limits and methods for recovery or disposal         Macadous waste       Yes       The generation of vaste existion or shouts in soluting and heat transmission oils.         Methods of disposal       Mineral-based non-chlorinated insulating and heat transmission oils.       The generation of vaste existion existing existion existing existion existing exi	12.5 Results of PBT & vPvB assessment	:	Not applica	ble			
The information in this section contains generic advice and substance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario().       Where possible (e.g. in the absence of relevant contamination intervated, subject to national/local authorisation, relevant contamination limits, safety regulations and air quality legislation. Contaminated in this, safety regulations and air quality legislation. Contaminated or qualified wase handlens. National legislation may identify a specific organisation, and/or preservice or wase substance (not directly recyclable): Disposal can be carried out directly, or by delivery to qualified wase handlens. National legislation may identify a specific organisation, and/or preservice or wases catalogue (EWC) Wase Code 13 03 07       Yes         European wase catalogue (EWC) Wase Code 13 03 07       Wast e designation.       Mineral-based non-chlorinated insulating and heat transmission oils.         Nethods of disposal       Yes       The generation of wasts should be avoided or minimission where repossible. Wase packaging should be considered when recyclable.         Nethods of disposal       ADR / IND       ADN       IMO / IMDG Classification       ICAO / IATA Classification         14.1 UN number       ADR / IND       ADN       IMO / IMDG Classification       ICAO / IATA Classification         14.2 UW proper shipping name       -       -       -       -         14.3 Transport hazard class(es)       -       -       -       -         14.3 Faving regulation for user U MARPOLT/* arother program in bu	12.6 Other adverse effects				n water surfaces causing physica	al damage to organisms.	
Information provided in the Exposure Scenario(s).  Where possible (a, in the absence of relevant contamination), recycling of used substance is the authorisations, relevant contaminated or inclinerated, subject to national/local authorisations, relevant contamination limits, safety regulations and air quality legislation. Contaminated or qualified waste handlers. National legislation may detected out inclinerated, subject to national/local authorisations, relevant contamination limits, safety regulations and air quality legislation. Contaminated or qualified waste handlers. National legislation may detected out inclinerated, subject to national/local authorisations, relevant contaminated is used. The substance can be burned or inclinerated, subject to national/local authorisations, relevant contamination limits, safety regulations and air quality legislation. Contaminated or qualified waste handlers. National legislation may detected out inclinerated, subject to national/local authorisation, and/or prescribe composition limits and methods for recovery or disposal  Hazardous waste  Ketods of disposal  Methods of ADR (N  ADR  ADR  ADR  ADR  ADR  ADR  ADR  AD	Section 13: Disposal Consideration	าร					
Appendix Methods of disposal         Satisble and recommended. This substance and point longet and point and yoal disposal constant and yoal disposal disposal disposal disposal d			d guidance. T	he list of Identified Uses in Secti	ion 1 should be consulted for ar	ny available use-specific	
European waste catalogue (EWC) Waste Cwel 13 03 07*         Meate designation.           Packaging         Mineral-based non-chlorinated insulating and heat transmission oils.           Methods of disposal         The generation of waste should be avoideded or minimised wherever possible. Waste packaging should be creceded or minimised wherever possible. Waste packaging should be creceded or minimised wherever possible. Waste packaging should be creceded or minimised wherever possible. Waste packaging should be creceded or minimised wherever possible. Waste packaging should be creceded or minimised wherever possible. Waste packaging should be creceded or minimised wherever possible. Waste packaging should be creceded or minimised wherever possible. Waste packaging should be creceded or minimised wherever possible. Waste packaging should be creceded or minimised wherever possible. Waste packaging should be creceded or minimised wherever possible. Waste packaging should be creceded or minimised wherever possible. Waste packaging should be creceded or minimised wherever possible. Waste packaging should be creceded or minimised wherever possible. Waste packaging should be creceded or minimised wherever possible. Waste packaging should be creceded or minimised wherever possible. Waste packaging should be creceded or minimised wherever possible. Waste packaging should be creceded or minimised wherever possible. Waste packaging should be creceded or minimised wherever possible. Waste packaging should be created or minimised wherever possible. Waste packaging should be created or minimised where yero should be created or minimised wherever possible. Waste packaging should be created or minimised wherever packaging should	Product Methods of disposal	Product Methods of disposal feasible and recommended. This substance can be burned or incinerated, subject to national/local authorisations, relevant contamination limits, safety regulations and air quality legislation. Contamina or waste substance (not directly recyclable): Disposal can be carried out directly, or by delivery to qualified waste handlers. National legislation may identify a specific organisation, and/or prescribe					
Packaging       Mineral-based non-chlorinated insulating and heat transmission oils.         Methods of disposal       The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.         Section 14: Transport Information       ADR / RID       ADN       IMO / IMDG Classification       ICAO / IATA Classification         14.1 UN number       Not regulated       Not regulated       Not regulated       Not regulated         14.2 UN proper shipping name       -       -       -       -         14.3 Transport hazerd class(es)       - <td< td=""><td>Hazardous waste</td><td></td><td>Yes</td><td></td><td></td><td></td></td<>	Hazardous waste		Yes				
Methods of disposal       The generation of waste should be avoided or minimised wherever possible.       Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.         Section 14: Transport Information         International transport regulations         International transport regulations         14.1 UN number       ADR / IND       ADN       IMO / IMDG Classification       ICAO / IATA Classification         14.2 UN proper shipping name       -       -       -       -         14.3 Transport hazard class(es)       -       -       -       -       -         14.4 Packing group       - <t< td=""><td colspan="3">European waste catalogue (EWC) Waste Code 13 03 07* Waste designation.</td><td></td></t<>	European waste catalogue (EWC) Waste Code 13 03 07* Waste designation.						
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14.3 Transport hazard class(es) $  -$ 14.4 Packing group $  -$ 14.5 Environmental hazardsNoNoNoAdditional Information $  -$ 14.5 Special precautions for user oils $  -$ 14.6 Special precautions for user oils14.6 Special precautions for user oils14.7 Transport in bulk according to Amrev 1 of MARPOL 78 and ENT Store Test Test Test Test Test Test Test Tes	14.1 UN number	Not regul	ated	Not regulated	Not regulated	Not regulated	
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14.5 Environmental hazardsNoNoNoAdditional Information14.6 Special precautions for user oils14.7 Transport in bulk according to Annex VI of MARPOL V78 and the VEV VEV VEV VEV VEV VEV VEV VEV VEV VE	14.3 Transport hazard class(es)	-		-	-	_	
Additional Information	14.4 Packing group			-	-	_	
14.6 Special precautions for user oils         14.7 Transport in bulk according to Annex I of MARPOL 73/78 and the IBC Code         Section 15: Regulatory Information         15.1 Safety, health and environmental regulations / legistion specific for the substance or mixture EU Regulation (EC) No. 1907/2006 (REACH)         Annex XIV – List of substances subject to authorisation Annex XIV       None of the components are listed         Substances of very high concern       None of the components are listed         Annex XVI – Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles.       Not applicable         International Lists National Inventory       Inventory name         Australia       Australian Inventory of Chemical Substances (AICS) – Yes         Canada       Domestic Substances List (NDSL) – No	14.5 Environmental hazards	No		No	No	No	
14.7 Transport in bulk according to Annex I of MARPOL 778 and the IBC Code         Section 15: Regulatory Information         15.1 Safety, health and environmental regulations / legitron specific for the substance or mixture EU Regulation (EC) No. 1907/2006 (REACH)         Annex XIV - List of substances subject to authorisation Annex XIV - Sestrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles.       None of the components are listed         International Lists National Inventory       Inventory name         Australia       Australian Inventory of Chemical Substances (AICS) – Yes         Canada       Domestic Substances List (NDSL) – No	Additional Information	_		-	-	-	
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on the market and use of certain dangerous substances,       Not applicable         International Lists National Inventory       Inventory name         Australia       Australian Inventory of Chemical Substances (AICS) – Yes         Canada       Domestic Substances List (DSL) – Yes         Non-Domestic Substances List (NDSL) – No	Annex XIV – List of substances subject to authorisation Annex XIVNone of the components are listed						
Australia     Australian Inventory of Chemical Substances (AICS) – Yes       Canada     Domestic Substances List (DSL) – Yes       Non-Domestic Substances List (NDSL) – No	on the market and use of certain dangerous substances, Not applicable			ble			
Canada Domestic Substances List (DSL) – Yes Non-Domestic Substances List (NDSL) – No	International Lists National Inventory	onal Inventory Inventory name					
Canada Non-Domestic Substances List (NDSL) – No	Australia		Australian Inventory of Chemical Substances (AICS) – Yes				
	Canada				)		
	China						







	European Inventory of Existing Commercial Chemical Substances (EINECS) – Yes
Europe	European List of Notified Chemical Substances (ELINCS) – No
Japan	Inventory of Existing and New Chemical Substances (ENCS) – Yes
Korea	Existing Chemicals List (ECL) – Yes
New Zealand	New Zealand Inventory – Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS) – Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory – Yes
	oly with the inventory requirements administered by the governing country(s) uct are not listed or exempt from listing on the inventory administered by the governing country(s).
Section 16: Other Information	
Revision comments	
Legend to abbreviations	
ADR	European agreement concerning the international carriage of dangerous good by road.
RID	Regulations agreement concerning the international carriage of dangerous good by rail.
IMDG Code	International Maritime Dangerous Goods Code.
ICAO	International Civil Aviation Organization.
IATA	International Air Transport Association.
GHS	Globally Harmonized System of Classification and Labeling of Chemicals.
CLP	Classification, Labelling and Packaging Regulation [Regulation (EC) No.1272/2008].
SCBA	Self-Contained Breathing Apparatus.
REACH	Registration, Evaluation, Authorization and Restriction of Chemicals Regulation [Regulation (EC) No. 1907/2006].
LC 50	Median lethal concentration.
LD 50	Median lethal dose.
РВТ	Persistent, Bio accumulative and Toxic.

GANDHAR OIL REFINERY (INDIA) LTD.		
Taloja Plant	Plot No.10, MIDC, Main Road, Taloja, Taluka Panvel, District - Raigad 410208, India.	
Silvassa Plant	Plot No. 2, Survey No. 678/1/3, Village Naroli, Near Naroli Check Post, Silvassa, Dadra & Nagar Haveli, Union Territory 396230, India.	
Emergency / Info Phone No.	Phone: +91-22-40635600 • Fax: +91-22-40635601	
Email	info@gandharoil.com	





# **DIVYOL TRIBOROL EPM2X GREASE**

Section 1: Identification of the Substance / Mixt	ture			
1.1 Product identifier				
Product name	Divyol Triborol E	PM2X Grease		
Product description	High Pressure Lo			
•	-	ing Life Glease		
Product type	Grease			
MARPOL Annex-1	****			
1.2 Identified uses				
Distribution of substance	Automotive & In			
Formulation & (re)packing of substance & mixtures	Automotive & In	dustrial Grease		
Manufacture of substance	Automotive & In	dustrial Grease		
Functional fluids	Automotive & In	dustrial Grease		
Section 2: Hazard Identification				
4-Extreme	Health		1	
3-High	Flammability		1	
2-Moderate	Reactivity		0	
1-Slight	Special		-	
Section 3: Compostion / Information on Ingredi				
				CACNE
Chemical Name / Ingredients Lithium Hydroxide	% by wt. 0.5 - 25	Hazardous Yes		CAS No. 1310-66-3
Mineral Oil	85 - 92	Yes	64742 52 5	64741-88-4, 64742-01-4
12 HSA	5 - 10	No	04/42-32-3,	106-14-9
НСО	2-5	No		8001-78-3
Complexing Acid	0-3	No	Pro	prietary Mixture
Molybdenum Disulfire	1-4	Yes		1317-33-5
Butene, Homo Polymer	0 -3	No		9003-27-4
Mix Additives	0 -4	Yes		7782-42-5
Solid Additive	0 - 3	Yes		7782-42-5
Product / Ingredient name	Lithium Hydroxy	stearate Complex	soaps from natural fatty substa	Inces
Section 4: First Aid Measures				
Inhalation exposure	Remove to fresh	air & provide ovvo	en if breathing is difficult. Con	tact physician
Skin contact	Remove contam	Remove to fresh air & provide oxygen, if breathing is difficult. Contact physician Remove contaminated clothing. Flush skin with water. Wash skin thoroughly with mild soap & water. If irritation occurs, call a physician.		
Swallowing or other		Do not induce vomiting. In general no treatment is necessary unless large quantities are ingested.		
Eye contact			everal minutes. Get medical at	tention if irritation persists
2,000.000				
Protection first-aiders		Disconnecting electrical supply. Ensure adequate ventilation and check that a safe and breathing area is available before entry into confined spaces.		
Section 5: Fire Fighting Measures				
5.1 Extinguishing media				
Unsuitable extinguishing media		Use dry powder, foam, carbon dioxide. Do not use direct water and wet chemicals, or water on the burning product. They may spread the fire. Use foam simultaneously on the surface.		
5.2 Special hazards arising from the substance or mix				
Hazards from the substance or mixture	Flammable liquio flammable vapo	Flammable liquids in pressurised containers may rupture and when exposed to heat, creating a highly flammable vapour cloud.		
Hazardous thermal decomposition products	particulates, gas	Incomplete combustion is likely to give rise to a complex mixture of airborne solid and liquid particulates, gases, including carbon monoxide, $H_2S$ , $SO_x$ (sulphur oxides) or sulphuric acid and unidentified organic and inorganic compounds.		
5.3 Advice for firefighters				
Special precautions for firefighters			wing all persons from the vicin personal risk or without suitab	ity of the incident if there is a fire. No le training.
Special protective equipment for firefighters	Firefighters shou (SCBA) with a ful helmets, protect	Firefighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face- piece operated in positive pressure mode. Clothing for firefighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.		





6.1 Personal precautions, protective equipment and emergency procedures				
For non-emergency personnel	Keep non-involved personnel away from the area of spillage. Alert emergency personnel. Except in case of small spillages, the feasibility of any actions should always be assessed and advised, if possible, by a trained, competent person in charge of managing the emergency. Stop leak if safe to do so. Avoid direct contact with the product. Stay upwind / keep distance from source. In case of large spillages, alert occupants in downwind areas. Eliminate all ignition sources if safe to do so. Spillages of limited amounts of product, especially in the open air when vapours will be usually quickly dispersed, are dynamic situations, which will presumably limit the exposure to dangerous concentrations. Note : Recommended measures are based on the most likely spillage scenarios for this material; however, local conditions (wind, air temperature, wave / current direction and speed) may significantly influence the choice of appropriate actions.			
For emergency responders	For this reason, local experts should be consulted when necessary. Local regulations may also prescribe or limit actions to be taken. Small spillages: Normal antistatic working clothes are usually adequate. Large spillages: Full body suit of chemically resistant and thermal resistant material should be used. Work gloves providing adequate chemical resistance, specifically to aromatic hydrocarbons. Note: Gloves made of PVA are not water-resistant, and are not suitable for emergency use. Safety helmet, antistatic non-skid safety shoes or boots. Goggles and / or face shield, if splashes or contact with eyes is possible or anticipated. Respiratory Protection : A half or full-face respirator with filter(s) for organic vapours (and when applicable for H <sub>2</sub> S) a Self Contained Breathing Apparatus (SCBA) can be used according to the extent of spill and predictable amount of exposure. If the situation cannot be completely assessed, or if an oxygen deficiency is possible, only SCBA's should be used.			
6.2 Environmental precautions	Prevent product from entering sewers, rivers or other bodies of water. If necessary dike the product with dry earth, sand or similar non-combustible materials. In case of soil contamination, remove contaminated soil and treat in accordance with local regulations. In case of small spillages in closed waters (i.e. ports), contain product with floating barriers or other equipment. Collect spilled product by absorbing with specific floating absorbents. If possible, large spillages in open waters should be contained with floating barriers or other mechanical means. If this is not possible, control the spreading of the spillage, and collect the product by skimming or other suitable mechanical means. The use of dispersants should be advised by an expert, and, if required, approved by local authorities.			
6.3 Methods and material for containment and cleaning	up			
Small spill	Stop leak if without risk. Absorb spilled product with suitable non-combustible materials.			
Large spill	Large spillages may be cautiously covered with foam, if available, to limit vapour cloud formation. Do not use water jet. When inside buildings or confined spaces, ensure adequate ventilation. Transfer collected product and other contaminated materials to suitable containers for recovery or safe disposal.			
6.4 Reference to other sections	See Section 1: For emergency contact information. See Section 8: For information on appropriate personal protective equipment. See Section 13: For additional waste treatment information.			
Section 7: Handling and Storage				
7.1 Advice on general information – hygiene, storage	Obtain special instructions before use. Keep away from heat / sparks / open flames/hot surfaces. No smoking. Use and store only outdoors or in a well-ventilated area. Hazard of slipping on spilt product. Avoid release to the environment.			
7.2 Conditions for safe storage including any incompatibilities	Storage area layout, tank design, equipment and operating procedures must comply with the relevant regional, national or local legislation. Storage installations should be designed with adequate bunds in case of leaks or spills. Cleaning, inspection and maintenance of internal structure of storage tanks must be done only by properly equipped and qualified personnel as defined by national, local or company regulations. Store separately from oxidising agents. Keep only in the original container or in a suitable container for this kind of product. Keep container tightly closed and sealed until ready for use. Do not store in unlabelled containers. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Empty containers may contain harmful, flammable / combustible or explosive residue or vapours. Do not cut, grind, drill, weld, reuse or dispose of containers unless adequate precautions are taken against these hazards. Protect from sunlight.			
7.3 Specific end use(s) – Recommendations	Not available			



Vapour pressure

Density Solubility (ies)



Section 8: Exposure Controls / Personal Protect	tion
The list of Identified Uses in Section 1 should be consu	Ited for any available use-specific information provided in the Exposure Scenario(s).
8.1 Control parameters	
Occupational exposure limits	
Product / Ingredient name	Distillates, mixture of hydrocarbons
Exposure limits values	AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m <sup>3</sup> 8 hours. Form: mist and fume STEL: 3 mg/m <sup>3</sup> 15 minutes. Form: mist and fume [Air contaminant]. AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m <sup>3</sup> 8 hours. Form: mist and fume STEL: 3 mg/m <sup>3</sup> 15 minutes. Form: mist and fume.
Recommended monitoring procedures	If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres – Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres – Guide for the application and use of procedures for the assessment of exposure to chemical agents for the performance of procedures for the measurement of chemical agents). Reference to national guidance documents for methods for the determination of hazardous substances will also be required.
8.2 Exposure control Appropriate engineering controls	Mechanical ventilation and local exhaust will reduce exposure via the air. Use oil resistant material in construction of handling equipment. Store under recommended conditions and if heated, temperature control equipment should be used to avoid overheating.
Individual protection measures	
Hygiene measures	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Ensure that eyewash stations and safety showers are close to the workstation location. Wash contaminated clothing before reuse.
Eye / face protection	Recommended: Safety glasses with side shields.
Skin protection	
Hand protection	4 – 8 hours (breakthrough time): nitrile rubber.
Body protection	Wear protective clothing if there is a risk of skin contact. Change contaminated clothes at the end of working shift.
Other skin protection	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary.
Environmental exposure control	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.
Section 9: Physical and Chemical Properties	
Appearance	Clear
Physical state	Smooth, Homogenous & Tacky
Colour	Grey
Odor	Petroleum odor
Odour threshold	Not available
Dropping point	> 260 °C (ASTM D 2265)
	> 230 °C (Mineral Oil)
Flash point	
Flash point Evaporation rate	Not available
	Not available       Not available
Evaporation rate	
Evaporation rate Flammability (solid, gas)	Not available

Not volatile

0.88 – 0.95 kg/L





	Insoluble in wat	ter				
iter) ficient (n-octanol/water)						
· · · · · · · · · · · · · · · ·						
		A D 217)				
	No data					
base oil substance(s)	Not available					
	<3 %					
ctivity						
	No specific test	data related to reactivity availa	able for this product or its ingr	edients.		
ctions	Under normal c	onditions of storage and use, I	nazardous reactions will not or	ccur. Oxidising agent.		
	Keep away from	n extreme heat and oxidising a	gents.			
products						
formation						
l effects						
Result		Species	Dose	Exposure		
LC 50 Inhalation due	sts and mists	Rat	>2.18mg/l	4 hours		
LD 50 Derr	nal	Rabbit	> 5000 mg/kg	-		
LD 50 Ora	al	Rat	>15000 mg/kg	-		
	No known significant effects or critical hazards.					
	No known signi	known significant effects or critical hazards.				
		data available to indicate product or any components present greater than 0.1 % are Itigene or genotoxic.				
	The product she	product should not be regarded as a carcinogen.				
gle exposure	contains no ingredient instea as toxic to reproduction.					
	Not classified					
	Aspiration hazard – Category 1					
oosure	Not available					
Potential acute health effects		ntact may cause redness and transient pain.				
		ion of oil mist or vapours at elevated temperatures may cause respiratory irritation.				
	Inhalation of oil	mist or vapours at elevated te	imperatures may cause respira	n significant effects or critical hazards.		
	No known signi					
	No known signi	ficant effects or critical hazard				
	No known signi May be fatal if s	ficant effects or critical hazard	S.			
	base oil substance(s) ctivity ctions products formation l effects Result LC 50 Inhalation dus LD 50 Derr	iter)Not availableNo dataNot available265 - 295 (ASTNNo dataNo database oil substance(s)No tavailable <3 %	No data         Not available         265 - 295 (ASTM D 217)         No data         No data         base oil substance(s)       Not available         <3 %	ter) Not available Not available Not available Set Sar Sar Not Available Set Sar Not Sar Not Available Set Not Availa		







Mutagenicity						
Teratogenicity		No known s	significant effects or critical haz	ards.		
Product / ingredient name						
Fertility effects		Not such the la	1-			
Other information Specific hazard		Not availab	le			
Section 12: Ecological Information						
12.1 Toxicity			ed to be harmful to aquatic org	anisms.		
12.2 Persistence and degradability			ntly biodegradable.			
12.3 Bioaccumulative potential				nt because of the low water solu	bility of this product.	
12.4 Mobility in soil			ered mobile.			
12.5 Results of PBT & vPvB assessment	:	Not applica				
12.6 Other adverse effects			n water. Spills may form a film of nsfer could also be impaired.	n water surfaces causing physica	al damage to organisms.	
Section 13: Disposal Consideration						
The information in this section contains information provided in the Exposure So	generic advice and enario(s).	d guidance. T	he list of Identified Uses in Sect	ion 1 should be consulted for ar	ny available use-specific	
Product Methods of disposal			Where possible (e.g. in the absence of relevant contamination), recycling of used substance is feasible and recommended. This substance can be burned or incinerated, subject to national/local authorisations, relevant contamination limits, safety regulations and air quality legislation. Contaminated or waste substance (not directly recyclable): Disposal can be carried out directly, or by delivery to qualified waste handlers. National legislation may identify a specific organisation, and/or prescribe composition limits and methods for recovery or disposal			
Hazardous waste		Yes				
European waste catalogue (EWC) Waste	Code 13 03 07*	Waste designation.				
Packaging		Mineral-based non-chlorinated insulating and heat transmission oils.				
Methods of disposal		The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.				
Section 14: Transport Information						
International transport regulations						
	ADR / R	ID	ADN	IMO / IMDG Classification	ICAO / IATA Classification	
14.1 UN number	Not regul	ated	Not regulated	Not regulated	Not regulated	
14.2 UN proper shipping name	_		_	_	_	
14.3 Transport hazard class(es)	_		-	_	_	
14.4 Packing group	_		-	_	_	
14.5 Environmental hazards	No		No	No	No	
Additional Information	_		-	-	-	
14.6 Special precautions for user oils						
14.7 Transport in bulk according to An	nex   of MARPOL	73/78 and th	e IBC Code			
Section 15: Regulatory Informatio						
15.1 Safety, health and environmental		slation speci	fic for the substance or mixture	e EU Regulation (EC) No. 1907/	2006 (REACH)	
Annex XIV – List of substances subject to authorisation Annex XIV Substances of very high concern		None of the components are listed				
Annex XVII – Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles.		Not applicable				
International Lists National Inventory		Inventory name				
Australia		Australian Inventory of Chemical Substances (AICS) – Yes				
Canada		Domestic Substances List (DSL) – Yes Non-Domestic Substances List (NDSL) – No				
China						
			Inventory of Existing Chemical Substances in China (IECSC) – Yes			







	European Inventory of Existing Commercial Chemical Substances (EINECS) – Yes
Europe	European List of Notified Chemical Substances (ELINCS) – No
Japan	Inventory of Existing and New Chemical Substances (ENCS) – Yes
Korea	Existing Chemicals List (ECL) – Yes
New Zealand	New Zealand Inventory – Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS) – Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory – Yes
	oly with the inventory requirements administered by the governing country(s) uct are not listed or exempt from listing on the inventory administered by the governing country(s).
Section 16: Other Information	
Revision comments	
Legend to abbreviations	
ADR	European agreement concerning the international carriage of dangerous good by road.
RID	Regulations agreement concerning the international carriage of dangerous good by rail.
IMDG Code	International Maritime Dangerous Goods Code.
ICAO	International Civil Aviation Organization.
IATA	International Air Transport Association.
GHS	Globally Harmonized System of Classification and Labeling of Chemicals.
CLP	Classification, Labelling and Packaging Regulation [Regulation (EC) No.1272/2008].
SCBA	Self-Contained Breathing Apparatus.
REACH	Registration, Evaluation, Authorization and Restriction of Chemicals Regulation [Regulation (EC) No. 1907/2006].
LC 50	Median lethal concentration.
LD 50	Median lethal dose.
PBT	Persistent, Bio accumulative and Toxic.

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Emergency / Info Phone No.	Phone: +91-22-40635600 • Fax: +91-22-40635601	
Email	info@gandharoil.com	





## **DIVYOL TRIBOROL EPX BB1GREASE**

Section 1: Identification of the Substance / Mixt	ure				
1.1 Product identifier					
Product name	Divvol Triborol E	Divyol Triborol EPX BB 1 Grease			
Product description		High Pressure Industrial Grease			
· · ·					
Product type	Grease				
MARPOL Annex-1	****				
1.2 Identified uses					
Distribution of substance	Automotive & In	dustrial Grease			
Formulation & (re)packing of substance & mixtures	Automotive & In	dustrial Grease			
Manufacture of substance	Automotive & In	dustrial Grease			
Functional fluids	Automotive & In	dustrial Grease			
Section 2: Hazard Identification					
4-Extreme	Health		1		
3-High	Flammability		1		
2-Moderate	Reactivity		0		
1-Slight	Special		_		
Section 3: Compostion / Information on Ingredi					
Chemical Name / Ingredients	% by wt. 0.5 - 2	Hazardous	CAS No.		
Lithium Hydroxide Mineral Oil	0.5 - 2 82 - 90	Yes Yes	1310-66-3		
12 HSA	4 - 10	No	64741-88-4, 64742-01-4, 64742-52-5, Proprietary Mixture 106-14-9		
НСО	2-6	No	8001-78-3		
Zinc dialkyldithiophosphate	0-2	Yes	68457-79-4		
Additives	0-2	Yes	Proprietary Mixture		
Bitumen	0 -1	No	8052-42-4		
Lead Naphthenate	1 - 3	No	617090-14-5		
Product / Ingredient name	Lithium soaps fro	om natural fatty si	ubstances		
Section 4: First Aid Measures					
Inhalation exposure	Remove to fresh	air & provide oxyo	gen, if breathing is difficult. Contact physician		
· · · · · · · · · · · · · · · · · · ·			lush skin with water. Wash skin thoroughly with mild soap & water.		
Skin contact		s, call a physician.			
Swallowing or other	Do not induce vo Get medical advi		al no treatment is necessary unless large quantities are ingested.		
Eye contact	Rinse continuou:	sly with water for s	several minutes. Get medical attention, if irritation persists.		
Protection first-aiders		Disconnecting electrical supply. Ensure adequate ventilation and check that a safe and breathing area is available before entry into confined spaces.			
Section 5: Fire Fighting Measures					
5.1 Extinguishing media					
Unsuitable extinguishing media		Use dry powder, foam, carbon dioxide. Do not use direct water and wet chemicals, or water on the burning product. They may spread the fire. Use foam simultaneously on the surface.			
5.2 Special hazards arising from the substance or mix	5.2 Special hazards arising from the substance or mixture				
Hazards from the substance or mixture		Flammable liquids in pressurised containers may rupture and when exposed to heat, creating a highly flammable vapour cloud.			
Hazardous thermal decomposition products	particulates, gase	Incomplete combustion is likely to give rise to a complex mixture of airborne solid and liquid particulates, gases, including carbon monoxide, H <sub>2</sub> S, SO <sub>x</sub> (sulphur oxides) or sulphuric acid and unidentified organic and inorganic compounds.			
5.3 Advice for firefighters					
Special precautions for firefighters			oving all persons from the vicinity of the incident if there is a fire. No y personal risk or without suitable training.		
Special protective equipment for firefighters	(SCBA) with a ful helmets, protect	l face- piece opera	ate protective equipment and self-contained breathing apparatus ated in positive pressure mode. Clothing for firefighters (including ves) conforming to European standard EN 469 will provide a basic level its.		





6.1 Personal precautions, protective equipment and emergency procedures				
Keep non-involved personnel away from the area of spillage.				
For non-emergency personnel	Alert emergency personnel. Except in case of small spillage, Alert emergency personnel. Except in case of small spillages, the feasibility of any actions should always be assessed and advised, if possible, by a trained, competent person in charge of managing the emergency. Stop leak if safe to do so. Avoid direct contact with the product. Stay upwind / keep distance from source. In case of large spillages, alert occupants in downwind areas. Eliminate all ignition sources if safe to do so. Spillages of limited amounts of product, especially in the open air when vapours will be usually quickly dispersed, are dynamic situations, which will presumably limit the exposure to dangerous concentrations. Note : Recommended measures are based on the most likely spillage scenarios for this material; however, local conditions (wind, air temperature, wave / current direction and speed) may significantly influence the choice of appropriate actions.			
For emergency responders	For this reason, local experts should be consulted when necessary. Local regulations may also prescribe or limit actions to be taken. Small spillages: Normal antistatic working clothes are usually adequate. Large spillages: Full body suit of chemically resistant and thermal resistant material should be used. Work gloves providing adequate chemical resistance, specifically to aromatic hydrocarbons. Note: Gloves made of PVA are not water-resistant, and are not suitable for emergency use. Safety helmet, antistatic non-skid safety shoes or boots. Goggles and / or face shield, if splashes or contact with eyes is possible or anticipated. Respiratory Protection : A half or full-face respirator with filter(s) for organic vapours (and when applicable for H <sub>2</sub> S) a Self Contained Breathing Apparatus (SCBA) can be used according to the extent of spill and predictable amount of exposure. If the situation cannot be completely assessed, or if an oxygen deficiency is possible, only SCBA's should be used.			
6.2 Environmental precautions	Prevent product from entering sewers, rivers or other bodies of water. If necessary dike the product with dry earth, sand or similar non-combustible materials. In case of soil contamination, remove contaminated soil and treat in accordance with local regulations. In case of small spillages in closed waters (i.e. ports), contain product with floating barriers or other equipment. Collect spilled product by absorbing with specific floating absorbents. If possible, large spillages in open waters should be contained with floating barriers or other mechanical means. If this is not possible, control the spreading of the spillage, and collect the product by skimming or other suitable mechanical means. The use of dispersants should be advised by an expert, and, if required, approved by local authorities.			
6.3 Methods and material for containment and cleaning	up			
Small spill	Stop leak if without risk. Absorb spilled product with suitable non-combustible materials.			
Large spill	Large spillages may be cautiously covered with foam, if available, to limit vapour cloud formation. Do not use water jet. When inside buildings or confined spaces, ensure adequate ventilation. Transfer collected product and other contaminated materials to suitable containers for recovery or safe disposal.			
6.4 Reference to other sections	See Section 1: For emergency contact information. See Section 8: For information on appropriate personal protective equipment. See Section 13: For additional waste treatment information.			
Section 7: Handling and Storage				
7.1 Advice on general information – hygiene, storage	Obtain special instructions before use. Keep away from heat / sparks / open flames/hot surfaces. No smoking. Use and store only outdoors or in a well-ventilated area. Hazard of slipping on spilt product. Avoid release to the environment.			
7.2 Conditions for safe storage including any incompatibilities	Storage area layout, tank design, equipment and operating procedures must comply with the relevant regional, national or local legislation. Storage installations should be designed with adequate bunds in case of leaks or spills. Cleaning, inspection and maintenance of internal structure of storage tanks must be done only by properly equipped and qualified personnel as defined by national, local or company regulations. Store separately from oxidising agents. Keep only in the original container or in a suitable container for this kind of product. Keep container tightly closed and sealed until ready for use. Do not store in unlabelled containers. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Empty containers may contain harmful, flammable / combustible or explosive residue or vapours. Do not cut, grind, drill, weld, reuse or dispose of containers unless adequate precautions are taken against these hazards. Protect from sunlight.			
7.3 Specific end use(s) – Recommendations	Not available			



Vapour pressure Density Solubility (ies)



Section 8: Exposure Controls / Personal Protect	
The list of Identified Uses in Section 1 should be consul	lted for any available use-specific information provided in the Exposure Scenario(s).
8.1 Control parameters	
Occupational exposure limits	
Product / Ingredient name	Distillates, mixture of hydrocarbons
Exposure limits values	AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m <sup>3</sup> 8 hours. Form: mist and fume STEL: 3 mg/m <sup>3</sup> 15 minutes. Form: mist and fume [Air contaminant]. AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m <sup>3</sup> 8 hours. Form: mist and fume STEL: 3 mg/m <sup>3</sup> 15 minutes. Form: mist and fume.
Recommended monitoring procedures	If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres – Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres – Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres – General requirements for the performance of procedures for the measurement of chemical agents). Reference to national guidance documents for methods for the determination of hazardous substances will also be required.
8.2 Exposure control Appropriate engineering controls	Mechanical ventilation and local exhaust will reduce exposure via the air. Use oil resistant material in construction of handling equipment. Store under recommended conditions and if heated, temperature control equipment should be used to avoid overheating.
Individual protection measures	
Hygiene measures	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Ensure that eyewash stations and safety showers are close to the workstation location. Wash contaminated clothing before reuse.
Eye / face protection	Recommended: Safety glasses with side shields.
Skin protection	
Hand protection	4 – 8 hours (breakthrough time): nitrile rubber.
Body protection	Wear protective clothing if there is a risk of skin contact. Change contaminated clothes at the end of working shift.
Other skin protection	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary.
Environmental exposure control	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.
Section 9: Physical and Chemical Properties	
Appearance	Clear
Physical state	Smooth & Buttery
Colour	Brownish
Odor	Petroleum odor
Odour threshold	Not available
Dropping point	> 190 °C (ASTM D 2265)
Flash point	> 210 °C (Mineral Oil)
Evaporation rate	Not available
Flammability (solid, gas)	Not available
Flammability limits in air (lower), % by volume	Not available
Flammability limits in air (upper), % by volume	Not available



Not volatile

0.88 – 0.95 kg/L





Solubility (water)		Insoluble in water						
Partition coefficient (n-octanol/water)		Not available						
Decomposition temperature		No data						
Auto-ignition temperature		Not available						
Worked Penetration at 25°C		310 – 340 (ASTM	M D 217)					
Explosive properties		No data						
Oxidising properties		No data						
DMSO extractable compounds for base oil substance(s) according to IP346		Not available						
Section 10: Stability and Rea	ctivity							
10.1 Reactivity	··· · · ·	No specific test	data related to reactivity avail	able for this product or its ingr	edients.			
10.2 Chemical stability			ormal conditions	1 5				
10.3 Possibility of hazardous rea	ctions	Under normal c	conditions of storage and use, I	hazardous reactions will not o	ccur. Oxidising agent.			
10.4 Conditions to avoid			n extreme heat and oxidising a					
10.5 Incompatible materials		Incomplete con	nbustion is likely to give rise to	o a complex mixture of airborn de, H <sub>2</sub> S, SO <sub>x</sub> (sulphur oxides) or				
10.6 Hazardous decomposition			ganic and inorganic compound					
SECTION 11: Toxicological In								
11.1 Information on toxicologica	al effects							
Acute toxicity								
Product / ingredient name	Result		Species	Dose	Exposure			
	LC 50 Inhalation du	sts and mists	Rat	>2.18mg/l	4 hours			
Distillate (Petroleum), hydro treated heavy paraffinic	LD 50 Deri	mal	Rabbit	> 5000 mg/kg	-			
licated neavy paramine	LD 50 Or	al	Rat	>15000 mg/kg	-			
Irritation / corrosion								
Skin								
Eye		No known significant effects or critical hazards.						
Respiratory								
Sensation								
Skin		No known significant effects or critical hazards.						
Respiratory								
Mutagenicity		No data available to indicate product or any components present greater than 0.1 % are multigene or genotoxic.						
Carcinogenicity		The base oil(s) in this product is based on an severely hydrotreated distillate.						
Reproductive toxicity		The product should not be regarded as a carcinogen. Contains no ingredient listed as toxic to reproduction.						
Specific target organ toxicity – single exposure								
Specific target organ toxicity – repeated exposure		Not classified						
Aspiration hazard		Aspiration hazard – Category 1						
Information on likely routes of exposure		Not available						
Potential acute health effects								
Eye contact		Eye contact may cause redness and transient pain.						
Inhalation		Inhalation of oil mist or vapours at elevated temperatures may cause respiratory irritation.						
mmalation	Skin contact		No known significant effects or critical hazards.					
		No known signi	ificant effects or critical hazard		May be fatal if swallowed and enters airways.			
Skin contact		-						
Skin contact Ingestion		-						
Skin contact Ingestion Potential chronic health effects		May be fatal if s	wallowed and enters airways.					
Skin contact Ingestion		May be fatal if s No known signi	wallowed and enters airways. ificant effects or critical hazard		The product should not be			







<form>Training endion Product / ingredient name tertily effects or critical hazards.Product / ingredient name tertily effects or Continuement or Specific hazard \&gt;Not explained (Eds or critical hazards.Other information Specific hazard \&gt;Not explained (Information Specific hazard \&gt;12.1 TotakityNot explained (Information Specific hazard \&gt;12.2 Presistence and degradability or Specific hasard \&gt;Not explained (Information Specific hazard \&gt;12.3 Feasite of Prak Veb assessment \&gt;Not explained (Information Information New Les synfaces causing physical Hazards.12.4 Mobility in soilNot explained (Information New Les synfaces causing physical Hazards.12.5 Results of Prak Veb assessment \&gt;Not explained (Information New Les synfaces causing physical Hazards.12.6 Construct of the Specific Information New Les synfaces causing physical Hazards.Not explained (Information New Les synfaces causing physical Hazards.2.6 Construct New Les synfaces causing physical Hazards.Not explained (Information New Les synfaces causing physical Hazards.2.6 Construct New Les synfaces causing physical Hazards.Not explained (Information New Les synfaces causing physical Hazards.2.6 Construct New Les synfaces causing physical Hazards.Not explained (Information New Les synfaces causing physical Hazards.2.6 Construct New Les synfaces causing physical Hazards.Not explained (Information New Les synfaces causing physical Hazards.2.6 Construct New Les synfaces causing physical Hazards.Not explained (Information New Les synfaces causing physical Hazards.2.6 Construct New Les synfaces causing physical Hazards.Not explained (Information New Les synfaces cau</form>	Mutagenicity							
<form>          Image: Product Program Provides Provides</form>								
intermation Specific hazard         Not available           Other information Specific hazard         Not available           12.1 Toticky         Not expected to be harmful to aquatic organicm.           12.2 Presistence and degradability in oli         Not inhiserently holiolity isol isolargamme.           12.3 Bioaccumulative potential         Not inhiserently holiolity isol isolargamme.           12.4 Mubility in oli         Not applicable           12.5 Beautics OPE a/VP3 assessement         Not applicable           12.5 Destits OPE a/VP3 assessement         Not applicable           12.6 Differed SP4 available sequencing         Work applicable           Section 12: Dispoid Considerations         Not applicable           Section 13: Dispoid Considerations genet: advice considered mobile:         Not applicable           Product Methods of disposal         Where possible log, in the abterne or fole-on constainted on any available use-specific morganicable, and interest reportable consultated is not any available use-specific morganicable.           Product Methods of disposal         Where possible log, in the abterne or fole-on constainted on any available use-specific morganicable.           Natardous waste         Water possible log, in the abterne or fole-on constainted on any available use-specific morganicable.           Product Methods of disposal         Water possible log, in the abterne or fole-on constainted on any available usespecific constainted on water usubtare in thematere tot	5,		No known s	No known significant effects or critical hazards.				
Other Information Specific hazard         Not available           Section 12: Ecological Informative 21: Toxicity         Not expected to be harmful to aquatic organisms.           12: Presistence and degradability         Not considered mobile.           12: A Mobility in soil         Not considered mobile.           12: A Bioaccumulation is unikely to be significant because of the low water solubility of this product.           12: A Mobility in soil         Not considered mobile.           12: A Book in the section contain generic advices of the low water solubility of maging physical damage to organisms.           12: A formation in this section contain generic advices of the low moter suffaces causing physical damage to organisms.           Product Methods of disposal         Where possible (e.g. in the absence of relevant contamination), necycling of used substance i. fessible and economended. This substance can be humed or interinsets, subject to national/ocal moter or mode product bible (sognal to commended This substance in the function on trans water is and the shared or function (sognal substance in the substance in the function on trans water is and the shared or function (sognal substance in the substance substances substance in the substance in the substance in the s								
Section 12: Ecological Information         Not expected to be harmful to aquatic organisms.           12.1 Toxicity         Not expected to be harmful to aquatic organisms.           12.3 Broistnee and degradability         Not expected to be harmful to aquatic organisms.           12.4 Mobility is soll         Not expected mobile.           12.4 Mobility is soll         Not expected mobile.           12.5 Results of PET & vPVB assessment         Not expected mobile.           12.6 Other adverse effects         Oxygen transfer could also be impaired.           Section 13: Disposal Considerations         The information insigneenic advected and belies in Section 1 should be consulted for any available use specific information provided in the Exposure Scenario(s).           Product Methods of disposal         Where possible (eq. in the absence or relevant commanication), recycling of used substance is feesible and recommended. This substance can be burned or incinerated, subject to national/coal authorision insits, addre pruvations and and used is possal           Product Methods of disposal         Yos           Hazardous swate         Yos           European waste catalogue (EWC) Waste Code 13 03 07°         Waste expected incident invulsion and hear transmission oils.           Feesible expected incident invulsion of vaste should be avoided or minimised wherever possible. Waste packaging should be involved.           14.1 Tansport Information         -         -         -         -           <			Not availab	le				
1.2.1 relation     Not respected to be harmful to aquatic organisms.       12.2 Pesitance and degradability     Not relative to be dignificant to be significant to be assume of the low water solubility of this product.       12.3 Reaccumulative potential     Not considered mobile.       12.4 Other diverse effects     Not considered mobile.       2.5 Other diverse effects     Not application water. Spills may form a film on water surfaces assume physical damage to organisms. Not application water surfaces and user application. Not application water surfaces assume physical damage to organisms. Not application water surfaces and user application. Not application water surfaces assume physical damage to organisms. Not application water surfaces assume physical damage to organis	•	1						
12.2 Persistence and degradability       Not therently biodegradable.         12.3 Bioacumulative potential       Bioaccumulation is unlikely to be significant because of the low water solubility of this product.         12.4 Mobility in sold       Not considered mobile.         12.5 Results of PBT & vPvB assessment       Insolubie in water. Spills may form a film on water surfaces causing physical danage to organisms. Oxygen transfer coald also be impaired.         Section 13: Disposal Considerations:       Insolubie in water. Spills may form a film on water surfaces causing physical danage to organisms. Oxygen transfer coald also be impaired.         Product Methods of disposal       Where possible (e.g. in the absence of relevant contamination) recycling or used substance in freewate contamination limits, stering contacting using legislation. may likely legislation. The product legislation may recycling or used substance in freewate contamination limits. stering contacting using legislation. may likely legislation.         Product Methods of disposal       Ves         European waste catalogue (EWC) Water Code 13 03 07*       Water designation.         Packaging       Merenzibased non-chioritated insulating and heat transmission lesis. The selection or transferidue de avoided or minimised wherever possible.         Section 14: Transport Information       DAPR/RID       MON IMO/IMDG Gassification       Not regulated         14.1 UN number       ADR/RID       ADR       More gulated       Not regulated         14.2 UN poper shipping name       -			Not expect	ed to be harmful to aquatic org	anisms.			
12.3 Biocarmulative potential       Not considered mobile.         12.4 Mobility in soil of PTE 4-VPI assessmet       Not applicable         12.6 Other adverse effects       Not applicable         2.6 Other adverse effects       Not applicable         2.6 Motio of PTE 4-VPI assessmet       Not applicable         Section 2.5 Section contains genetic advice-motion advices to the absence of relevant containation, reciping of used substance is feasible and ecommended. This substance can be buind or indinerated, subject to national/local array and array auby legislation. Containitation finities. Settory regulations and array auby legislation. Containitation interines. Settory regulation and array auby legislation. Containitation interes expression and array auby legislation. Containitation errow density regulation and array auby legislation. Containitation errow density regulation and array auby legislation. Containitation errow density regulation and array auby legislation. Containitation errow density and array auby legislation. Containitation errow density and array auby legislation. Containitation errow density regulation and array auby legislation. Containitation errow density and array auby legislation. Containitation errow density and array auby legislation. Containitation errow density regulation and array auby legislation. Containitation errow density regulation and array auby legislation. Containitiation errow density regulation and array auby legislation. Containitiation errow density regulation and array auby legislation. Containitiation errow density and array auby legislation. Containitiation errow density regulation and array auby legislation. Containitiation errow density and arrow density. The regulation and the expressicon considerend webex erow density. The regulation is and relevab	· · · · · · · · · · · · · · · · · · ·		•					
12.4 Mobility in soll       Not considered mobile.         12.5 Results of PGT & VPR assessment       Insolubile inwater. Spills may form a film on water surfaces causing physical damage to organisms. Consenting the water. Spills may form a film on water surfaces causing physical damage to organisms. Consenting the information in this section contains generic advice and used to e impaired.         Section 13: Disposal Consideration:       The information in this section contains generic advice and used to explice (e.g. in the absence of relevant contamination) invested in the Exposure Scenario(S).         Product Methods of disposal       Where possible (e.g. in the absence of relevant contamination) invested or galified values in Section 1 should be consulted for any available use-specific organisation, and/or prescribe composition linits and methods for recovery or disposal         Hazardous waste       Yes         European waste catalogue (EWC) Waste Code 13 03 07*       Waste designation.         Packaging       Yes         Kethods of disposal       The generation of vaste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not facesifies.         Packaging       ADR / R/D       ADN / MO/ IMDG Classification       CAO / IAA Classification         14.1 UN number       Not regulated       Not regulated       Not regulated         14.3 Parking group       -       -       -         14.3 Low proper shipping name       -       - <td colspan="2"></td> <td></td> <td>, ,</td> <td>nt because of the low water solu</td> <td>Ibility of this product.</td>				, ,	nt because of the low water solu	Ibility of this product.		
12.6 Other adverse effects     Soluble in water. Splis may form a fitm on water surfaces causing physical damage to organisms. Novigen transfer could also be impaired.       Section 13: Disposal Considerations:       Section 13: Disposal Considerations:       Section 13: Disposal Considerations:       Section 13: Disposal Considerations:       Section 20: Sec				· · ·				
Autone during attransport       Oxygen transfer could also be impaired.         Section 13: Disposal Consideration       Oxygen transfer could also be impaired.         Section 13: Disposal Consideration       Oxygen transfer could also be impaired.         Product Methods of disposal       Where possible (e.g. in the absence of relevant contamination dimeted in increated, subject to national/local authorisation, relevant contamination dimits, safery regulations and an quality legislation. Contamination dimits, safery regulation and an quality legislation. Contamination dimits, safery regulations and an quality legislation. Contamination dimits and methods for recovery or disposal         Hazardous waste       Yes       Temperation       Temperation       Temperation of vaste safet and incomination dimits and heat transmission oils.         Record of disposal       Mineral-based non-chlorinated insulating and heat transmission oils.       Ten generation of vaste should be avoided or minimated there possible.       Not applied in the absence of relevant contamination dimits with reversion of vaste assign and in a call type legislation.         Methods of disposal       ADR / RID       ADN       IMO / IMDG Classification			Not applica	ble				
The information in this section contains generic advice and guidance. The list of identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(S).         Product Methods of disposal       Where possible (e.g. in the absence of relevant contamination), recycling of used substance is a behavior on incinerated, subject to national/local autoinal/local autoinal/instance, requesting and incine safety regulations and air qualified uses thandlers. National legislation. Contaminated or wase substance (not directly recyclabic): Disposal can be carried out directly, or by delivery to composition limits and methods for recovery or disposal can be carried out directly, or by delivery to composition limits and methods for recovery or disposal can be carried out directly, or by delivery to composition limits and methods for recovery or disposal can be carried out directly, or by delivery to composition limits and methods for recovery or disposal can be carried out directly, or by delivery to composition limits and methods for recovery or disposal can be carried out directly, or by delivery to composition limits and methods for recovery or disposal.         Hazardous waste       Yes         European waste catalogue (EWC) Waste Code 13 03 07*       Waste designation.         Methods of disposal       Mineral-based non-chlorinated insulating and heat transmission oils.         Tansport Information       Deprevation of Yaste should be avoided or minimised where recycling is not feasible.         Section 15:       ADR / RID       ADN       IMO / IMDG Classification       ICAO / IATA Classification         14.1 UN number       ADR / RID       ADN       <	12.6 Other adverse effects	12.6 Other adverse effects		Insoluble in water. Spills may form a film on water surfaces causing physical damage to organisms.				
information provided in the Exposure Scenario(s).  Where possible (e.g. in the absence of relevant contamination), recycling of used substance (an be burned or inclinerated, subject to national/local authorisations, relevant contamination limits, safety regulations and air quality legislation. Contaminated or qualified waste handlers. National legislation may describe composition. Imits and the directly recycluble): Disposal can be carried out directly, recycling egulations and air quality legislation. Contaminated or qualified waste handlers. National legislation may describe composition. Imits and methods for recovery or disposal Hazardous waste  Ves European waste catalogue (EWC) Waste Code 13 03 07* Mineral-based non-chlorinated insulating and heat transmission oils. The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Inclineration of vaste should be avoided or minimised wherever possible. Waste packaging should be recycled. Inclineration of vaste should be avoided or minimised wherever possible. Waste packaging should be recycled. Inclineration or landfill should on ye considered when recycling. Vaste packaging should be recycled. Inclineration or landfill should on ye considered when recycling. Vaste packaging should be recycled. Inclinerated assesses in the should on tregulated Not regulated Not Point Point (ES) Po	Section 13: Disposal Consideration	าร						
Appendix Methods of disposal         Sesible and recommended. This subtance can be burned or incineated, subject on attional/local fuely subjects on a subject of a subj			d guidance. T	he list of Identified Uses in Secti	ion 1 should be consulted for ar	ny available use-specific		
European waste catalogue (EWC) Waste Code 13 03 07*       Mieral-based non-chlorinated insulating and heat transmission oils.         Methods of disposal       The generation of waste should be avoideded or minimised wherever possible. Waste packaging should be crecicled are minimised wherever possible. Waste packaging should be avoidered when recycling is not feasible.         Section 14: Transport Information:         Termational transport regulation:         INMOV (MDG Classification (CAO / IATA Cl	Product Methods of disposal		feasible and recommended. This substance can be burned or incinerated, subject to national/local authorisations, relevant contamination limits, safety regulations and air quality legislation. Contaminated or waste substance (not directly recyclable): Disposal can be carried out directly, or by delivery to qualified waste handlers. National legislation may identify a specific organisation, and/or prescribe					
Packaging       Mineral-based non-chlorinated insulating and heat transmission oils.         Methods of disposal       The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.         Section 14: Transport Information       ADR / RID       ADN       IMO / IMDG Classification       ICAO / IATA Classification         14.1 UN number       Not regulated       Not regulated       Not regulated       Not regulated         14.2 UN proper shipping name       -       -       -       -         14.3 Transport hazard class(es)       -       -       -       -         14.4 Packing group       -	Hazardous waste		Yes					
Methods of disposal       The generation of waste should be avoided or minimised wherever possible.       Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.         Section 14: Transport Information         International transport regulations         International transport regulations       ADR / RID       ADN       IMO / IMDG Classification       ICAO / IATA Classification         14.1 UN number       Not regulated       Not regulated       Not regulated       Not regulated         14.2 UN proper shipping name       -       -       -       -         14.3 Transport hazard class(es)       - <t< td=""><td>European waste catalogue (EWC) Waste</td><td>Code 13 03 07*</td><td>Waste desi</td><td>gnation.</td><td></td><td></td></t<>	European waste catalogue (EWC) Waste	Code 13 03 07*	Waste desi	gnation.				
Methods of disposal       recycled. Incineration or landfill should only be considered when recycling is not feasible.         Section 14: Transport Information         International transport regulations         Methods of disposal       ICAO / IATA Classification         IADR / RID       ADD / RID       MOV (PALA) Classification       ICAO / IATA Classification         14.1 UN number       IOAO / IATA Classification       ICAO / IATA Classification         14.1 UN number       O O O       O         14.2 UN proper shipping name       O       O       O         14.3 Transport hazard class(es)       O       O       O         14.4 Packing group       O       O       O         14.4 Packing group       O       O       O         14.5 Environmental hazards       No       No         Additional Information       O       O       O         14.5 Environmental hazards       No       No       No	Packaging		Mineral-ba	sed non-chlorinated insulating	and heat transmission oils.			
International transport regulationsInternational transport regulationsADR / RIDADNIMO / IMDG ClassificationICAO / IATA Classification14.1 UN numberNot regulatedNot regulatedNot regulatedNot regulatedNot regulated14.2 UN proper shipping name14.3 Transport hazard class(es)14.4 Packing group14.4 Packing group14.5 Environmental hazardsNoNoNoNoNoAdditional Information14.6 Special precautions for user oilsNoNoNoNoNo14.6 Special precautions for user oilsMARPOL > TARSPOL	Methods of disposal							
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14.1 UN numberNot regulatedNot regulatedNot regulatedNot regulated14.2 UN proper shipping name $  -$ 14.3 Transport hazard class(es) $  -$ 14.4 Packing group $  -$ 14.5 Environmental hazardsNoNoNoAdditional Information $  -$ 14.5 Experiation for user oils $  -$ 14.5 Experiation for user oils $  -$ I definition of the set of t	International transport regulations							
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14.3 Transport hazard class(es) $  -$ 14.4 Packing group $   -$ 14.5 Environmental hazardsNoNoNoAdditional Information $   -$ 14.6 Special precautions for user oils $   -$ 14.6 Special precautions for user oils14.7 Transport in bulk according to Amrev 1 of MARPOL 78 and the EC CodeSection 15: Regulatory InformatiorSection 15: Regulatory InformatiorSole substances subject $-$ is for the substance or mixture EU Regulation (EC) No. 1907/EU REACH)Annex XIV - List of substances subject $-$ the substance or mixture EU Regulation (EC) No. 1907/EU EU EU EUAnnex XIV - List of substances subject $-$ the substance are listedSubstances of very high concernNone of the components are listedSubstances of very high concernNot applic bulk according loven $-$ bulk according loven $-$ bulk according $-$ bulk acco	14.1 UN number	Not regul	ated	Not regulated	Not regulated	Not regulated		
14.4 Packing group $   -$ 14.5 Environmental hazardsNoNoNoAdditional Information $  -$ 14.6 Special precautions for user oilssection 15: Regulatory InformatioSection 15: Regulatory Informatiorsection 15: Regulatory Informatiorsection 15: Regulatory Informatiorsection 15: Section 15: Regulatory InformatiorSection 15: Regulatory InformatiorSection 15: Regulatory InformatiorNonex XIV - List of substances subject to atthrivisation Annex XIV - List of substances subject to: placeAnnex XIV - List of substances subject to: placeSection 15: Regulatory InformatiorAnnex XIV - List of substances subject to: placeSection 15: Regulatory InformatiorNonex UV - List of substances subject to: placeSection 15: Regulatory InformatiorAnnex XIV - List of substances subject to: placeSection 15: Regulatory InformatiorAnnex XIVI - Section 10: PlaceSection 10: PlaceSection 10: PlaceAutory of Chemical Substances List (DSL) - YesAutory Informatio: </td <td>14.2 UN proper shipping name</td> <td>-</td> <td></td> <td>-</td> <td>-</td> <td>_</td>	14.2 UN proper shipping name	-		-	-	_		
14.5 Environmental hazardsNoNoNoAdditional Information14.6 Special precautions for user oils14.7 Transport in bulk according to American Source of MARPOL T/8 and the substance or mixtureSection 15: Regulatory InformationIdea to a substance subject to fMARPOL T/8 and the substance or mixtureSection 15: Segulatory Informations / legitations / legitations substances or mixtureIdea to a substance subject to substance or mixtureSection 15: Segulatory InformationNone of the substance or mixture EU Regulation (EC) No. 1907 (REACH)Annex XIV - List of substances subject to substances or mixture substance or mixture substances of very high concernAnnex XIV - List of substances subject to placing on the manufacture, placing on the market and use of certain dangerusSubstances of very high concernAnnex XIV - Restrictions on the manufacture, placing on the market and use of certain dangerusSubstances List OSL - VesSubstances List (DSL) - YesCanadaOmestic Substances List (DSL) - YesCanada	14.3 Transport hazard class(es)	-		-	-	-		
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14.6 Special precautions for user oils         14.7 Transport in bulk according to Annex I of MARPOL 73/78 and the IBC Code         Section 15: Regulatory Information         15.1 Safety, health and environmental regulations / legistion specific for the substance or mixture EU Regulation (EC) No. 1907/2006 (REACH)         Annex XIV – List of substances subject to authorisation Annex XIV       None of the components are listed         Substances of very high concern       None of the components are listed         Annex XVI – Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles.       Not applicable         International Lists National Inventory       Inventory name         Australia       Australian Inventory of Chemical Substances (AICS) – Yes         Canada       Domestic Substances List (NDSL) – No	14.5 Environmental hazards	No		No	No	No		
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Canada Non-Domestic Substances List (NDSL) – No	Australia	Istralia			Australian Inventory of Chemical Substances (AICS) – Yes			
	Canada							
	China							







_	European Inventory of Existing Commercial Chemical Substances (EINECS) – Yes			
Europe	European List of Notified Chemical Substances (ELINCS) – No			
Japan	Inventory of Existing and New Chemical Substances (ENCS) – Yes			
Korea	Existing Chemicals List (ECL) – Yes			
New Zealand	New Zealand Inventory – Yes			
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS) – Yes			
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory – Yes			
	oly with the inventory requirements administered by the governing country(s) uct are not listed or exempt from listing on the inventory administered by the governing country(s).			
Section 16: Other Information				
Revision comments				
Legend to abbreviations				
ADR	European agreement concerning the international carriage of dangerous good by road.			
RID	Regulations agreement concerning the international carriage of dangerous good by rail.			
IMDG Code	International Maritime Dangerous Goods Code.			
ICAO	International Civil Aviation Organization.			
IATA	International Air Transport Association.			
GHS	Globally Harmonized System of Classification and Labeling of Chemicals.			
CLP	Classification, Labelling and Packaging Regulation [Regulation (EC) No.1272/2008].			
SCBA	Self-Contained Breathing Apparatus.			
REACH	Registration, Evaluation, Authorization and Restriction of Chemicals Regulation [Regulation (EC) No. 1907/2006].			
LC 50	Median lethal concentration.			
LD 50	Median lethal dose.			
РВТ	Persistent, Bio accumulative and Toxic.			

GANDHAR OIL REFINERY (INDIA) LTD.		
Taloja Plant	Plot No.10, MIDC, Main Road, Taloja, Taluka Panvel, District - Raigad 410208, India.	
Silvassa Plant	Plot No. 2, Survey No. 678/1/3, Village Naroli, Near Naroli Check Post, Silvassa, Dadra & Nagar Haveli, Union Territory 396230, India.	
Emergency / Info Phone No.	Phone: +91-22-40635600 • Fax: +91-22-40635601	
Email	info@gandharoil.com	





## **DIVYOL TRIBOROL EPX BB 2 GREASE**

Section 1: Identification of the Substance / Mixture					
1.1 Product identifier					
Product name	Divyol Triborol El	PX BB 2 Grease			
Product description	High Pressure Ind				
Product type	Grease				
MARPOL Annex-1	****				
1.2 Identified uses					
Distribution of substance	Automotive & Inc	dustrial Grease			
Formulation & (re)packing of substance & mixtures	Automotive & Inc				
Manufacture of substance					
Functional fluids		Automotive & Industrial Grease			
Section 2: Hazard Identification	Automotive & Inc	uustriai Grease			
4-Extreme	Health		1		
3-High	Flammability		1		
2-Moderate	Reactivity		0		
1-Slight	Special		-		
Section 3: Compostion / Information on Ingredi	ents				
Chemical Name / Ingredients	% by wt.	Hazardous	CAS No.		
Lithium Hydroxide	0.5 - 2	Yes	1310-66-3		
Mineral Oil	82 - 90	Yes	64741-88-4, 64742-01-4, 64742-52-5, Proprietary Mixture		
12 HSA	4 - 10	No	106-14-9		
НСО	2-6	No	8001-78-3		
Zinc dialkyldithiophosphate	0 - 2	Yes	68457-79-4		
Additives	0 - 2	Yes	Proprietary Mixture		
Bitumen	0-1	No	8052-42-4		
Lead Naphthenate	1 - 3	No	617090-14-5		
Product / Ingredient name	Lithium soaps fro	om natural fatty su	bstances		
Section 4: First Aid Measures					
Inhalation exposure	Remove to fresh	Remove to fresh air & provide oxygen, if breathing is difficult. Contact physician			
Skin contact		Remove contaminated clothing. Flush skin with water. Wash skin thoroughly with mild soap & water. If irritation occurs, call a physician.			
Swallowing or other		Do not induce vomiting. In general no treatment is necessary unless large quantities are ingested. Get medical advice.			
Eye contact	Rinse continuous	Rinse continuously with water for several minutes. Get medical attention, if irritation persists.			
Protection first-aiders	Disconnecting electrical supply. Ensure adequate ventilation and check that a safe and breathing area i available before entry into confined spaces.				
Section 5: Fire Fighting Measures					
5.1 Extinguishing media					
Unsuitable extinguishing media	Use dry powder foam carbon dioxide. Do not use direct water and wet chemicals or water on the				
5.2 Special hazards arising from the substance or mixture					
Hazards from the substance or mixture	Flammable liquids in pressurised containers may rupture and when exposed to heat, creating a highly flammable vapour cloud.				
Hazardous thermal decomposition products	Incomplete combustion is likely to give rise to a complex mixture of airborne solid and liquid particulates, gases, including carbon monoxide, H <sub>2</sub> S, SO <sub>x</sub> (sulphur oxides) or sulphuric acid and unidentified organic and inorganic compounds.				
5.3 Advice for firefighters					
Special precautions for firefighters	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.				
Special protective equipment for firefighters	Firefighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face, piece operated in positive pressure mode. Clothing for firefighters (including				





6.1. Personal precautions protective equipment and emergency procedures				
6.1 Personal precautions, protective equipment and emergency procedures				
For non-emergency personnel	Keep non-involved personnel away from the area of spillage. Alert emergency personnel. Except in case of small spillages, the feasibility of any actions should always be assessed and advised, if possible, by a trained, competent person in charge of managing the emergency. Stop leak if safe to do so. Avoid direct contact with the product. Stay upwind / keep distance from source. In case of large spillages, alert occupants in downwind areas. Eliminate all ignition sources if safe to do so. Spillages of limited amounts of product, especially in the open air when vapours will be usually quickly dispersed, are dynamic situations, which will presumably limit the exposure to dangerous concentrations. Note : Recommended measures are based on the most likely spillage scenarios for this material; however, local conditions (wind, air temperature, wave / current direction and speed) may significantly influence the choice of appropriate actions.			
For emergency responders	For this reason, local experts should be consulted when necessary. Local regulations may also prescribe or limit actions to be taken. Small spillages: Normal antistatic working clothes are usually adequate. Large spillages: Full body suit of chemically resistant and thermal resistant material should be used. Work gloves providing adequate chemical resistance, specifically to aromatic hydrocarbons. Note: Gloves made of PVA are not water-resistant, and are not suitable for emergency use. Safety helmet, antistatic non-skid safety shoes or boots. Goggles and / or face shield, if splashes or contact with eyes is possible or anticipated. Respiratory Protection : A half or full-face respirator with filter(s) for organic vapours (and when applicable for H <sub>2</sub> S) a Self Contained Breathing Apparatus (SCBA) can be used according to the extent of spill and predictable amount of exposure. If the situation cannot be completely assessed, or if an oxygen deficiency is possible, only SCBA's should be used.			
6.2 Environmental precautions	Prevent product from entering sewers, rivers or other bodies of water. If necessary dike the product with dry earth, sand or similar non-combustible materials. In case of soil contamination, remove contaminated soil and treat in accordance with local regulations. In case of small spillages in closed waters (i.e. ports), contain product with floating barriers or other equipment. Collect spilled product by absorbing with specific floating absorbents. If possible, large spillages in open waters should be contained with floating barriers or other mechanical means. If this is not possible, control the spreading of the spillage, and collect the product by skimming or other suitable mechanical means. The use of dispersants should be advised by an expert, and, if required, approved by local authorities.			
6.3 Methods and material for containment and cleaning	up			
Small spill	Stop leak if without risk. Absorb spilled product with suitable non-combustible materials.			
Large spill	Large spillages may be cautiously covered with foam, if available, to limit vapour cloud formation. Do not use water jet. When inside buildings or confined spaces, ensure adequate ventilation. Transfer collected product and other contaminated materials to suitable containers for recovery or safe disposal.			
6.4 Reference to other sections	See Section 1: For emergency contact information. See Section 8: For information on appropriate personal protective equipment. See Section 13: For additional waste treatment information.			
Section 7: Handling and Storage				
7.1 Advice on general information – hygiene, storage	Obtain special instructions before use. Keep away from heat / sparks / open flames/hot surfaces. No smoking. Use and store only outdoors or in a well-ventilated area. Hazard of slipping on spilt product. Avoid release to the environment.			
7.2 Conditions for safe storage including any incompatibilities	Storage area layout, tank design, equipment and operating procedures must comply with the relevant regional, national or local legislation. Storage installations should be designed with adequate bunds in case of leaks or spills. Cleaning, inspection and maintenance of internal structure of storage tanks must be done only by properly equipped and qualified personnel as defined by national, local or company regulations. Store separately from oxidising agents. Keep only in the original container or in a suitable container for this kind of product. Keep container tightly closed and sealed until ready for use. Do not store in unlabelled containers. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Empty containers may contain harmful, flammable / combustible or explosive residue or vapours. Do not cut, grind, drill, weld, reuse or dispose of containers unless adequate precautions are taken against these hazards. Protect from sunlight.			
7.3 Specific end use(s) – Recommendations	Not available			



Vapour pressure Density Solubility (ies)



Section 8: Exposure Controls / Personal Protect	tion
The list of Identified Uses in Section 1 should be consu	Ited for any available use-specific information provided in the Exposure Scenario(s).
8.1 Control parameters	
Occupational exposure limits	
Product / Ingredient name	Distillates, mixture of hydrocarbons
Exposure limits values	AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m <sup>3</sup> 8 hours. Form: mist and fume STEL: 3 mg/m <sup>3</sup> 15 minutes. Form: mist and fume [Air contaminant]. AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m <sup>3</sup> 8 hours. Form: mist and fume STEL: 3 mg/m <sup>3</sup> 15 minutes. Form: mist and fume.
Recommended monitoring procedures	If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres – Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres – Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres – General requirements for the performance of procedures for the measurement of chemical agents). Reference to national guidance documents for methods for the determination of hazardous substances will also be required.
8.2 Exposure control Appropriate engineering controls	Mechanical ventilation and local exhaust will reduce exposure via the air. Use oil resistant material in construction of handling equipment. Store under recommended conditions and if heated, temperature control equipment should be used to avoid overheating.
Individual protection measures	
Hygiene measures	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Ensure that eyewash stations and safety showers are close to the workstation location. Wash contaminated clothing before reuse.
Eye / face protection	Recommended: Safety glasses with side shields.
Skin protection	
Hand protection	4 – 8 hours (breakthrough time): nitrile rubber.
Body protection	Wear protective clothing if there is a risk of skin contact. Change contaminated clothes at the end of working shift.
Other skin protection	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary.
Environmental exposure control	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.
Section 9: Physical and Chemical Properties	
Appearance	Clear
Physical state	Smooth & Buttery
Colour	Brownish
Odor	Petroleum odor
Odour threshold	Not available
Dropping point	> 195 °C (ASTM D 2265)
Flash point	> 210 °C (Mineral Oil)
Evaporation rate	Not available
Flammability (solid, gas)	Not available
Flammability limits in air (lower), % by volume	Not available
Flammability limits in air (upper), % by volume	Not available



Not volatile

0.88 – 0.95 kg/L





	Insoluble in wat	ter				
Solubility (water) Partition coefficient (n-octanol/water)						
· · · · ·						
Worked Penetration at 25°C		A D 217)				
	No data					
base oil substance(s)	Not available					
	<3 %					
ctivity						
	No specific test	data related to reactivity availa	able for this product or its ingr	edients.		
ctions	Under normal c	onditions of storage and use, I	nazardous reactions will not or	ccur. Oxidising agent.		
	Keep away from	n extreme heat and oxidising a	gents.			
products						
formation						
l effects						
Result		Species	Dose	Exposure		
LC 50 Inhalation due	sts and mists	Rat	>2.18mg/l	4 hours		
LD 50 Dermal		Rabbit	> 5000 mg/kg	-		
LD 50 Ora	al	Rat	>15000 mg/kg	-		
	No known significant effects or critical hazards.					
	No known significant effects or critical hazards.					
	No data available to indicate product or any components present greater than 0.1 % are multigene or genotoxic.					
	The product should not be regarded as a carcinogen.					
gle exposure	Not classified					
	Aspiration hazard – Category 1					
oosure	Not available					
	Eye contact may cause redness and transient pain.					
Eye contact Inhalation		Inhalation of oil mist or vapours at elevated temperatures may cause respiratory irritation.				
	Inhalation of oil	mist or vapours at elevated te	No known significant effects or critical hazards.			
	No known signi					
	No known signi	ficant effects or critical hazard				
	No known signi May be fatal if s	ficant effects or critical hazard	S.			
	base oil substance(s) ctivity ctions products formation l effects Result LC 50 Inhalation dus LD 50 Derr	iter)Not availableNo dataNot available265 - 295 (ASTNNo dataNo database oil substance(s)No tavailable <3 %	No data         Not available         265 - 295 (ASTM D 217)         No data         No data         base oil substance(s)       Not available         <3 %	ter) Not available Not available Not available Antipart and Antipart		







Mutagenicity						
Teratogenicity			significant effects or critical haz	ards.		
Product / ingredient name						
Fertility effects		Not such the la	1-			
Other information Specific hazard		Not availab	le			
Section 12: Ecological Information						
12.1 Toxicity			ed to be harmful to aquatic org	anisms.		
12.2 Persistence and degradability		Not inherently biodegradable.				
12.3 Bioaccumulative potential				nt because of the low water solu	bility of this product.	
12.4 Mobility in soil			ered mobile.			
12.5 Results of PBT & vPvB assessment	:	Not applica				
12.6 Other adverse effects			n water. Spills may form a film of nsfer could also be impaired.	n water surfaces causing physica	al damage to organisms.	
Section 13: Disposal Consideration						
The information in this section contains information provided in the Exposure So	generic advice and enario(s).	d guidance. T	he list of Identified Uses in Sect	ion 1 should be consulted for ar	ny available use-specific	
Product Methods of disposal		feasible and authorisatio or waste su qualified w	Where possible (e.g. in the absence of relevant contamination), recycling of used substance is feasible and recommended. This substance can be burned or incinerated, subject to national/local authorisations, relevant contamination limits, safety regulations and air quality legislation. Contaminated or waste substance (not directly recyclable): Disposal can be carried out directly, or by delivery to qualified waste handlers. National legislation may identify a specific organisation, and/or prescribe composition limits and methods for recovery or disposal			
Hazardous waste		Yes				
European waste catalogue (EWC) Waste Code 13 03 07*		Waste designation.				
Packaging		Mineral-based non-chlorinated insulating and heat transmission oils.				
Methods of disposal		The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.				
Section 14: Transport Information						
International transport regulations						
	ADR / R	ID	ADN	IMO / IMDG Classification	ICAO / IATA Classification	
14.1 UN number	Not regul	ated	Not regulated	Not regulated	Not regulated	
14.2 UN proper shipping name	_		_	_	_	
14.3 Transport hazard class(es)	_		-	_	_	
14.4 Packing group	_		-	_	_	
14.5 Environmental hazards	No		No	No	No	
Additional Information	_		-	-	-	
14.6 Special precautions for user oils						
14.7 Transport in bulk according to An	nex   of MARPOL	73/78 and th	e IBC Code			
Section 15: Regulatory Informatio						
15.1 Safety, health and environmental		slation speci	fic for the substance or mixture	e EU Regulation (EC) No. 1907/	2006 (REACH)	
Annex XIV – List of substances subject to authorisation Annex XIV Substances of very high concern		None of the components are listed				
Annex XVII – Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles.		Not applicable				
International Lists National Inventory		Inventory name				
Australia		Australian Inventory of Chemical Substances (AICS) – Yes				
Canada		Domestic Substances List (DSL) – Yes Non-Domestic Substances List (NDSL) – No				
China			f Existing Chemical Substances			
		inventory o	. Easting chemical substances			





	European Inventory of Existing Commercial Chemical Substances (EINECS) – Yes
Europe	European List of Notified Chemical Substances (ELINCS) – No
Japan	Inventory of Existing and New Chemical Substances (ENCS) – Yes
Korea	Existing Chemicals List (ECL) – Yes
New Zealand	New Zealand Inventory – Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS) – Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory – Yes
	oly with the inventory requirements administered by the governing country(s) uct are not listed or exempt from listing on the inventory administered by the governing country(s).
Section 16: Other Information	
Revision comments	
Legend to abbreviations	
ADR	European agreement concerning the international carriage of dangerous good by road.
RID	Regulations agreement concerning the international carriage of dangerous good by rail.
IMDG Code	International Maritime Dangerous Goods Code.
ICAO	International Civil Aviation Organization.
IATA	International Air Transport Association.
GHS	Globally Harmonized System of Classification and Labeling of Chemicals.
CLP	Classification, Labelling and Packaging Regulation [Regulation (EC) No.1272/2008].
SCBA	Self-Contained Breathing Apparatus.
REACH	Registration, Evaluation, Authorization and Restriction of Chemicals Regulation [Regulation (EC) No. 1907/2006].
LC 50	Median lethal concentration.
LD 50	Median lethal dose.
РВТ	Persistent, Bio accumulative and Toxic.

GANDHAR OIL REFINERY (INDIA) LTD.			
Taloja Plant	Plot No.10, MIDC, Main Road, Taloja, Taluka Panvel, District - Raigad 410208, India.		
Silvassa Plant	ot No. 2, Survey No. 678/1/3, Village Naroli, Near Naroli Check Post, Silvassa, Dadra & Nagar Haveli, Union Territory 396230, India.		
Emergency / Info Phone No.	Phone: +91-22-40635600 • Fax: +91-22-40635601		
Email	info@gandharoil.com		





## **DIVYOL TRIBOROL EPX BB 3 GREASE**

Section 1: Identification of the Substance / Mixt	ure				
1.1 Product identifier					
Product name	Divyol Triborol E	Divyol Triborol EPX BB 3 Grease			
Product description		High Pressure Industrial Grease			
Product type	Grease				
MARPOL Annex-1	****				
1.2 Identified uses					
Distribution of substance	Automotive & In	dustrial Grease			
Formulation & (re)packing of substance & mixtures	Automotive & In				
Manufacture of substance	Automotive & In				
Functional fluids	Automotive & Ine	dustrial Grease			
Section 2: Hazard Identification					
4-Extreme	Health		1		
3-High	Flammability		1		
2-Moderate	Reactivity		0		
1-Slight	Special		-		
Section 3: Compostion / Information on Ingredi	ents				
Chemical Name / Ingredients	% by wt.	Hazardous	CAS No.		
Lithium Hydroxide	0.5 - 2	Yes	1310-66-3		
Mineral Oil	82 - 90	Yes	64741-88-4, 64742-01-4, 64742-52-5, Proprietary Mixture		
12 HSA	4 - 10	No	106-14-9		
НСО	2-6	No	8001-78-3		
Zinc dialkyldithiophosphate	0 - 2	Yes	68457-79-4		
Additives	0 - 2	Yes	Proprietary Mixture		
Bitumen	0-1	No	8052-42-4		
Lead Naphthenate	1 - 3	No	617090-14-5		
Product / Ingredient name Lithium soaps from natural fatty substances					
Section 4: First Aid Measures					
Inhalation exposure	Remove to fresh	air & provide oxyg	jen, if breathing is difficult. Contact physician		
Skin contact		Remove contaminated clothing. Flush skin with water. Wash skin thoroughly with mild soap & water. If irritation occurs, call a physician.			
Swallowing or other	Do not induce vo Get medical advi		I no treatment is necessary unless large quantities are ingested.		
Eye contact	Rinse continuou	sly with water for s	several minutes. Get medical attention, if irritation persists.		
Protection first-aiders		lectrical supply. Er entry into confine	isure adequate ventilation and check that a safe and breathing area is d spaces.		
Section 5: Fire Fighting Measures					
5.1 Extinguishing media					
Unsuitable extinguishing media			ide. Do not use direct water and wet chemicals, or water on the the fire. Use foam simultaneously on the surface.		
5.2 Special hazards arising from the substance or mix	5.		,		
Hazards from the substance or mixture			ontainers may rupture and when exposed to heat, creating a highly		
Hazardous thermal decomposition products	particulates, gase	Incomplete combustion is likely to give rise to a complex mixture of airborne solid and liquid particulates, gases, including carbon monoxide, H <sub>2</sub> S, SO <sub>x</sub> (sulphur oxides) or sulphuric acid and unidentified organic and inorganic compounds.			
5.3 Advice for firefighters					
Special precautions for firefighters			oving all persons from the vicinity of the incident if there is a fire. No personal risk or without suitable training.		
Special protective equipment for firefighters	Firefighters shou (SCBA) with a ful helmets, protect	<ul> <li>action shall be taken involving any personal risk or without suitable training.</li> <li>Firefighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face- piece operated in positive pressure mode. Clothing for firefighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.</li> </ul>			





6.1 Personal precautions protective equipment and em	ergency procedures			
6.1 Personal precautions, protective equipment and emergency procedures Keep non-involved personnel away from the area of spillage.				
For non-emergency personnel	Alert emergency personnel away from the area of spillage. Alert emergency personnel. Except in case of small spillages, the feasibility of any actions should always be assessed and advised, if possible, by a trained, competent person in charge of managing the emergency. Stop leak if safe to do so. Avoid direct contact with the product. Stay upwind / keep distance from source. In case of large spillages, alert occupants in downwind areas. Eliminate all ignition sources if safe to do so. Spillages of limited amounts of product, especially in the open air when vapours will be usually quickly dispersed, are dynamic situations, which will presumably limit the exposure to dangerous concentrations. Note : Recommended measures are based on the most likely spillage scenarios for this material; however, local conditions (wind, air temperature, wave / current direction and speed) may significantly influence the choice of appropriate actions.			
For emergency responders	For this reason, local experts should be consulted when necessary. Local regulations may also prescribe or limit actions to be taken. Small spillages: Normal antistatic working clothes are usually adequate. Large spillages: Full body suit of chemically resistant and thermal resistant material should be used. Work gloves providing adequate chemical resistance, specifically to aromatic hydrocarbons. Note: Gloves made of PVA are not water-resistant, and are not suitable for emergency use. Safety helmet, antistatic non-skid safety shoes or boots. Goggles and / or face shield, if splashes or contact with eyes is possible or anticipated. Respiratory Protection : A half or full-face respirator with filter(s) for organic vapours (and when applicable for H <sub>2</sub> S) a Self Contained Breathing Apparatus (SCBA) can be used according to the extent of spill and predictable amount of exposure. If the situation cannot be completely assessed, or if an oxygen deficiency is possible, only SCBA's should be used.			
6.2 Environmental precautions	Prevent product from entering sewers, rivers or other bodies of water. If necessary dike the product with dry earth, sand or similar non-combustible materials. In case of soil contamination, remove contaminated soil and treat in accordance with local regulations. In case of small spillages in closed waters (i.e. ports), contain product with floating barriers or other equipment. Collect spilled product by absorbing with specific floating absorbents. If possible, large spillages in open waters should be contained with floating barriers or other mechanical means. If this is not possible, control the spreading of the spillage, and collect the product by skimming or other suitable mechanical means. The use of dispersants should be advised by an expert, and, if required, approved by local authorities.			
6.3 Methods and material for containment and cleaning	up			
Small spill	Stop leak if without risk. Absorb spilled product with suitable non-combustible materials.			
Large spill	Large spillages may be cautiously covered with foam, if available, to limit vapour cloud formation. Do not use water jet. When inside buildings or confined spaces, ensure adequate ventilation. Transfer collected product and other contaminated materials to suitable containers for recovery or safe disposal.			
6.4 Reference to other sections	See Section 1: For emergency contact information. See Section 8: For information on appropriate personal protective equipment. See Section 13: For additional waste treatment information.			
Section 7: Handling and Storage				
7.1 Advice on general information – hygiene, storage	Obtain special instructions before use. Keep away from heat / sparks / open flames/hot surfaces. No smoking. Use and store only outdoors or in a well-ventilated area. Hazard of slipping on spilt product. Avoid release to the environment.			
7.2 Conditions for safe storage including any incompatibilities	Storage area layout, tank design, equipment and operating procedures must comply with the relevant regional, national or local legislation. Storage installations should be designed with adequate bunds in case of leaks or spills. Cleaning, inspection and maintenance of internal structure of storage tanks must be done only by properly equipped and qualified personnel as defined by national, local or company regulations. Store separately from oxidising agents. Keep only in the original container or in a suitable container for this kind of product. Keep container tightly closed and sealed until ready for use. Do not store in unlabelled containers. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Empty containers may contain harmful, flammable / combustible or explosive residue or vapours. Do not cut, grind, drill, weld, reuse or dispose of containers unless adequate precautions are taken against these hazards. Protect from sunlight.			
7.3 Specific end use(s) – Recommendations	Not available			



Density Solubility (ies)



Section 8: Exposure Controls / Personal Protect		
The list of Identified Uses in Section 1 should be consu	Ited for any available use-specific information provided in the Exposure Scenario(s).	
8.1 Control parameters		
Occupational exposure limits		
Product / Ingredient name	Distillates, mixture of hydrocarbons	
Exposure limits values	AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m <sup>3</sup> 8 hours. Form: mist and fume STEL: 3 mg/m <sup>3</sup> 15 minutes. Form: mist and fume [Air contaminant]. AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m <sup>3</sup> 8 hours. Form: mist and fume STEL: 3 mg/m <sup>3</sup> 15 minutes. Form: mist and fume.	
Recommended monitoring procedures	If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres – Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres – Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres – General requirements for the performance of procedures for the measurement of chemical agents). Reference to national guidance documents for methods for the determination of hazardous substances will also be required.	
8.2 Exposure control Appropriate engineering controls	Mechanical ventilation and local exhaust will reduce exposure via the air. Use oil resistant material in construction of handling equipment. Store under recommended conditions and if heated, temperature control equipment should be used to avoid overheating.	
Individual protection measures		
Hygiene measures	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Ensure that eyewash stations and safety showers are close to the workstation location. Wash contaminated clothing before reuse.	
Eye / face protection	Recommended: Safety glasses with side shields.	
Skin protection		
Hand protection	4 – 8 hours (breakthrough time): nitrile rubber.	
Body protection	Wear protective clothing if there is a risk of skin contact. Change contaminated clothes at the end of working shift.	
Other skin protection	Appropriate footwear and any additional skin protection measures should be selected based on th task being performed and the risks involved and should be approved by a specialist before handlin this product.	
Respiratory protection	Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary.	
Environmental exposure control	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.	
Section 9: Physical and Chemical Properties		
Appearance	Clear	
Physical state	Smooth & Buttery	
Colour	Brownish	
Odor	Petroleum odor	
Odour threshold	Not available	
Dropping point	> 195 °C (ASTM D 2265)	
Flash point	> 210 °C (Mineral Oil)	
Evaporation rate	Not available	
Flammability (solid, gas)	Not available	
Flammability limits in air (lower), % by volume	Not available	
Flammability limits in air (upper), % by volume	Not available	
Vapour pressure	Not volatile	



0.88 – 0.95 kg/L





Solubility (water)		Insoluble in wat	ter		
Partition coefficient (n-octanol/water)		Not available			
· · · · · · · · · · · · · · · · · · ·		No data			
Auto-ignition temperature		Not available			
Worked Penetration at 25°C		220 – 250 (ASTN	A D 217)		
Explosive properties		No data			
Oxidising properties		No data			
DMSO extractable compounds for	r base oil substance(s)	Not available			
according to IP346		<3 %			
Section 10: Stability and Rea	ctivity	1			
10.1 Reactivity		No specific test	data related to reactivity avail	able for this product or its ingr	edients.
10.2 Chemical stability			ormal conditions		
10.3 Possibility of hazardous rea	octions	Under normal c	onditions of storage and use, I	hazardous reactions will not o	ccur. Oxidising agent.
10.4 Conditions to avoid		Keep away from	n extreme heat and oxidising a	igents.	
10.5 Incompatible materials		Incomplete con particulates, ga	nbustion is likely to give rise to ses, including carbon monoxic	a complex mixture of airborn de, H <sub>2</sub> S, SO. (sulphur oxides) or	e solid and liquid sulphuric acid and
10.6 Hazardous decomposition	products		ganic and inorganic compound		
SECTION 11: Toxicological In	formation				
11.1 Information on toxicologica	al effects				
Acute toxicity					
Product / ingredient name	Result		Species	Dose	Exposure
	LC 50 Inhalation due	sts and mists	Rat	>2.18mg/l	4 hours
Distillate (Petroleum), hydro treated heavy paraffinic	LD 50 Derr	nal	Rabbit	> 5000 mg/kg	-
treated neavy paraminic	LD 50 Ora	al	Rat	>15000 mg/kg	-
Irritation / corrosion					
Skin					
Eye		No known significant effects or critical hazards.			
Respiratory					
Sensation					
Skin					
Respiratory		No known significant effects or critical hazards.			
nespiratory		No data available to indicate product or any components present greater than 0.1 % are			
Mutagenicity		No data available to indicate product or any components present greater than 0.1 % are multigene or genotoxic.			
Carcinogenicity			n this product is based on an s		•
Reproductive toxicity		The product should not be regarded as a carcinogen. Contains no ingredient listed as toxic to reproduction.			
Specific target organ toxicity – sin	gle exposure				
Specific target organ toxicity – rep		Not classified			
Aspiration hazard		Aspiration hazard – Category 1			
Information on likely routes of exp	oosure	Not available			
Potential acute health effects					
Eye contact		Eye contact may cause redness and transient pain.			
Inhalation		Inhalation of oil mist or vapours at elevated temperatures may cause respiratory irritation.			
Skin contact			ficant effects or critical hazard		
Ingestion			wallowed and enters airways.		
Potential chronic health effects			transwed and enters an ways.		
General		No known signi	ficant effects or critical bazard	c	
General		No known significant effects or critical hazards. The base oil(s) in this product is based on an severely hydrotreated distillate. The product should not be			
Carcinogenicity		regarded as a ca		everely hydrotreated distillate	. The product should not be







Mutagenicity						
Teratogenicity			significant effects or critical haz	ards.		
Product / ingredient name						
Fertility effects		Not such the la	1-			
Other information Specific hazard		Not availab	le			
Section 12: Ecological Information						
12.1 Toxicity			ed to be harmful to aquatic org	anisms.		
12.2 Persistence and degradability		Not inherently biodegradable.				
12.3 Bioaccumulative potential				nt because of the low water solu	bility of this product.	
12.4 Mobility in soil			ered mobile.			
12.5 Results of PBT & vPvB assessment	:	Not applica				
12.6 Other adverse effects			n water. Spills may form a film of nsfer could also be impaired.	n water surfaces causing physica	al damage to organisms.	
Section 13: Disposal Consideration						
The information in this section contains information provided in the Exposure So	generic advice and enario(s).	d guidance. T	he list of Identified Uses in Sect	ion 1 should be consulted for ar	ny available use-specific	
Product Methods of disposal		feasible and authorisatio or waste su qualified w	Where possible (e.g. in the absence of relevant contamination), recycling of used substance is feasible and recommended. This substance can be burned or incinerated, subject to national/local authorisations, relevant contamination limits, safety regulations and air quality legislation. Contaminated or waste substance (not directly recyclable): Disposal can be carried out directly, or by delivery to qualified waste handlers. National legislation may identify a specific organisation, and/or prescribe composition limits and methods for recovery or disposal			
Hazardous waste		Yes				
European waste catalogue (EWC) Waste Code 13 03 07*		Waste designation.				
Packaging		Mineral-based non-chlorinated insulating and heat transmission oils.				
Methods of disposal		The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.				
Section 14: Transport Information						
International transport regulations						
	ADR / R	ID	ADN	IMO / IMDG Classification	ICAO / IATA Classification	
14.1 UN number	Not regul	ated	Not regulated	Not regulated	Not regulated	
14.2 UN proper shipping name	_		_	_	_	
14.3 Transport hazard class(es)	_		-	_	_	
14.4 Packing group	_		-	_	_	
14.5 Environmental hazards	No		No	No	No	
Additional Information	_		-	-	-	
14.6 Special precautions for user oils						
14.7 Transport in bulk according to An	nex   of MARPOL	73/78 and th	e IBC Code			
Section 15: Regulatory Informatio						
15.1 Safety, health and environmental		slation speci	fic for the substance or mixture	e EU Regulation (EC) No. 1907/	2006 (REACH)	
Annex XIV – List of substances subject to authorisation Annex XIV Substances of very high concern		None of the components are listed				
Annex XVII – Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles.		Not applicable				
International Lists National Inventory		Inventory name				
Australia		Australian Inventory of Chemical Substances (AICS) – Yes				
Canada		Domestic Substances List (DSL) – Yes Non-Domestic Substances List (NDSL) – No				
China			f Existing Chemical Substances			
		inventory o	. Easting chemical substances			





_	European Inventory of Existing Commercial Chemical Substances (EINECS) – Yes			
Europe	European List of Notified Chemical Substances (ELINCS) – No			
Japan	Inventory of Existing and New Chemical Substances (ENCS) – Yes			
Korea	Existing Chemicals List (ECL) – Yes			
New Zealand	New Zealand Inventory – Yes			
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS) – Yes			
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory – Yes			
	oly with the inventory requirements administered by the governing country(s) uct are not listed or exempt from listing on the inventory administered by the governing country(s).			
Section 16: Other Information				
Revision comments				
Legend to abbreviations				
ADR	European agreement concerning the international carriage of dangerous good by road.			
RID	Regulations agreement concerning the international carriage of dangerous good by rail.			
IMDG Code	International Maritime Dangerous Goods Code.			
ICAO	International Civil Aviation Organization.			
IATA	International Air Transport Association.			
GHS	Globally Harmonized System of Classification and Labeling of Chemicals.			
CLP	Classification, Labelling and Packaging Regulation [Regulation (EC) No.1272/2008].			
SCBA	Self-Contained Breathing Apparatus.			
REACH	Registration, Evaluation, Authorization and Restriction of Chemicals Regulation [Regulation (EC) No. 1907/2006].			
LC 50	Median lethal concentration.			
LD 50	Median lethal dose.			
РВТ	Persistent, Bio accumulative and Toxic.			

GANDHAR OIL REFINERY (INDIA) LTD.			
Taloja Plant	Plot No.10, MIDC, Main Road, Taloja, Taluka Panvel, District - Raigad 410208, India.		
Silvassa Plant	ot No. 2, Survey No. 678/1/3, Village Naroli, Near Naroli Check Post, Silvassa, Dadra & Nagar Haveli, Union Territory 396230, India.		
Emergency / Info Phone No.	Phone: +91-22-40635600 • Fax: +91-22-40635601		
Email	info@gandharoil.com		





# **DIVYOL TRIBOROL HC 2 GREASE**

Section 1: Identification of the Substance / Mixt	ure				
1.1 Product identifier					
Product name	Divyol Triborol H	Divyol Triborol HC 2 Grease			
Product description	Hammer / Chisel	Hammer / Chisel Grease			
Product type	Grease				
MARPOL Annex-1	****				
1.2 Identified uses					
Distribution of substance	Automotive & Inc	dustrial Grease			
Formulation & (re)packing of substance & mixtures	Automotive & Inc				
Manufacture of substance	Automotive & Inc				
Functional fluids	Automotive & Inc				
Section 2: Hazard Identification					
4-Extreme	Health		1		
3-High	Flammability		1		
2-Moderate	Reactivity		0		
1-Slight	Special		-		
Section 3: Compostion / Information on Ingredi					
Chemical Name / Ingredients	% by wt.	Hazardous		CAS No.	
Lithium Hydroxide	0.5 - 2	Yes		1310-66-3	
Mineral Oil	65 - 75	Yes		64742-52-5, 64741-88-4, 64742-54-7, 64742-01-4	
12 HSA	3 - 7	No		106-14-9	
НСО	1 - 3	No		8001-78-3	
Complexing Acid	0.5 - 2	No		Proprietary Mixture	
Additive Package	0 - 3	Yes		Proprietary Mixture	
Zinc dialkyldithiophosphate	0 - 3	Yes		68457-79-4	
Butene, Homo Polymer	0 -3	No		9003-27-4	
Copper Powder	5 - 15	Yes		7782-50-8	
Graphite Powder	4 - 12	Yes		7782-42-5	
Molybdenum Diasulfe	0 - 4 Yes			1317-33 - 5	
Product / Ingredient name	Graphite and Co	oper soaps from n	natura	al fatty substances	
Section 4: First Aid Measures					
Inhalation exposure				f breathing is difficult. Contact physician	
Skin contact		nated clothing. Fl s, call a physician.		skin with water. Wash skin thoroughly with mild soap & water.	
Swallowing or other		Do not induce vomiting. In general no treatment is necessary unless large quantities are ingested. Get medical advice.			
Eye contact	Rinse continuous	sly with water for	sever	ral minutes. Get medical attention, if irritation persists.	
Protection first-aiders		ectrical supply. Er entry into confine		adequate ventilation and check that a safe and breathing area is aces.	
Section 5: Fire Fighting Measures					
5.1 Extinguishing media					
Unsuitable extinguishing media				Do not use direct water and wet chemicals, or water on the fire. Use foam simultaneously on the surface.	
5.2 Special hazards arising from the substance or mix	51			·	
Hazards from the substance or mixture	Flammable liquio flammable vapor	•	contai	iners may rupture and when exposed to heat, creating a highly	
Hazardous thermal decomposition products	Incomplete combustion is likely to give rise to a complex mixture of airborne solid and liquid particulates, gases, including carbon monoxide, H <sub>2</sub> S, SO <sub>x</sub> (sulphur oxides) or sulphuric acid and unidentified organic and inorganic compounds.				
5.3 Advice for firefighters					
Special precautions for firefighters	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.				
Special protective equipment for firefighters	Firefighters should wear appropriate protective equipment and self-contained breathing apparatus (SCRA) with a full face-price operated in positive pressure mode. Clothing for firefighters (including				





6.1 Personal precautions, protective equipment and emergency procedures						
Keep non-involved personnel away from the area of spillage.						
For non-emergency personnel	Alert emergency personnel. Except in case of small spillages, the feasibility of any actions should always be assessed and advised, if possible, by a trained, competent person in charge of managing the emergency. Stop leak if safe to do so. Avoid direct contact with the product. Stay upwind / keep distance from source. In case of large spillages, alert occupants in downwind areas. Eliminate all ignition sources if safe to do so. Spillages of limited amounts of product, especially in the open air when vapours will be usually quickly dispersed, are dynamic situations, which will presumably limit the exposure to dangerous concentrations. Note : Recommended measures are based on the most likely spillage scenarios for this material; however, local conditions (wind, air temperature, wave / current direction and speed) may significantly influence the choice of appropriate actions.					
For emergency responders	For this reason, local experts should be consulted when necessary. Local regulations may also prescribe or limit actions to be taken. Small spillages: Normal antistatic working clothes are usually adequate. Large spillages: Full body suit of chemically resistant and thermal resistant material should be used. Work gloves providing adequate chemical resistance, specifically to aromatic hydrocarbons. Note: Gloves made of PVA are not water-resistant, and are not suitable for emergency use. Safety helmet, antistatic non-skid safety shoes or boots. Goggles and / or face shield, if splashes or contact with eyes is possible or anticipated. Respiratory Protection : A half or full-face respirator with filter(s) for organic vapours (and when applicable for H <sub>2</sub> S) a Self Contained Breathing Apparatus (SCBA) can be used according to the extent of spill and predictable amount of exposure. If the situation cannot be completely assessed, or if an oxygen deficiency is possible, only SCBA's should be used.					
6.2 Environmental precautions	Prevent product from entering sewers, rivers or other bodies of water. If necessary dike the product with dry earth, sand or similar non-combustible materials. In case of soil contamination, remove contaminated soil and treat in accordance with local regulations. In case of small spillages in closed waters (i.e. ports), contain product with floating barriers or other equipment. Collect spilled product by absorbing with specific floating absorbents. If possible, large spillages in open waters should be contained with floating barriers or other mechanical means. If this is not possible, control the spreading of the spillage, and collect the product by skimming or other suitable mechanical means. The use of dispersants should be advised by an expert, and, if required, approved by local authorities.					
6.3 Methods and material for containment and cleaning	up					
Small spill	Stop leak if without risk. Absorb spilled product with suitable non-combustible materials.					
Large spill	Large spillages may be cautiously covered with foam, if available, to limit vapour cloud formation. Do not use water jet. When inside buildings or confined spaces, ensure adequate ventilation. Transfer collected product and other contaminated materials to suitable containers for recovery or safe disposal.					
6.4 Reference to other sections	See Section 1: For emergency contact information. See Section 8: For information on appropriate personal protective equipment. See Section 13: For additional waste treatment information.					
Section 7: Handling and Storage						
7.1 Advice on general information – hygiene, storage	Obtain special instructions before use. Keep away from heat / sparks / open flames/hot surfaces. No smoking. Use and store only outdoors or in a well-ventilated area. Hazard of slipping on spilt product. Avoid release to the environment.					
7.2 Conditions for safe storage including any incompatibilities	Storage area layout, tank design, equipment and operating procedures must comply with the relevant regional, national or local legislation. Storage installations should be designed with adequate bunds in case of leaks or spills. Cleaning, inspection and maintenance of internal structure of storage tanks must be done only by properly equipped and qualified personnel as defined by national, local or company regulations. Store separately from oxidising agents. Keep only in the original container or in a suitable container for this kind of product. Keep container tightly closed and sealed until ready for use. Do not store in unlabelled containers. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Empty containers may contain harmful, flammable / combustible or explosive residue or vapours. Do not cut, grind, drill, weld, reuse or dispose of containers unless adequate precautions are taken against these hazards. Protect from sunlight.					
7.3 Specific end use(s) – Recommendations	Not available					



Density Solubility (ies)



Section 8: Exposure Controls / Personal Protect	tion
The list of Identified Uses in Section 1 should be consu	ulted for any available use-specific information provided in the Exposure Scenario(s).
8.1 Control parameters	
Occupational exposure limits	
Product / Ingredient name	Distillates, mixture of hydrocarbons
Exposure limits values	AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m <sup>3</sup> 8 hours. Form: mist and fume STEL: 3 mg/m <sup>3</sup> 15 minutes. Form: mist and fume [Air contaminant]. AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m <sup>3</sup> 8 hours. Form: mist and fume STEL: 3 mg/m <sup>3</sup> 15 minutes. Form: mist and fume.
Recommended monitoring procedures	If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres – Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres – Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres – General requirements for the performance of procedures for the measurement of chemical agents). Reference to national guidance documents for methods for the determination of hazardous substances will also be required.
8.2 Exposure control Appropriate engineering controls	Mechanical ventilation and local exhaust will reduce exposure via the air. Use oil resistant material in construction of handling equipment. Store under recommended conditions and if heated, temperature control equipment should be used to avoid overheating.
Individual protection measures	
Hygiene measures	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Ensure that eyewash stations and safety showers are close to the workstation location. Wash contaminated clothing before reuse.
Eye / face protection	Recommended: Safety glasses with side shields.
Skin protection	
Hand protection	4 – 8 hours (breakthrough time): nitrile rubber.
Body protection	Wear protective clothing if there is a risk of skin contact. Change contaminated clothes at the end of working shift.
Other skin protection	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary.
Environmental exposure control	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.
Section 9: Physical and Chemical Properties	
Appearance	Clear
Physical state	Coppery Anthracite
Colour	Amber
Odor	Petroleum odor
Odour threshold	Not available
Dropping point	> 260 °C (ASTM D 2265)
Flash point	> 230 °C (Mineral Oil)
Evaporation rate	Not available
Flammability (solid, gas)	Not available
Flammability limits in air (lower), % by volume	Not available
Flammability limits in air (upper), % by volume	Not available
Vapour pressure	Not volatile



0.9 – 1 kg/L





	Insoluble in wat	ter					
		A D 217)					
	No data						
base oil substance(s)	Not available						
	<3 %						
ctivity							
	No specific test	data related to reactivity availa	able for this product or its ingr	edients.			
ctions	Under normal c	onditions of storage and use, I	nazardous reactions will not or	ccur. Oxidising agent.			
	Keep away from	n extreme heat and oxidising a	gents.				
products							
formation							
l effects							
Result		Species	Dose	Exposure			
LC 50 Inhalation due	sts and mists	Rat	>2.18mg/l	4 hours			
LD 50 Dermal		Rabbit	> 5000 mg/kg	-			
LD 50 Ora	al	Rat	>15000 mg/kg	-			
	No known signi	ficant effects or critical hazard	S.				
	No known significant effects or critical hazards.						
	No data available to indicate product or any components present greater than 0.1 % are multigene or genotoxic.						
	The product she	e product should not be regarded as a carcinogen.					
gle exposure							
	Not classified						
	Aspiration hazard – Category 1						
oosure	Not available						
	Eye contact may	y cause redness and transient	pain.				
	Inhalation of oil mist or vapours at elevated temperatures may cause respiratory irritation.						
	Inhalation of oil	mist or vapours at elevated te	imperatures may cause respira				
	No known signi	ficant effects or critical hazard wallowed and enters airways.					
	No known signi	ficant effects or critical hazard					
	No known signi May be fatal if s	ficant effects or critical hazard	S.				
	base oil substance(s) ctivity ctions products formation l effects Result LC 50 Inhalation dus LD 50 Derr	iter)Not availableNo dataNot available265 - 295 (ASTNNo dataNo database oil substance(s)No tavailable <3 %	No data         Not available         265 - 295 (ASTM D 217)         No data         No data         base oil substance(s)       Not available         <3 %	ter) Not available Not available Not available Antipart and Antipart			







Mutagenicity							
Teratogenicity							
Product / ingredient name		No known s	significant effects or critical haza	ards.			
Fertility effects							
Other information Specific hazard		Not availab	lo				
•		NOL availab					
Section 12: Ecological Information		Not over a st	ad ta ha hawaful ta awatia awa				
12.1 Toxicity		Not expected to be harmful to aquatic organisms.					
12.2 Persistence and degradability		Not inherently biodegradable. Bioaccumulation is unlikely to be significant because of the low water solubility of this product.					
12.3 Bioaccumulative potential				It because of the low water solu	ibility of this product.		
12.4 Mobility in soil 12.5 Results of PBT & vPvB assessment			ered mobile.				
12.5 Results of PBT & VPVB assessment		Not applica	water. Spills may form a film or	a water surfaces causing physic	al damago to organisms		
12.6 Other adverse effects			nsfer could also be impaired.	Twater surfaces causing physics	al damage to organisms.		
Section 13: Disposal Consideration	ns						
The information in this section contains information provided in the Exposure Sc	generic advice and enario(s).	d guidance. T	he list of Identified Uses in Secti	ion 1 should be consulted for ar	ny available use-specific		
Product Methods of disposal		Where possible (e.g. in the absence of relevant contamination), recycling of used substance is feasible and recommended. This substance can be burned or incinerated, subject to national/local authorisations, relevant contamination limits, safety regulations and air quality legislation. Contaminat or waste substance (not directly recyclable): Disposal can be carried out directly, or by delivery to qualified waste handlers. National legislation may identify a specific organisation, and/or prescribe composition limits and methods for recovery or disposal					
Hazardous waste	Yes						
European waste catalogue (EWC) Waste	Code 13 03 07*	Waste designation.					
Packaging		Mineral-ba	sed non-chlorinated insulating	and heat transmission oils.			
Methods of disposal			tion of waste should be avoided cineration or landfill should onl	•			
Section 14: Transport Information		-					
International transport regulations							
	ADR / R	ID	ADN	IMO / IMDG Classification	ICAO / IATA Classification		
14.1 UN number	Not regul	ated	Not regulated	Not regulated	Not regulated		
14.2 UN proper shipping name	-		_	_	_		
14.3 Transport hazard class(es)	-		-	-	-		
14.4 Packing group	-		_	_	_		
14.5 Environmental hazards	No		No	No	No		
Additional Information	_		_	_	-		
14.6 Special precautions for user oils							
14.7 Transport in bulk according to An		73/78 and th	e IBC Code				
Section 15: Regulatory Informatio		Si i o anu th					
		dation energy	fic for the substance or misture	ELL Regulation (EC) No. 1007/			
Annex XIV – List of substances subject to authorisation			lation specific for the substance or mixture EU Regulation (EC) No. 1907/2006 (REACH) None of the components are listed				
Annex XVII – Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles.							
International Lists National Inventory		Inventory name					
Australia		Australian Inventory of Chemical Substances (AICS) – Yes					
Canada			ubstances List (DSL) – Yes stic Substances List (NDSL) – No				
China	Non-Domestic Substances List (NDSL) – No						
China	hina Inventory of Existing Chemical Substances in China (IECSC) – Yes						





	European Inventory of Existing Commercial Chemical Substances (EINECS) – Yes			
Europe	European List of Notified Chemical Substances (ELINCS) – No			
Japan	Inventory of Existing and New Chemical Substances (ENCS) – Yes			
Korea	Existing Chemicals List (ECL) – Yes			
New Zealand	New Zealand Inventory – Yes			
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS) – Yes			
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory – Yes			
	oly with the inventory requirements administered by the governing country(s) uct are not listed or exempt from listing on the inventory administered by the governing country(s).			
Section 16: Other Information				
Revision comments				
Legend to abbreviations				
ADR	European agreement concerning the international carriage of dangerous good by road.			
RID	Regulations agreement concerning the international carriage of dangerous good by rail.			
IMDG Code	International Maritime Dangerous Goods Code.			
ICAO	International Civil Aviation Organization.			
IATA	International Air Transport Association.			
GHS	Globally Harmonized System of Classification and Labeling of Chemicals.			
CLP	Classification, Labelling and Packaging Regulation [Regulation (EC) No.1272/2008].			
SCBA	Self-Contained Breathing Apparatus.			
REACH	Registration, Evaluation, Authorization and Restriction of Chemicals Regulation [Regulation (EC) No. 1907/2006].			
LC 50	Median lethal concentration.			
LD 50	Median lethal dose.			
РВТ	Persistent, Bio accumulative and Toxic.			

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Emergency / Info Phone No.	Phone: +91-22-40635600 • Fax: +91-22-40635601				
Email	info@gandharoil.com				





# **DIVYOL TRIBOROL HC 3 GREASE**

Section 1: Identification of the Substance / Mixt	ure				
1.1 Product identifier					
Product name	Divyol Triborol H	C 3 Grease			
Product description	Hammer / Chisel	Hammer / Chisel Grease			
Product type	Grease				
MARPOL Annex-1	****				
1.2 Identified uses					
Distribution of substance	Automotive & Ind	dustrial Grease			
Formulation & (re)packing of substance & mixtures	Automotive & Ind				
Manufacture of substance	Automotive & Inc				
Functional fluids	Automotive & Ind				
Section 2: Hazard Identification					
4-Extreme	Health		1		
3-High	Flammability		1		
2-Moderate	Reactivity		0		
1-Slight	Special		_		
Section 3: Compostion / Information on Ingredi					
Chemical Name / Ingredients	% by wt.	Hazardous		CAS No.	
Lithium Hydroxide	0.5 - 2	Yes		1310-66-3	
Mineral Oil	65 - 75	Yes		64742-52-5, 64741-88-4, 64742-54-7, 64742-01-4	
12 HSA	3 - 7	No		106-14-9	
НСО	1 - 3	No		8001-78-3	
Complexing Acid	0.5 - 2	No		Proprietary Mixture	
Additive Package	0 - 3	Yes		Proprietary Mixture	
Zinc dialkyldithiophosphate	0 - 3	Yes		68457-79-4	
Butene, Homo Polymer	0 -3	No		9003-27-4	
Copper Powder	5 - 15	Yes		7782-50-8	
Graphite Powder	4 - 12	Yes		7782-42-5	
Molybdenum Diasulfe	0 - 4 Yes			1317-33 - 5	
Product / Ingredient name	Graphite and Co	oper soaps from n	natura	al fatty substances	
Section 4: First Aid Measures					
Inhalation exposure	Remove to fresh	air & provide oxy	gen, if	f breathing is difficult. Contact physician	
Skin contact		nated clothing. Fl s, call a physician.		kin with water. Wash skin thoroughly with mild soap & water.	
Swallowing or other	Do not induce vo Get medical advi		al no t	reatment is necessary unless large quantities are ingested.	
Eye contact	Rinse continuous	sly with water for	sever	al minutes. Get medical attention, if irritation persists.	
Protection first-aiders		ectrical supply. Er entry into confine		adequate ventilation and check that a safe and breathing area is aces.	
Section 5: Fire Fighting Measures					
5.1 Extinguishing media					
Unsuitable extinguishing media				Do not use direct water and wet chemicals, or water on the fire. Use foam simultaneously on the surface.	
5.2 Special hazards arising from the substance or mix	5.				
Hazards from the substance or mixture	Flammable liquio flammable vapor	•	contai	iners may rupture and when exposed to heat, creating a highly	
Hazardous thermal decomposition products	Incomplete combustion is likely to give rise to a complex mixture of airborne solid and liquid particulates, gases, including carbon monoxide, H <sub>2</sub> S, SO <sub>x</sub> (sulphur oxides) or sulphuric acid and unidentified organic and inorganic compounds.				
5.3 Advice for firefighters					
Special precautions for firefighters	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.				
Special protective equipment for firefighters	Firefighters should wear appropriate protective equipment and self-contained breathing apparatus				





6.1 Personal precautions, protective equipment and em	ergency procedures
stri ersonal precautions, protective equipment and em	Keep non-involved personnel away from the area of spillage.
For non-emergency personnel	Alert emergency personnel away from the area of spillage. Alert emergency personnel. Except in case of small spillages, the feasibility of any actions should always be assessed and advised, if possible, by a trained, competent person in charge of managing the emergency. Stop leak if safe to do so. Avoid direct contact with the product. Stay upwind / keep distance from source. In case of large spillages, alert occupants in downwind areas. Eliminate all ignition sources if safe to do so. Spillages of limited amounts of product, especially in the open air when vapours will be usually quickly dispersed, are dynamic situations, which will presumably limit the exposure to dangerous concentrations. Note : Recommended measures are based on the most likely spillage scenarios for this material; however, local conditions (wind, air temperature, wave / current direction and speed) may significantly influence the choice of appropriate actions.
For emergency responders	For this reason, local experts should be consulted when necessary. Local regulations may also prescribe or limit actions to be taken. Small spillages: Normal antistatic working clothes are usually adequate. Large spillages: Full body suit of chemically resistant and thermal resistant material should be used. Work gloves providing adequate chemical resistance, specifically to aromatic hydrocarbons. Note: Gloves made of PVA are not water-resistant, and are not suitable for emergency use. Safety helmet, antistatic non-skid safety shoes or boots. Goggles and / or face shield, if splashes or contact with eyes is possible or anticipated. Respiratory Protection : A half or full-face respirator with filter(s) for organic vapours (and when applicable for H <sub>2</sub> S) a Self Contained Breathing Apparatus (SCBA) can be used according to the extent of spill and predictable amount of exposure. If the situation cannot be completely assessed, or if an oxygen deficiency is possible, only SCBA's should be used.
6.2 Environmental precautions	Prevent product from entering sewers, rivers or other bodies of water. If necessary dike the product with dry earth, sand or similar non-combustible materials. In case of soil contamination, remove contaminated soil and treat in accordance with local regulations. In case of small spillages in closed waters (i.e. ports), contain product with floating barriers or other equipment. Collect spilled product by absorbing with specific floating absorbents. If possible, large spillages in open waters should be contained with floating barriers or other mechanical means. If this is not possible, control the spreading of the spillage, and collect the product by skimming or other suitable mechanical means. The use of dispersants should be advised by an expert, and, if required, approved by local authorities.
6.3 Methods and material for containment and cleaning	up
Small spill	Stop leak if without risk. Absorb spilled product with suitable non-combustible materials.
Large spill	Large spillages may be cautiously covered with foam, if available, to limit vapour cloud formation. Do not use water jet. When inside buildings or confined spaces, ensure adequate ventilation. Transfer collected product and other contaminated materials to suitable containers for recovery or safe disposal.
6.4 Reference to other sections	See Section 1: For emergency contact information. See Section 8: For information on appropriate personal protective equipment. See Section 13: For additional waste treatment information.
Section 7: Handling and Storage	
7.1 Advice on general information – hygiene, storage	Obtain special instructions before use. Keep away from heat / sparks / open flames/hot surfaces. No smoking. Use and store only outdoors or in a well-ventilated area. Hazard of slipping on spilt product. Avoid release to the environment.
7.2 Conditions for safe storage including any incompatibilities	Storage area layout, tank design, equipment and operating procedures must comply with the relevant regional, national or local legislation. Storage installations should be designed with adequate bunds in case of leaks or spills. Cleaning, inspection and maintenance of internal structure of storage tanks must be done only by properly equipped and qualified personnel as defined by national, local or company regulations. Store separately from oxidising agents. Keep only in the original container or in a suitable container for this kind of product. Keep container tightly closed and sealed until ready for use. Do not store in unlabelled containers. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Empty containers may contain harmful, flammable / combustible or explosive residue or vapours. Do not cut, grind, drill, weld, reuse or dispose of containers unless adequate precautions are taken against these hazards. Protect from sunlight.
7.3 Specific end use(s) – Recommendations	Not available



Density Solubility (ies)



Section 8: Exposure Controls / Personal Prote	ction
The list of Identified Uses in Section 1 should be cons	ulted for any available use-specific information provided in the Exposure Scenario(s).
8.1 Control parameters	
Occupational exposure limits	
Product / Ingredient name	Distillates, mixture of hydrocarbons
Exposure limits values	AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m <sup>3</sup> 8 hours. Form: mist and fume STEL: 3 mg/m <sup>3</sup> 15 minutes. Form: mist and fume [Air contaminant]. AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m <sup>3</sup> 8 hours. Form: mist and fume STEL: 3 mg/m <sup>3</sup> 15 minutes. Form: mist and fume.
Recommended monitoring procedures	If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres – Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres – Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres – General requirements for the performance of procedures for the measurement of chemical agents). Reference to national guidance documents for methods for the determination of hazardous substances will also be required.
8.2 Exposure control Appropriate engineering controls	Mechanical ventilation and local exhaust will reduce exposure via the air. Use oil resistant material in construction of handling equipment. Store under recommended conditions and if heated, temperature control equipment should be used to avoid overheating.
Individual protection measures	
Hygiene measures	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Ensure that eyewash stations and safety showers are close to the workstation location. Wash contaminated clothing before reuse.
Eye / face protection	Recommended: Safety glasses with side shields.
Skin protection	
Hand protection	4 – 8 hours (breakthrough time): nitrile rubber.
Body protection	Wear protective clothing if there is a risk of skin contact. Change contaminated clothes at the end of working shift.
Other skin protection	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary.
Environmental exposure control	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.
Section 9: Physical and Chemical Properties	
Appearance	Clear
Physical state	Coppery Anthracite
Colour	Amber
Odor	Petroleum odor
Odour threshold	Not available
Dropping point	> 260 °C (ASTM D 2265)
Flash point	> 230 °C (Mineral Oil)
Evaporation rate	Not available
Flammability (solid, gas)	Not available
Flammability limits in air (lower), % by volume	Not available
Flammability limits in air (upper), % by volume	Not available
Vapour pressure	Not volatile



0.9 – 1 kg/L





Solubility (water)		Insoluble in wat	ter			
Partition coefficient (n-octanol/wa	ater)	Not available				
Decomposition temperature		No data				
Auto-ignition temperature		Not available				
Worked Penetration at 25°C		220 – 250 (ASTM	M D 217)			
Explosive properties		No data				
Oxidising properties		No data				
DMSO extractable compounds for according to IP346	base oil substance(s)	Not available <3 %				
Section 10: Stability and Rea	ctivity	43 / 0				
10.1 Reactivity	,	No specific test	data related to reactivity avail	able for this product or its ingr	edients.	
10.2 Chemical stability			ormal conditions			
10.3 Possibility of hazardous rea	ctions			hazardous reactions will not o	ccur. Oxidising agent.	
10.4 Conditions to avoid			n extreme heat and oxidising a		<u>-</u>	
10.5 Incompatible materials		Incomplete con	nbustion is likely to give rise to	a complex mixture of airborn de, H <sub>2</sub> S, SO <sub>x</sub> (sulphur oxides) or		
10.6 Hazardous decomposition			ganic and inorganic compound			
SECTION 11: Toxicological In						
11.1 Information on toxicologica	al effects					
Acute toxicity						
Product / ingredient name	Result		Species	Dose	Exposure	
	LC 50 Inhalation due	sts and mists	Rat	>2.18mg/l	4 hours	
Distillate (Petroleum), hydro treated heavy paraffinic	LD 50 Dermal		Rabbit	> 5000 mg/kg	-	
dealed heavy paramine	LD 50 Ora	al	Rat	>15000 mg/kg	-	
Irritation / corrosion						
Skin						
Eye		No known signi	ificant effects or critical hazard	ls.		
Respiratory						
Sensation						
Skin		No known significant effects or critical hazards.				
Respiratory						
Mutagenicity		No data available to indicate product or any components present greater than 0.1 % are multigene or genotoxic.				
Carcinogenicity		3 3		severely hydrotreated distillate		
Reproductive toxicity		The product she	The product should not be regarded as a carcinogen. Contains no ingredient listed as toxic to reproduction.			
Specific target organ toxicity – sin	ale exposure	Contains no ing	greateric instea as toxic to repro			
Specific target organ toxicity – rep		Not classified				
Aspiration hazard	cated exposure	Aspiration hazard – Category 1				
Information on likely routes of exp	oosure	Not available				
Potential acute health effects	Juic					
Eye contact		Eve contact may	v cause redness and transient	nain		
Inhalation		Eye contact may cause redness and transient pain.           Inhalation of oil mist or vapours at elevated temperatures may cause respiratory irritation.			tory irritation	
Skin contact	No known significant effects or critical hazards.			nory intration.		
Ingestion Potential chronic health effects		way be latal if s	wanowed and enters airways.			
General		No known signi	ificant offects or critical barand			
Genelal			ificant effects or critical hazard		The product should not be	
Carcinogenicity The base oil(s) in this product is based on an severely hydrotreated distillate. The product should not regarded as a carcinogen.					. The product should not be	







Mutagenicity							
Teratogenicity		No known s	significant effects or critical haz	ards.			
Product / ingredient name		-					
Fertility effects							
Other information Specific hazard		Not available					
Section 12: Ecological Information							
12.1 Toxicity			ed to be harmful to aquatic org	anisms.			
12.2 Persistence and degradability		Not inherently biodegradable.					
12.3 Bioaccumulative potential			Bioaccumulation is unlikely to be significant because of the low water solubility of this product. Not considered mobile.				
12.4 Mobility in soil							
12.5 Results of PBT & vPvB assessment	:	Not applica					
12.6 Other adverse effects			n water. Spills may form a film of nsfer could also be impaired.	n water surfaces causing physica	al damage to organisms.		
Section 13: Disposal Consideration							
The information in this section contains information provided in the Exposure So	generic advice and enario(s).	d guidance. T	he list of Identified Uses in Sect	ion 1 should be consulted for ar	ny available use-specific		
Product Methods of disposal	Ut Methods of disposal Where possible (e.g. in the absence of relevant contamination), recycling of used substance is feasible and recommended. This substance can be burned or incinerated, subject to national/le authorisations, relevant contamination limits, safety regulations and air quality legislation. Con or waste substance (not directly recyclable): Disposal can be carried out directly, or by delivery qualified waste handlers. National legislation may identify a specific organisation, and/or prese composition limits and methods for recovery or disposal				subject to national/local ality legislation. Contaminated rectly, or by delivery to		
Hazardous waste		Yes					
European waste catalogue (EWC) Waste	Code 13 03 07*	Waste designation.					
Packaging		Mineral-ba	sed non-chlorinated insulating	and heat transmission oils.			
Methods of disposal		The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.					
Section 14: Transport Information							
International transport regulations							
	ADR / R	ID	ADN	IMO / IMDG Classification	ICAO / IATA Classification		
14.1 UN number	Not regul	ated	Not regulated	Not regulated	Not regulated		
14.2 UN proper shipping name	_		_	_	_		
14.3 Transport hazard class(es)	_		-	_	_		
14.4 Packing group	_		-	_	_		
14.5 Environmental hazards	No		No	No	No		
Additional Information	_		-	-	-		
14.6 Special precautions for user oils							
14.7 Transport in bulk according to An	nex   of MARPOL	73/78 and th	e IBC Code				
Section 15: Regulatory Informatio							
15.1 Safety, health and environmental		slation speci	fic for the substance or mixture	e EU Regulation (EC) No. 1907/	2006 (REACH)		
Annex XIV – List of substances subject to Annex XIV Substances of very high concern	None of the components are listed						
Annex XVII – Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles.							
International Lists National Inventory		Inventory name					
Australia		Australian Inventory of Chemical Substances (AICS) – Yes					
Canada			ubstances List (DSL) – Yes stic Substances List (NDSL) – Nc	)			
China			f Existing Chemical Substances				
		inventory o	. Easting chemical substances				





	European Inventory of Existing Commercial Chemical Substances (EINECS) – Yes
Europe	European List of Notified Chemical Substances (ELINCS) – No
Japan	Inventory of Existing and New Chemical Substances (ENCS) – Yes
Korea	Existing Chemicals List (ECL) – Yes
New Zealand	New Zealand Inventory – Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS) – Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory – Yes
	oly with the inventory requirements administered by the governing country(s) uct are not listed or exempt from listing on the inventory administered by the governing country(s).
Section 16: Other Information	
Revision comments	
Legend to abbreviations	
ADR	European agreement concerning the international carriage of dangerous good by road.
RID	Regulations agreement concerning the international carriage of dangerous good by rail.
IMDG Code	International Maritime Dangerous Goods Code.
ICAO	International Civil Aviation Organization.
IATA	International Air Transport Association.
GHS	Globally Harmonized System of Classification and Labeling of Chemicals.
CLP	Classification, Labelling and Packaging Regulation [Regulation (EC) No.1272/2008].
SCBA	Self-Contained Breathing Apparatus.
REACH	Registration, Evaluation, Authorization and Restriction of Chemicals Regulation [Regulation (EC) No. 1907/2006].
LC 50	Median lethal concentration.
LD 50	Median lethal dose.
РВТ	Persistent, Bio accumulative and Toxic.

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Emergency / Info Phone No.	Phone: +91-22-40635600 • Fax: +91-22-40635601	
Email	info@gandharoil.com	





# **DIVYOL TRIBOROL HT2 M GREASE**

Section 1: Identification of the Substance / Mixt	ture			
1.1 Product identifier				
Product name	Divyol Triborol HT2 M Grease			
	,			
Product description	<u> </u>	High Temprature/Perfomance Moly Grease		
Product type	Grease	Grease		
MARPOL Annex-1	****			
1.2 Identified uses				
Distribution of substance	Automotive & In	dustrial Grease		
Formulation & (re)packing of substance & mixtures	Automotive & In	dustrial Grease		
Manufacture of substance	Automotive & In	dustrial Grease		
Functional fluids	Automotive & In	dustrial Grease		
Section 2: Hazard Identification				
4-Extreme	Health		1	
3-High	Flammability		1	
2-Moderate	Reactivity		0	
1-Slight	Special		_	
Section 3: Composition / Information on Ingredi				
Chemical Name / Ingredients	% by wt.	Hazardous	CAS No.	
Lithium Hydroxide	0.5 - 2	Yes	1310-66-3	
Mineral Oil 12 HSA	85 - 92	Yes No	64742-52-5, 64741-88-4, 64742-01-4 106-14-9	
HCO	5 - 10 2 - 5	No	8001-78-3	
Complexing Acid	0-3	No	Proprietary Mixture	
Molybdenum Disulfie	1-4	Yes	1317-33-5	
Butene, Homo Polymer	0-3	Yes	689003-27-4457-79-4	
Mix Additives	0-4	No	Proprietary Mixture	
Solid Additive	0 - 3	Yes	7782-42-5	
Product / Ingredient name		oaps from natural	Il fatty substances	
Section 4: First Aid Measures				
Inhalation exposure	Remove to fresh	air & provide oxyc	gen, if breathing is difficult. Contact physician	
Skin contact	Remove contam	inated clothing. Fl	lush skin with water. Wash skin thoroughly with mild soap & water.	
Swallowing or other		If irritation occurs, call a physician. Do not induce vomiting. In general no treatment is necessary unless large quantities are ingested.		
Eye contact			several minutes. Get medical attention, if irritation persists.	
Protection first-aiders		Disconnecting electrical supply. Ensure adequate ventilation and check that a safe and breathing area is available before entry into confined spaces.		
Section 5: Fire Fighting Measures				
5.1 Extinguishing media		<b>c</b>		
Unsuitable extinguishing media	burning product	Use dry powder, foam, carbon dioxide. Do not use direct water and wet chemicals, or water on the burning product. They may spread the fire. Use foam simultaneously on the surface.		
5.2 Special hazards arising from the substance or mix				
Hazards from the substance or mixture		Flammable liquids in pressurised containers may rupture and when exposed to heat, creating a highly flammable vapour cloud.		
Hazardous thermal decomposition products	particulates, gas	Incomplete combustion is likely to give rise to a complex mixture of airborne solid and liquid particulates, gases, including carbon monoxide, H <sub>2</sub> S, SO <sub>x</sub> (sulphur oxides) or sulphuric acid and unidentified organic and inorganic compounds.		
5.3 Advice for firefighters				
Special precautions for firefighters			noving all persons from the vicinity of the incident if there is a fire. No y personal risk or without suitable training.	
Special protective equipment for firefighters	(SCBA) with a ful helmets, protect	Firefighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face- piece operated in positive pressure mode. Clothing for firefighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.		





6.1 Personal precautions, protective equipment and emergency procedures			
For non-emergency personnel	Keep non-involved personnel away from the area of spillage. Alert emergency personnel. Except in case of small spillages, the feasibility of any actions should always be assessed and advised, if possible, by a trained, competent person in charge of managing the emergency. Stop leak if safe to do so. Avoid direct contact with the product. Stay upwind / keep distance from source. In case of large spillages, alert occupants in downwind areas. Eliminate all ignition sources if safe to do so. Spillages of limited amounts of product, especially in the open air when vapours will be usually quickly dispersed, are dynamic situations, which will presumably limit the exposure to dangerous concentrations. Note : Recommended measures are based on the most likely spillage scenarios for this material; however, local conditions (wind, air temperature, wave / current direction and speed) may significantly influence the choice of appropriate actions.		
For emergency responders	For this reason, local experts should be consulted when necessary. Local regulations may also prescribe or limit actions to be taken. Small spillages: Normal antistatic working clothes are usually adequate. Large spillages: Full body suit of chemically resistant and thermal resistant material should be used. Work gloves providing adequate chemical resistance, specifically to aromatic hydrocarbons. Note: Gloves made of PVA are not water-resistant, and are not suitable for emergency use. Safety helmet, antistatic non-skid safety shoes or boots. Goggles and / or face shield, if splashes or contact with eyes is possible or anticipated. Respiratory Protection : A half or full-face respirator with filter(s) for organic vapours (and when applicable for H <sub>2</sub> S) a Self Contained Breathing Apparatus (SCBA) can be used according to the extent of spill and predictable amount of exposure. If the situation cannot be completely assessed, or if an oxygen deficiency is possible, only SCBA's should be used.		
6.2 Environmental precautions	Prevent product from entering sewers, rivers or other bodies of water. If necessary dike the product with dry earth, sand or similar non-combustible materials. In case of soil contamination, remove contaminated soil and treat in accordance with local regulations. In case of small spillages in closed waters (i.e. ports), contain product with floating barriers or other equipment. Collect spilled product by absorbing with specific floating absorbents. If possible, large spillages in open waters should be contained with floating barriers or other mechanical means. If this is not possible, control the spreading of the spillage, and collect the product by skimming or other suitable mechanical means. The use of dispersants should be advised by an expert, and, if required, approved by local authorities.		
6.3 Methods and material for containment and cleaning up			
Small spill	Stop leak if without risk. Absorb spilled product with suitable non-combustible materials.		
Large spill	Large spillages may be cautiously covered with foam, if available, to limit vapour cloud formation. Do not use water jet. When inside buildings or confined spaces, ensure adequate ventilation. Transfer collected product and other contaminated materials to suitable containers for recovery or safe disposal.		
6.4 Reference to other sections	See Section 1: For emergency contact information. See Section 8: For information on appropriate personal protective equipment. See Section 13: For additional waste treatment information.		
Section 7: Handling and Storage			
7.1 Advice on general information – hygiene, storage	Obtain special instructions before use. Keep away from heat / sparks / open flames/hot surfaces. No smoking. Use and store only outdoors or in a well-ventilated area. Hazard of slipping on spilt product. Avoid release to the environment.		
7.2 Conditions for safe storage including any incompatibilities	Storage area layout, tank design, equipment and operating procedures must comply with the relevant regional, national or local legislation. Storage installations should be designed with adequate bunds in case of leaks or spills. Cleaning, inspection and maintenance of internal structure of storage tanks must be done only by properly equipped and qualified personnel as defined by national, local or company regulations. Store separately from oxidising agents. Keep only in the original container or in a suitable container for this kind of product. Keep container tightly closed and sealed until ready for use. Do not store in unlabelled containers. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Empty containers may contain harmful, flammable / combustible or explosive residue or vapours. Do not cut, grind, drill, weld, reuse or dispose of containers unless adequate precautions are taken against these hazards. Protect from sunlight.		
7.3 Specific end use(s) – Recommendations	Not available		



Vapour pressure

Density Solubility (ies)



Section 8: Exposure Controls / Personal Protect	tion		
The list of Identified Uses in Section 1 should be consu	ulted for any available use-specific information provided in the Exposure Scenario(s).		
8.1 Control parameters			
Occupational exposure limits			
Product / Ingredient name	Distillates, mixture of hydrocarbons		
Exposure limits values	AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m <sup>3</sup> 8 hours. Form: mist and fume STEL: 3 mg/m <sup>3</sup> 15 minutes. Form: mist and fume [Air contaminant]. AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m <sup>3</sup> 8 hours. Form: mist and fume STEL: 3 mg/m <sup>3</sup> 15 minutes. Form: mist and fume.		
Recommended monitoring procedures	If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres – Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres – Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres – General requirements for the performance of procedures for the measurement of chemical agents). Reference to national guidance documents for methods for the determination of hazardous substances will also be required.		
8.2 Exposure control Appropriate engineering controls	Mechanical ventilation and local exhaust will reduce exposure via the air. Use oil resistant material in construction of handling equipment. Store under recommended conditions and if heated, temperature control equipment should be used to avoid overheating.		
Individual protection measures			
Hygiene measures	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Ensure that eyewash stations and safety showers are close to the workstation location. Wash contaminated clothing before reuse.		
Eye / face protection	Recommended: Safety glasses with side shields.		
Skin protection			
Hand protection	4 – 8 hours (breakthrough time): nitrile rubber.		
Body protection	Wear protective clothing if there is a risk of skin contact. Change contaminated clothes at the end of working shift.		
Other skin protection	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.		
Respiratory protection	Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary.		
Environmental exposure control	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.		
Section 9: Physical and Chemical Properties			
Appearance	Clear		
Physical state	Smooth & Tacky		
Colour	Grey		
Odor	Petroleum odor		
Odour threshold	Not available		
Dropping point	> 260°C (ASTM D -566)		
Flash point	> 230°C (MINERAL OIL)		
Evaporation rate	Not available		
Flammability (solid, gas)	Not available		
Flammability limits in air (lower), % by volume	Not available		
Flammability limits in air (upper), % by volume	Not available		



Not volatile

0.88 - 0.95 Kg/L





		Insoluble in water				
Solubility (water) Partition coefficient (n-octanol/wa	ater)	Not available				
Decomposition temperature			No data			
		Not available				
			265-295 (ASTM D 217)			
		No data				
Oxidising properties		No data				
DMSO extractable compounds for	base oil substance(s)	Not available				
according to IP346		<3 %				
Section 10: Stability and Read	ctivity					
10.1 Reactivity			data related to reactivity availa	able for this product or its ingr	redients.	
10.2 Chemical stability			ormal conditions			
10.3 Possibility of hazardous rea	ctions		conditions of storage and use, I		ccur. Oxidising agent.	
10.4 Conditions to avoid		Keep away from	n extreme heat and oxidising a	gents.		
10.5 Incompatible materials			nbustion is likely to give rise to ses, including carbon monoxic			
10.6 Hazardous decomposition p	products	unidentified or	ganic and inorganic compound	ds.		
SECTION 11: Toxicological Inf	formation					
11.1 Information on toxicologica	al effects					
Acute toxicity						
Product / ingredient name	Result		Species	Dose	Exposure	
, i i i i i i i i i i i i i i i i i i i	LC 50 Inhalation due	sts and mists	Rat	>2.18mg/l	4 hours	
Distillate (Petroleum), hydro	LD 50 Derr		Rabbit	> 5000 mg/kg	_	
treated heavy paraffinic	LD 50 Ora		Rat	>15000 mg/kg	_	
Irritation / corrosion						
Skin						
Eye		No known signi	ificant effects or critical hazard	s.		
Eye Respiratory		No known signi	ificant effects or critical hazard	S.		
Eye Respiratory Sensation		No known signi	ificant effects or critical hazard	S.		
Eye Respiratory						
Eye Respiratory Sensation			ificant effects or critical hazard ificant effects or critical hazard			
Eye Respiratory Sensation Skin Respiratory		No known signi	ificant effects or critical hazard le to indicate product or any c	S.	an 0.1 % are	
Eye Respiratory Sensation Skin		No known signi No data availab multigene or ge	ificant effects or critical hazard le to indicate product or any c	s. omponents present greater th		
Eye Respiratory Sensation Skin Respiratory Mutagenicity		No known signi No data availab multigene or ge The base oil(s) i The product sho	ificant effects or critical hazard le to indicate product or any c enotoxic. n this product is based on an s ould not be regarded as a carc	s. omponents present greater th everely hydrotreated distillate inogen.		
Eye Respiratory Sensation Skin Respiratory Mutagenicity Carcinogenicity Reproductive toxicity	ale exposure	No known signi No data availab multigene or ge The base oil(s) i The product sho	ificant effects or critical hazard le to indicate product or any c enotoxic. n this product is based on an s	s. omponents present greater th everely hydrotreated distillate inogen.		
Eye Eye Respiratory Sensation Skin Respiratory Mutagenicity Carcinogenicity Reproductive toxicity Specific target organ toxicity – sing	<b>5</b> 1	No known signi No data availab multigene or ge The base oil(s) i The product sho	ificant effects or critical hazard le to indicate product or any c enotoxic. n this product is based on an s ould not be regarded as a carc	s. omponents present greater th everely hydrotreated distillate inogen.		
Eye Eye Respiratory Sensation Skin Respiratory Mutagenicity Carcinogenicity Reproductive toxicity Specific target organ toxicity – sing Specific target organ toxicity – rep	<b>5</b> 1	No known signi No data availab multigene or ge The base oil(s) i The product she Contains no ing Not classified	ificant effects or critical hazard le to indicate product or any c enotoxic. n this product is based on an s ould not be regarded as a carc gredient listed as toxic to repro	s. omponents present greater th everely hydrotreated distillate inogen.		
Eye Eye Respiratory Sensation Skin Respiratory Mutagenicity Carcinogenicity Reproductive toxicity Specific target organ toxicity – sing Specific target organ toxicity – rep Aspiration hazard	beated exposure	No known signi No data availab multigene or ge The base oil(s) i The product she Contains no ing Not classified Aspiration haza	ificant effects or critical hazard le to indicate product or any c enotoxic. n this product is based on an s ould not be regarded as a carc gredient listed as toxic to repro	s. omponents present greater th everely hydrotreated distillate inogen.		
Eye Eye Respiratory Sensation Skin Respiratory Mutagenicity Carcinogenicity Reproductive toxicity Specific target organ toxicity – rep Aspiration hazard Information on likely routes of exp	beated exposure	No known signi No data availab multigene or ge The base oil(s) i The product she Contains no ing Not classified	ificant effects or critical hazard le to indicate product or any c enotoxic. n this product is based on an s ould not be regarded as a carc gredient listed as toxic to repro	s. omponents present greater th everely hydrotreated distillate inogen.		
Eye Respiratory Sensation Skin Respiratory Mutagenicity Carcinogenicity Reproductive toxicity Specific target organ toxicity – sing Specific target organ toxicity – rep Aspiration hazard Information on likely routes of exp Potential acute health effects	beated exposure	No known signi No data availab multigene or ge The base oil(s) i The product she Contains no ing Not classified Aspiration haza Not available	ificant effects or critical hazard le to indicate product or any c enotoxic. n this product is based on an s ould not be regarded as a carc gredient listed as toxic to repro	s. omponents present greater th everely hydrotreated distillate inogen. duction.		
Eye Eye Respiratory Sensation Skin Respiratory Mutagenicity Carcinogenicity Carcinogenicity Specific target organ toxicity – sing Specific target organ toxicity – rep Aspiration hazard Information on likely routes of exp Potential acute health effects Eye contact	beated exposure	No known signi No data availab multigene or ge The base oil(s) i The product she Contains no ing Not classified Aspiration haza Not available Eye contact ma	ificant effects or critical hazard le to indicate product or any c enotoxic. n this product is based on an s ould not be regarded as a carc gredient listed as toxic to repro ard – Category 1	s. omponents present greater th everely hydrotreated distillate inogen. duction. pain.		
Eye         Respiratory         Sensation         Skin         Respiratory         Mutagenicity         Carcinogenicity         Reproductive toxicity         Specific target organ toxicity – sing         Specific target organ toxicity – sing         Aspiration hazard         Information on likely routes of exp         Potential acute health effects         Eye contact         Inhalation	beated exposure	No known signi No data availab multigene or ge The base oil(s) i The product she Contains no ing Not classified Aspiration haza Not available Eye contact may Inhalation of oil	ificant effects or critical hazard le to indicate product or any c enotoxic. n this product is based on an s ould not be regarded as a carc gredient listed as toxic to repro ard – Category 1 y cause redness and transient l mist or vapours at elevated te	s. omponents present greater th everely hydrotreated distillate inogen. duction. pain. emperatures may cause respire		
Eye         Respiratory         Sensation         Skin         Respiratory         Mutagenicity         Carcinogenicity         Reproductive toxicity         Specific target organ toxicity – rep         Aspiration hazard         Information on likely routes of exp         Potential acute health effects         Eye contact         Inhalation         Skin contact	beated exposure	No known signi No data availab multigene or ge The base oil(s) i The product she Contains no ing Not classified Aspiration haza Not available Eye contact ma Inhalation of oil No known signi	ificant effects or critical hazard le to indicate product or any c enotoxic. In this product is based on an s ould not be regarded as a carc gredient listed as toxic to repro ard – Category 1 y cause redness and transient l mist or vapours at elevated te ificant effects or critical hazard	s. omponents present greater th everely hydrotreated distillate inogen. duction. pain. emperatures may cause respire	·	
Eye   Respiratory   Sensation   Skin   Respiratory   Mutagenicity   Carcinogenicity   Reproductive toxicity   Specific target organ toxicity - single   Specific target organ toxicity - rep   Aspiration hazard   Information on likely routes of exp   Potential acute health effects   Eye contact   Inhalation   Skin contact   Ingestion	beated exposure	No known signi No data availab multigene or ge The base oil(s) i The product she Contains no ing Not classified Aspiration haza Not available Eye contact ma Inhalation of oil No known signi	ificant effects or critical hazard le to indicate product or any c enotoxic. n this product is based on an s ould not be regarded as a carc gredient listed as toxic to repro ard – Category 1 y cause redness and transient l mist or vapours at elevated te	s. omponents present greater th everely hydrotreated distillate inogen. duction. pain. emperatures may cause respire	·	
EyeRespiratorySensationSkinRespiratoryMutagenicityCarcinogenicityReproductive toxicitySpecific target organ toxicity - singSpecific target organ toxicity - sing <td>beated exposure</td> <td>No known signi No data availab multigene or ge The base oil(s) i The product she Contains no ing Not classified Aspiration haza Not available Eye contact ma Inhalation of oil No known signi May be fatal if s</td> <td>ificant effects or critical hazard le to indicate product or any c enotoxic. n this product is based on an s ould not be regarded as a carc gredient listed as toxic to repro ard – Category 1 y cause redness and transient I mist or vapours at elevated te ificant effects or critical hazard wallowed and enters airways.</td> <td>s. omponents present greater th everely hydrotreated distillate inogen. duction. pain. emperatures may cause respira s.</td> <td>·</td>	beated exposure	No known signi No data availab multigene or ge The base oil(s) i The product she Contains no ing Not classified Aspiration haza Not available Eye contact ma Inhalation of oil No known signi May be fatal if s	ificant effects or critical hazard le to indicate product or any c enotoxic. n this product is based on an s ould not be regarded as a carc gredient listed as toxic to repro ard – Category 1 y cause redness and transient I mist or vapours at elevated te ificant effects or critical hazard wallowed and enters airways.	s. omponents present greater th everely hydrotreated distillate inogen. duction. pain. emperatures may cause respira s.	·	
Eye   Respiratory   Sensation   Skin   Respiratory   Mutagenicity   Carcinogenicity   Reproductive toxicity   Specific target organ toxicity - single   Specific target organ toxicity - rep   Aspiration hazard   Information on likely routes of exp   Potential acute health effects   Eye contact   Inhalation   Skin contact   Ingestion	beated exposure	No known signi No data availab multigene or ge The base oil(s) i The product she Contains no ing Not classified Aspiration haza Not available Eye contact ma Inhalation of oil No known signi May be fatal if s	ificant effects or critical hazard le to indicate product or any c enotoxic. In this product is based on an s ould not be regarded as a carc gredient listed as toxic to repro ard – Category 1 y cause redness and transient l mist or vapours at elevated te ificant effects or critical hazard	s. omponents present greater th everely hydrotreated distillate inogen. duction. pain. emperatures may cause respira s.	tory irritation.	







Mutagenicity							
Teratogenicity		No known s	significant effects or critical haz	ards.			
Product / ingredient name							
Fertility effects		Not such the la	1-				
Other information Specific hazard		Not availab	le				
Section 12: Ecological Information							
12.1 Toxicity			ed to be harmful to aquatic org	anisms.			
12.2 Persistence and degradability			ntly biodegradable.				
12.3 Bioaccumulative potential				nt because of the low water solu	bility of this product.		
12.4 Mobility in soil			ered mobile.				
12.5 Results of PBT & vPvB assessment	:	Not applica					
12.6 Other adverse effects			n water. Spills may form a film of nsfer could also be impaired.	n water surfaces causing physica	al damage to organisms.		
Section 13: Disposal Consideration							
The information in this section contains information provided in the Exposure So	generic advice and enario(s).	d guidance. T	he list of Identified Uses in Sect	ion 1 should be consulted for ar	ny available use-specific		
Product Methods of disposal			Where possible (e.g. in the absence of relevant contamination), recycling of used substance is feasible and recommended. This substance can be burned or incinerated, subject to national/local authorisations, relevant contamination limits, safety regulations and air quality legislation. Contaminated or waste substance (not directly recyclable): Disposal can be carried out directly, or by delivery to qualified waste handlers. National legislation may identify a specific organisation, and/or prescribe composition limits and methods for recovery or disposal				
Hazardous waste		Yes					
European waste catalogue (EWC) Waste	Code 13 03 07*	Waste designation.					
Packaging		Mineral-ba	Mineral-based non-chlorinated insulating and heat transmission oils.				
Methods of disposal			The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.				
Section 14: Transport Information							
International transport regulations							
	ADR / R	ID	ADN	IMO / IMDG Classification	ICAO / IATA Classification		
14.1 UN number	Not regul	ated	Not regulated	Not regulated	Not regulated		
14.2 UN proper shipping name	_		_	_	_		
14.3 Transport hazard class(es)	_		-	_	_		
14.4 Packing group	_		-	_	_		
14.5 Environmental hazards	No		No	No	No		
Additional Information	_		-	-	-		
14.6 Special precautions for user oils							
14.7 Transport in bulk according to An	nex   of MARPOL	73/78 and th	e IBC Code				
Section 15: Regulatory Informatio							
		slation speci	fic for the substance or mixture	e EU Regulation (EC) No. 1907/	2006 (REACH)		
			None of the components are listed				
Annex XVII – Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles.		Not applicable					
International Lists National Inventory		Inventory name					
Australia		Australian I	Australian Inventory of Chemical Substances (AICS) – Yes				
Canada			Domestic Substances List (DSL) – Yes Non-Domestic Substances List (NDSL) – No				
China		Inventory of Existing Chemical Substances in China (IECSC) – Yes					







_	European Inventory of Existing Commercial Chemical Substances (EINECS) – Yes
Europe	European List of Notified Chemical Substances (ELINCS) – No
Japan	Inventory of Existing and New Chemical Substances (ENCS) – Yes
Korea	Existing Chemicals List (ECL) – Yes
New Zealand	New Zealand Inventory – Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS) – Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory – Yes
	ply with the inventory requirements administered by the governing country(s) uct are not listed or exempt from listing on the inventory administered by the governing country(s).
Section 16: Other Information	
Revision comments	
Legend to abbreviations	
ADR	European agreement concerning the international carriage of dangerous good by road.
RID	Regulations agreement concerning the international carriage of dangerous good by rail.
IMDG Code	International Maritime Dangerous Goods Code.
ICAO	International Civil Aviation Organization.
IATA	International Air Transport Association.
GHS	Globally Harmonized System of Classification and Labeling of Chemicals.
CLP	Classification, Labelling and Packaging Regulation [Regulation (EC) No.1272/2008].
SCBA	Self-Contained Breathing Apparatus.
REACH	Registration, Evaluation, Authorization and Restriction of Chemicals Regulation [Regulation (EC) No. 1907/2006].
LC 50	Median lethal concentration.
LD 50	Median lethal dose.
РВТ	Persistent, Bio accumulative and Toxic.

GANDHAR OIL REFINERY (INDIA) LTD.		
Taloja Plant	Plot No.10, MIDC, Main Road, Taloja, Taluka Panvel, District - Raigad 410208, India.	
Silvassa Plant	Plot No. 2, Survey No. 678/1/3, Village Naroli, Near Naroli Check Post, Silvassa, Dadra & Nagar Haveli, Union Territory 396230, India.	
Emergency / Info Phone No.	Phone: +91-22-40635600 • Fax: +91-22-40635601	
Email	info@gandharoil.com	





# **DIVYOL TRIBOROL HT2X GREASE**

Section 1: Identification of the Substance / Mixture				
1.1 Product identifier				
Product name	Divyol Triborol HT2X Grease			
Product description	High Temprature Grease			
Product type	Grease			
MARPOL Annex-1	****			
1.2 Identified uses				
Distribution of substance	Automotive & Industrial Grease			
Formulation & (re)packing of substance & mixtures	Automotive & Industrial Grease			
Manufacture of substance	Automotive & Industrial Grease			
Functional fluids	Automotive & Industrial Grease			
Section 2: Hazard Identification				
4-Extreme	Health	1		
3-High	Flammability	1		
2-Moderate	Reactivity	0		
1-Slight	Special	-		
	· ·	-		
Section 3: Compostion / Information on Ingred				
Chemical Name / Ingredients	% by wt.	Hazardous	CAS No.	
Bentonite	5 - 10	Yes	68953-58-2	
Propylene Carbonate	0.5 - 2	Yes	108-32-7	
Mineral Oil	85 - 95	Yes	64742-01-4, 64741-88-4	
Additives	0.5 - 2	Yes	Proprietary Mixture	
Product / Ingredient name	Clay soaps from natural fatty sub	ostances		
Section 4: First Aid Measures				
Inhalation exposure	Remove to fresh air & provide ox	ygen, if breathing is difficult. Contac	t physician	
Skin contact	Remove contaminated clothing. If irritation occurs, call a physicia	Flush skin with water. Wash skin tho n.	roughly with mild soap & water.	
Swallowing or other	Do not induce vomiting. In gene Get medical advice.	Do not induce vomiting. In general no treatment is necessary unless large quantities are ingested. Get medical advice.		
Eye contact	Rinse continuously with water for	r several minutes. Get medical atten	tion, if irritation persists.	
Protection first-aiders		Disconnecting electrical supply. Ensure adequate ventilation and check that a safe and breathing area is available before entry into confined spaces.		
Section 5: Fire Fighting Measures				
5.1 Extinguishing media				
Unsuitable extinguishing media		oxide. Do not use direct water and v ad the fire. Use foam simultaneously		
5.2 Special hazards arising from the substance or mix	•			
Hazards from the substance or mixture	Flammable liquids in pressurised containers may rupture and when exposed to heat, creating a highly flammable vapour cloud.			
Hazardous thermal decomposition products	particulates, gases, including car	Incomplete combustion is likely to give rise to a complex mixture of airborne solid and liquid particulates, gases, including carbon monoxide, H <sub>2</sub> S, SO <sub>x</sub> (sulphur oxides) or sulphuric acid and unidentified organic and inorganic compounds.		
5.3 Advice for firefighters				
Special precautions for firefighters		moving all persons from the vicinity ny personal risk or without suitable t		
Special protective equipment for firefighters	(SCBA) with a full face- piece ope			





6.1 Personal precautions, protective equipment and emergency procedures				
Keep non-involved personnel away from the area of spillage.				
For non-emergency personnel	Alert emergency personnel. Except in case of small spillages, the feasibility of any actions should always be assessed and advised, if possible, by a trained, competent person in charge of managing the emergency. Stop leak if safe to do so. Avoid direct contact with the product. Stay upwind / keep distance from source. In case of large spillages, alert occupants in downwind areas. Eliminate all ignition sources if safe to do so. Spillages of limited amounts of product, especially in the open air when vapours will be usually quickly dispersed, are dynamic situations, which will presumably limit the exposure to dangerous concentrations. Note : Recommended measures are based on the most likely spillage scenarios for this material; however, local conditions (wind, air temperature, wave / current direction and speed) may significantly influence the choice of appropriate actions.			
For emergency responders	For this reason, local experts should be consulted when necessary. Local regulations may also prescribe or limit actions to be taken. Small spillages: Normal antistatic working clothes are usually adequate. Large spillages: Full body suit of chemically resistant and thermal resistant material should be used. Work gloves providing adequate chemical resistance, specifically to aromatic hydrocarbons. Note: Gloves made of PVA are not water-resistant, and are not suitable for emergency use. Safety helmet, antistatic non-skid safety shoes or boots. Goggles and / or face shield, if splashes or contact with eyes is possible or anticipated. Respiratory Protection : A half or full-face respirator with filter(s) for organic vapours (and when applicable for H <sub>2</sub> S) a Self Contained Breathing Apparatus (SCBA) can be used according to the extent of spill and predictable amount of exposure. If the situation cannot be completely assessed, or if an oxygen deficiency is possible, only SCBA's should be used.			
6.2 Environmental precautions	Prevent product from entering sewers, rivers or other bodies of water. If necessary dike the product with dry earth, sand or similar non-combustible materials. In case of soil contamination, remove contaminated soil and treat in accordance with local regulations. In case of small spillages in closed waters (i.e. ports), contain product with floating barriers or other equipment. Collect spilled product by absorbing with specific floating absorbents. If possible, large spillages in open waters should be contained with floating barriers or other mechanical means. If this is not possible, control the spreading of the spillage, and collect the product by skimming or other suitable mechanical means. The use of dispersants should be advised by an expert, and, if required, approved by local authorities.			
6.3 Methods and material for containment and cleaning up				
Small spill	Stop leak if without risk. Absorb spilled product with suitable non-combustible materials.			
Large spill	Large spillages may be cautiously covered with foam, if available, to limit vapour cloud formation. Do not use water jet. When inside buildings or confined spaces, ensure adequate ventilation. Transfer collected product and other contaminated materials to suitable containers for recovery or safe disposal.			
6.4 Reference to other sections	See Section 1: For emergency contact information. See Section 8: For information on appropriate personal protective equipment. See Section 13: For additional waste treatment information.			
Section 7: Handling and Storage				
7.1 Advice on general information – hygiene, storage	Obtain special instructions before use. Keep away from heat / sparks / open flames/hot surfaces. No smoking. Use and store only outdoors or in a well-ventilated area. Hazard of slipping on spilt product. Avoid release to the environment.			
7.2 Conditions for safe storage including any incompatibilities	Storage area layout, tank design, equipment and operating procedures must comply with the relevant regional, national or local legislation. Storage installations should be designed with adequate bunds in case of leaks or spills. Cleaning, inspection and maintenance of internal structure of storage tanks must be done only by properly equipped and qualified personnel as defined by national, local or company regulations. Store separately from oxidising agents. Keep only in the original container or in a suitable container for this kind of product. Keep container tightly closed and sealed until ready for use. Do not store in unlabelled containers. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Empty containers may contain harmful, flammable / combustible or explosive residue or vapours. Do not cut, grind, drill, weld, reuse or dispose of containers unless adequate precautions are taken against these hazards. Protect from sunlight.			
7.3 Specific end use(s) – Recommendations	Not available			



Density Solubility (ies)



Section 8: Exposure Controls / Personal Protect	tion
The list of Identified Uses in Section 1 should be consu	Ited for any available use-specific information provided in the Exposure Scenario(s).
8.1 Control parameters	
Occupational exposure limits	
Product / Ingredient name	Distillates, mixture of hydrocarbons
Exposure limits values	AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m <sup>3</sup> 8 hours. Form: mist and fume STEL: 3 mg/m <sup>3</sup> 15 minutes. Form: mist and fume [Air contaminant]. AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m <sup>3</sup> 8 hours. Form: mist and fume STEL: 3 mg/m <sup>3</sup> 15 minutes. Form: mist and fume.
Recommended monitoring procedures	If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres – Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres – Guide for the application and use of procedures for the assessment of exposure to chemical agents of the performance of procedures for the measurement of chemical agents). Reference to national guidance documents for methods for the determination of hazardous substances will also be required.
8.2 Exposure control Appropriate engineering controls	Mechanical ventilation and local exhaust will reduce exposure via the air. Use oil resistant material in construction of handling equipment. Store under recommended conditions and if heated, temperature control equipment should be used to avoid overheating.
Individual protection measures	
Hygiene measures	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Ensure that eyewash stations and safety showers are close to the workstation location. Wash contaminated clothing before reuse.
Eye / face protection	Recommended: Safety glasses with side shields.
Skin protection	
Hand protection	4 – 8 hours (breakthrough time): nitrile rubber.
Body protection	Wear protective clothing if there is a risk of skin contact. Change contaminated clothes at the end of working shift.
Other skin protection	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary.
Environmental exposure control	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.
Section 9: Physical and Chemical Properties	
Appearance	Clear
Physical state	Smooth & Greyish Black
Colour	Amber
Odor	Petroleum odor
Odour threshold	Not available
Dropping point	280 °C (ASTM D566)
Flash point	> 240°C (MINERAL OIL)
Evaporation rate	Not available
Flammability (solid, gas)	Not available
Flammability limits in air (lower), % by volume	Not available
Flammability limits in air (upper), % by volume	Not available
Vapour pressure	Not volatile



0.88 - 0.95 Kg/L





Solubility (water)		Insoluble in wat	tor		
Solubility (water) Partition coefficient (n-octanol/water)		Not available			
Partition coefficient (n-octanol/water)		No data			
Decomposition temperature		Not available			
Auto-ignition temperature Worked Penetration at 25°C			D 217)		
		265-295 (ASTM D 217)			
Explosive properties		No data No data			
Oxidising properties DMSO extractable compounds for	r baca ail substanca(s)				
according to IP346		Not available <3 %			
Section 10: Stability and Rea	ctivity				
10.1 Reactivity		No specific test data related to reactivity available for this product or its ingredients.			
10.2 Chemical stability		Stable under normal conditions			
10.3 Possibility of hazardous rea	ctions	Under normal c	conditions of storage and use, I	hazardous reactions will not o	ccur. Oxidising agent.
10.4 Conditions to avoid		Keep away from	n extreme heat and oxidising a	igents.	
10.5 Incompatible materials		Incomplete combustion is likely to give rise to a complex mixture of airborne solid and liquid particulates, gases, including carbon monoxide, $H_2S$ , $SO_x$ (sulphur oxides) or sulphuric acid and			
10.6 Hazardous decomposition	products		ganic and inorganic compound		
SECTION 11: Toxicological In	formation				
11.1 Information on toxicologica	al effects				
Acute toxicity					
Product / ingredient name	Result		Species	Dose	Exposure
5	LC 50 Inhalation due	sts and mists	Rat	>2.18mg/l	4 hours
Distillate (Petroleum), hydro	LD 50 Derr	nal	Rabbit	> 5000 mg/kg	_
treated heavy paraffinic	LD 50 Oral		Rat	>15000 mg/kg	_
Irritation / corrosion					
Skin					
		No known significant effects or critical hazards.			
Eye		NO KHOWH SIGH		5.	
Respiratory					
Sensation					
Skin		No known significant effects or critical hazards.			
Respiratory		No. data availata	In the local sector was doned as a sector of		
Mutagenicity		No data available to indicate product or any components present greater than 0.1 % are multigene or genotoxic.			
Carcinogenicity		The base oil(s) i	n this product is based on an s	everely hydrotreated distillate	<b>.</b>
Reproductive toxicity		The product should not be regarded as a carcinogen. Contains no ingredient listed as toxic to reproduction.			
Specific target organ toxicity – sin	gle exposure				
Specific target organ toxicity – repeated exposure		Not classified			
Aspiration hazard		Aspiration hazard – Category 1			
Information on likely routes of exposure		Not available			
Potential acute health effects					
Eye contact		Eye contact may cause redness and transient pain.			
Inhalation		Inhalation of oil mist or vapours at elevated temperatures may cause respiratory irritation.			
Skin contact		No known significant effects or critical hazards.			
Ingestion		May be fatal if swallowed and enters airways.			
Potential chronic health effects			in a chier and chier an ways.		
General	No known significant effects or critical hazards.				
		The base oil(s) in this product is based on an severely hydrotreated distillate. The product should not be			
Carcinogenicity		regarded as a carcinogen.			







Tearing ending Product / ingredient name Fully effects or critical hazards.Product / ingredient name Fully effects or critical hazards.Other information Specific hazard Section 12: Ecological Information12.1 TotakityNot expected to be harmful to aquatic organism.12.2 Presistence and degradability Constrained production is unlikely to be significant because of the low water solubility of this product.12.3 Feasure of PTA Veb assessmentNot expected to be harmful to aquatic organism.12.6 Constra degradability in solNot expected to be significant because of the low water solubility of this product.12.6 Total of PTA Veb assessmentNot expected to be significant because of the low water solubility of this product.12.6 Total of PTA Veb assessmentNot expected to be significant because of the low water solubility of this product.12.6 Total of PTA Veb assessmentNot expected to be inpaired in or water solubility of using the consultation or expected to provide in the Expected Society and the because of elevant commination/, recycling of user solubility and the total solub impaired in this solver constituent and the because of elevant commination/, recycling of user solubility or orden in the solubility or orden index solubated elevand constituent in this solub expected to provide in the solubility or presche or water solubility or presche or water solubility or orden index solubility and heat transmission oils.Product Methods of disposalNore regulated on chonfinated insulating and heat transmission oils.Product Methods of disposalNore regulated on chonfinated insulating and heat transmission oils.Product Methods of disposalNore regulated on chonfinated insulation and are disposal<	Mutagenicity						
<form>          Image: Product Program Provides Provides</form>	Mutagenicity Teratogenicity		No known significant effects or critical hazards.				
intermation Specific hazard         Not available           Other information Specific hazard         Not available           12.1 Toticky         Not expected to be harmful to aquatic organicm.           12.2 Presistence and degradability in oli         Not inhiserently holiolity isol isolargamme.           12.3 Bioaccumulative potential         Not inhiserently holiolity isol isolargamme.           12.4 Mubility in oli         Not applicable           12.5 Beautics OPE a/VP3 assessement         Not applicable           12.5 Destits OPE a/VP3 assessement         Not applicable           12.6 Differed SP4 available sequencing         Work applicable           Section 12: Dispoid Considerations         Not applicable           Section 13: Dispoid Considerations genet: advice considered mobile:         Not applicable           Product Methods of disposal         Where possible log, in the abterner of relevant constaination, seecling of used subtance is instained not previde previde subtance is instained inducet methods or recovery or disposal           Product Methods of disposal         Were possible log, in the abterner of relevant constaination, seecling of the opplicable constained instaining and arguing your adviced previde subtance is instained instaining and arguing your adviced previde subtance is instained instaining and previde subtance is instained instained instaining and previde subtance is instained instained instained subtance is instained instained instained instained where your publicable and instenotinstained instained where your publicable and insta	5,						
Other Information Specific hazard         Not available           Section 12: Ecological Informative 21: Toxicity         Not expected to be harmful to aquatic organisms.           12: Presistence and degradability         Not considered mobile.           12: A Mobility in soil         Not considered mobile.           12: A Bioaccumulation is unikely to be significant because of the low water solubility of this product.           12: A Mobility in soil         Not considered mobile.           12: A Book in the section contain generic advices of the low water solubility of maging physical damage to organisms.           Product Methods of disposal         Insoluble in water. Splits may form a film on water surfaces causing physical damage to organisms.           Product Methods of disposal         Where possible (e.g. in the absence of relevant contamination), necycling of used subtance i. feesible and econneended. This subsance can be humed or interneside, subject to national/local motion provided in the Exposure Scenario?           Product Methods of disposal         Yes           Europeen waste catalogue (EQL) Waster K         Yes designation.           Reacido di disposal         The generation or low faile displication may identify a specific organisation and/or prescribe composition or land displication for material displication or land displication and or prescribe composition and contage metric cond discler the suble.           Hazerdous waste         Yes         Contageneration or land displication and contrel displication and contageneration or land displication anore	5						
Section 12: Ecological Information         Not expected to be harmful to aquatic organisms.           12.1 Toxicity         Not expected to be harmful to aquatic organisms.           12.3 Broistnee and degradability         Not expected to be harmful to aquatic organisms.           12.4 Mobility is soll         Not expected mobile.           12.4 Mobility is soll         Not expected mobile.           12.5 Results of PET & vPVB assessment         Not expected mobile.           12.6 Other adverse effects         Oxygen transfer could also be impaired.           Section 13: Disposal Considerations         The information insigneenic advected and belies in Section 1 should be consulted for any available use specific information provided in the Exposure Scenario(s).           Product Methods of disposal         Where possible (eq. in the absence or relevant commanication), recycling of used substance is feesible and recommended. This substance can be burned or incinerated, subject to national/coal authoris storing.           Product Methods of disposal         Vise           Hazardous swate         Vise           European waste catalogue (EWC) Wiset Code 13 03 07°         Wiset expected in curve and advected or minimitied wherever possible. Waste packaging should be increated. subject in feasible.           Nethods of disposal         The generation of vaste should be avoided or minimitied wherever possible. Waste packaging should be increated. subject in feasible.           Nethods of disposal         The generation of vaste should be			Not availab	le			
1.2.1 relation     Not respected to be harmful to aquatic organisms.       12.2 Pesitance and degradability     Not relative to be dignificant to be significant to be assume of the low water solubility of this product.       12.3 Reaccumulative potential     Not considered mobile.       12.4 Other diverse effects     Not considered mobile.       2.5 Other diverse effects     Not application water. Spills may form a film on water surfaces assuing physical damage to organisms. Not application water surfaces assuing physical damage to organisms. Not applicati	•	1					
12.2 Persistence and degradability       Not therently biodegradable.         12.3 Bioacumulative potential       Bioaccumulation is unlikely to be significant because of the low water solubility of this product.         12.4 Mobility in sold       Not considered mobile.         12.5 Results of PBT & vPvB assessment       Insolubie in water. Spills may form a film on water surfaces causing physical danage to organisms. Oxygen transfer coald also be impaired.         Section 13: Disposal Considerations:       Insolubie in water. Spills may form a film on water surfaces causing physical danage to organisms. Oxygen transfer coald also be impaired.         Product Methods of disposal       Where possible (e.g. in the absence of relevant contamination) recycling or used substance in freewate contamination limits, stering contacting using legislation. may likely legislation. The product legislation may recycling or used substance in freewate contamination limits. stering contacting using legislation. may likely legislation.         Product Methods of disposal       Ves         European waste catalogue (EWC) Water Code 13 03 07*       Water designation.         Packaging       Merenzibased non-chioritated insulating and heat transmission lesis. The selection or transferidue de avoided or minimised wherever possible.         Section 14: Transport Information       DAPR/RID       MON IMO/IMDG Gassification       Not regulated         14.1 UN number       ADR/RID       ADR       More gulated       Not regulated         14.2 UN poper shipping name       -			Not expect	ed to be harmful to aquatic org	anisms.		
12.3 Biocarmulative potential       Not considered mobile.         12.4 Mobility in soil of PTE 4-VPI assessmet       Not applicable         12.6 Other adverse effects       Not applicable         2.6 Other adverse effects       Not applicable         2.6 Motio of PTE 4-VPI assessmet       Not applicable         Section 2.5 Section contains genetic advice-to-to-to-to-to-to-to-to-to-to-to-to-to-	· · · · · · · · · · · · · · · · · · ·						
12.4 Mobility in soll       Not considered mobile.         12.5 Results of PGT & VPR assessment       Insolubile inwater. Spills may form a film on water surfaces causing physical damage to organisms. Consenting the water. Spills may form a film on water surfaces causing physical damage to organisms. Consenting the information in this section contains generic advice and used to e impaired.         Section 13: Disposal Consideration:       The information in this section contains generic advice and used to explice (e.g. in the absence of relevant contamination) invested in the Exposure Scenario(S).         Product Methods of disposal       Where possible (e.g. in the absence of relevant contamination) invested or galified values in Section 1 should be consulted for any available use-specific organisation, and/or prescribe composition linits and methods for recovery or disposal         Hazardous wase       Yes         European waste catalogue (EWC) Waste Code 13 03 07*       Waste designation.         Readaging       Yes         Methods of disposal       The generation of vaste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not facesifies.         Section 15:       ADR / RPD       ADN       MO/ / MDG Classification       MO/ / I/A Classification         14.1 UN number       ADR / RPD       ADN       MO/ / MDG Classification       MO/ / I/A Classification         14.3 Parking group       -       -       -       -       -			, , ,				
12.6 Other adverse effects     Soluble in water. Splis may form a fitm on water surfaces causing physical damage to organisms. Novigen transfer could also be impaired.       Section 13: Disposal Considerations:       Section 13: Disposal Considerations:       Section 13: Disposal Considerations:       Section 13: Disposal Considerations:       Section 20: Sec							
Autone during attransport       Oxygen transfer could also be impaired.         Section 13: Disposal Consideration       Oxygen transfer could also be impaired.         Section 13: Disposal Consideration       Oxygen transfer could also be impaired.         Product Methods of disposal       Where possible (e.g. in the absence of relevant contamination dimeted in increated, subject to national/local authorisation, relevant contamination dimits, safery regulations and an quality legislation. Contamination dimits, safery regulation and an quality legislation. Contamination dimits, safery regulations and an quality legislation. Contamination dimits and methods for recovery or disposal         Hazardous waste       Yes       Temperation       Temperation of vaste satisfantion.         Records of disposal       Yes       Temperation of vaste satisfantion oils.       Temperation of vaste satisfantion oils.         Records of disposal       ADR / RID       ADN       IMO / IMDG Classification       ICAO / IATA Classification         Methods of disposal       Ox regulated       Not regulated       Not regulated       Not regulated       Not regulated      <							
The information in this section contains generic advice and guidance. The list of identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(S).         Product Methods of disposal       Where possible (e.g. in the absence of relevant contamination), recycling of used substance is a behavior on incinerated, subject to national/local autoinal/local autoinal/instance, requesting and incine safety regulations and air qualified uses thandlers. National legislation. Contaminated or wase substance (not directly recyclabic): Disposal can be carried out directly, or by delivery to composition limits and methods for recovery or disposal can be carried out directly, or by delivery to composition limits and methods for recovery or disposal can be carried out directly, or by delivery to composition limits and methods for recovery or disposal can be carried out directly, or by delivery to composition limits and methods for recovery or disposal can be carried out directly, or by delivery to composition limits and methods for recovery or disposal can be carried out directly, or by delivery to composition limits and methods for recovery or disposal.         Hazardous waste       Yes         European waste catalogue (EWC) Waste Code 13 03 07*       Waste designation.         Methods of disposal       Mineral-based non-chlorinated insulating and heat transmission oils.         Tansport Information       Deprevation or landfill should only be considered when recycling is not feasible.         Interational transport regulations       ADR / RID       ADN / MDO / IMDG Classification       ICAO / IATA Classification         14.1 UN number       ADR / RID       ADN	12.6 Other adverse effects	12.6 Other adverse effects		Insoluble in water. Spills may form a film on water surfaces causing physical damage to organisms.			
information provided in the Exposure Scenario(s).  Where possible (e.g. in the absence of relevant contamination), recycling of used substance (an be burned or inclinerated, subject to national/local authorisations, relevant contamination limits, safety regulations and air quality legislation. Contaminated or qualified waste handlers. National legislation may describe composition. Imits and the directly recycluble): Disposal can be carried out directly, recycling egulations and air quality legislation. Contaminated or qualified waste handlers. National legislation may describe composition. Imits and methods for recovery or disposal Hazardous waste  Ves European waste catalogue (EWC) Waste Code 13 03 07* Mineral-based non-chlorinated insulating and heat transmission oils. The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Inclineration of vaste should be avoided or minimised wherever possible. Waste packaging should be recycled. Inclineration of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Inclineration or landfill should on ye considered when recycling. In CAO / IATA Classification ADR / IM Degulated Not regulated Not regul	Section 13: Disposal Consideration	าร					
Appendix Methods of disposal         Sesible and recommended. This subtance can be burned or incineated, subject on attional/local fuely subjects on a subject of a subj			d guidance. T	he list of Identified Uses in Secti	ion 1 should be consulted for ar	ny available use-specific	
European waste catalogue (EWC) Waste Code 13 03 07*       Mieral-based non-chlorinated insulating and heat transmission oils.         Methods of disposal       The generation of waste should be avoideded or minimised wherever possible. Waste packaging should be crecicled are minimised wherever possible. Waste packaging should be avoidered when recycling is not feasible.         Section 14: Transport Information:         Termational transport regulation:         INMOV (MDG Classification (CAO / IATA Cl	Product Methods of disposal		feasible and recommended. This substance can be burned or incinerated, subject to national/local authorisations, relevant contamination limits, safety regulations and air quality legislation. Contaminated or waste substance (not directly recyclable): Disposal can be carried out directly, or by delivery to qualified waste handlers. National legislation may identify a specific organisation, and/or prescribe				
Packaging       Mineral-based non-chlorinated insulating and heat transmission oils.         Methods of disposal       The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.         Section 14: Transport Information       ADR / RID       ADN       IMO / IMDG Classification       ICAO / IATA Classification         14.1 UN number       Not regulated       Not regulated       Not regulated       Not regulated         14.2 UN proper shipping name       -       -       -       -         14.3 Transport hazard class(es)       -       -       -       -         14.4 Packing group       -	Hazardous waste		Yes				
Methods of disposal       The generation of waste should be avoided or minimised wherever possible.       Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.         Section 14: Transport Information         International transport regulations         International transport regulations       ADR / RID       ADN       IMO / IMDG Classification       ICAO / IATA Classification         14.1 UN number       Not regulated       Not regulated       Not regulated       Not regulated         14.2 UN proper shipping name       -       -       -       -         14.3 Transport hazard class(es)       - <t< td=""><td>European waste catalogue (EWC) Waste</td><td>Code 13 03 07*</td><td colspan="4">Waste designation.</td></t<>	European waste catalogue (EWC) Waste	Code 13 03 07*	Waste designation.				
Methods of disposal       recycled. Incineration or landfill should only be considered when recycling is not feasible.         Section 14: Transport Information         International transport regulations         Methods of disposal       ICAO / IATA Classification         IADR / RID       ADD / RID       MOV (PAL) ADD / IATA Classification         IADR / RID       ADD / RID       MOV (PAL) ADD / IATA Classification         IADR / RID       ADD / RID       MOV (PAL) ADD / IATA Classification         IADR / RID       ADD / RID       MOV (PAL) ADD / IATA Classification         IADR / RID       MOV (PAL) ADD / IATA Classification         IADR / RID       MOV (PAL) ADD / IATA Classification         IADR / RID       MOV (PAL) ADD / IATA Classification         IADR / RID       MOV (PAL) Classification       IADA / IATA Classification         IADR / RID       MOV (PAL) Classification         IADE / Factor       -       -       -         IAA Transport hazard class(bs)       No       No       No	Packaging		Mineral-based non-chlorinated insulating and heat transmission oils.				
International transport regulationsInternational transport regulationsADR / RIDADNIMO / IMDG ClassificationICAO / IATA Classification14.1 UN numberNot regulatedNot regulatedNot regulatedNot regulatedNot regulated14.2 UN proper shipping name14.3 Transport hazard class(es)14.4 Packing group14.4 Packing group14.5 Environmental hazardsNoNoNoNoNoAdditional Information14.6 Special precautions for user oilsNoNoNoNoNo14.6 Special precautions for user oilsMARPOL > TARSPOL	Methods of disposal						
ADR / RIDADNIMO / IMDG ClassificationICAO / IATA Classification14.1 UN numberNot regulatedNot regulatedNot regulatedNot regulated14.2 UN proper shipping name14.3 Transport hazard class(es)14.4 Packing group14.5 Environmental hazardsNoNoNoNoNoAdditional Information14.5 Expecial precautions for user oils14.6 Special precautions for user oils14.7 Transport in bulk according to Annex I of MARPOL 73/78 and the IBC CodeSection 15: Regulatory Information15.1 Safety, health and environmental regulations / legistarion specific for the substance or mixture EU Regulation (EC) No. 1907/2006 (REACH)None of the components are listedAnnex XIV - List of substances subject to authorisation on the market and use of certain dangerous substances, mixtures and articles.Not applicableNot applicableAnnex XVI - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles.Inventory aneAustraliaAustralian Inventory of Chemical Substances (AICS) - YesDomestic Substances List (DSL) - YesCanadaOnestic Substances List (NDSL) - NoNo	Section 14: Transport Information						
14.1 UN numberNot regulatedNot regulatedNot regulatedNot regulated14.2 UN proper shipping name $  -$ 14.3 Transport hazard class(es) $  -$ 14.4 Packing group $  -$ 14.5 Environmental hazardsNoNoNoAdditional Information $  -$ 14.5 Experiation for user oils $  -$ 14.5 Experiation for user oils $  -$ I definition for user oilsExperiation for user oilsExperiation for user oilsExperiation for user oilsI definition for user oilsI definition for user oilsExperiation for user oilsExperiation for user oilsExperiation for user oilsI definition for user oilsI definition for user oilsExperiation for user oilsExperiation for user oilsExperiation for user oilsI definition for user oilsI definition for user oilsSection 15: Regulatory InformationA not substances subject to if before user oilsI definition for user oilsSubstances of very high concernAnnex XVI - Restrictions on the manufacture, placingI definition for user oilsI definition for user oils							







Former	European Inventory of Existing Commercial Chemical Substances (EINECS) – Yes		
Europe	European List of Notified Chemical Substances (ELINCS) – No		
Japan	Inventory of Existing and New Chemical Substances (ENCS) – Yes		
Korea	Existing Chemicals List (ECL) – Yes		
New Zealand	New Zealand Inventory – Yes		
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS) – Yes		
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory – Yes		
	oly with the inventory requirements administered by the governing country(s) uct are not listed or exempt from listing on the inventory administered by the governing country(s).		
Section 16: Other Information			
Revision comments			
Legend to abbreviations			
ADR	European agreement concerning the international carriage of dangerous good by road.		
RID	Regulations agreement concerning the international carriage of dangerous good by rail.		
IMDG Code	International Maritime Dangerous Goods Code.		
ICAO	International Civil Aviation Organization.		
IATA	International Air Transport Association.		
GHS	Globally Harmonized System of Classification and Labeling of Chemicals.		
CLP	Classification, Labelling and Packaging Regulation [Regulation (EC) No.1272/2008].		
SCBA	Self-Contained Breathing Apparatus.		
REACH	Registration, Evaluation, Authorization and Restriction of Chemicals Regulation [Regulation (EC) No. 1907/2006].		
LC 50	Median lethal concentration.		
LD 50	Median lethal dose.		
РВТ	Persistent, Bio accumulative and Toxic.		

GANDHAR OIL REFINERY (INDIA) LTD.		
Taloja Plant	Plot No.10, MIDC, Main Road, Taloja, Taluka Panvel, District - Raigad 410208, India.	
Silvassa Plant	Plot No. 2, Survey No. 678/1/3, Village Naroli, Near Naroli Check Post, Silvassa, Dadra & Nagar Haveli, Union Territory 396230, India.	
Emergency / Info Phone No.	Phone: +91-22-40635600 • Fax: +91-22-40635601	
Email	info@gandharoil.com	





## **DIVYOL TRIBOROL HT2X MOLY GREASE**

Section 1: Identification of the Substance / Mixture					
1.1 Product identifier					
Product name	Divyol Triborol HT2X Moly Greas	Divvol Triborol HT2X Moly Grease			
Product description		High Temprature/Perfomance Moly Grease			
Product type	Grease				
MARPOL Annex-1	****				
1.2 Identified uses					
Distribution of substance	Automotive & Industrial Crosse				
		Automotive & Industrial Grease			
Formulation & (re)packing of substance & mixtures		Automotive & Industrial Grease			
Manufacture of substance	Automotive & Industrial Grease				
Functional fluids	Automotive & Industrial Grease				
Section 2: Hazard Identification					
4-Extreme	Health	1			
3-High	Flammability	1			
2-Moderate	Reactivity	0			
1-Slight	Special	-			
Section 3: Compostion / Information on Ingredi	ients				
Chemical Name / Ingredients	% by wt.	Hazardous	CAS No.		
Bentonite	5 - 10	No	68953-58-2		
Propylene Carbonate	0.5 - 2	Yes	108-32-7		
Mineral Oil	85 - 95	Yes	64742-01-4, 64741-88-4		
Molybdenum Disulfie	0 - 4	Yes	1317-33-5		
Mix Additives	2.5 - 6	Yes	Proprietary Mixture		
Product / Ingredient name	Clay soaps from natural fatty sub	ostances			
Section 4: First Aid Measures					
Inhalation exposure	Remove to fresh air & provide ox	ygen, if breathing is difficult. Contac	t physician		
Skin contact	Remove contaminated clothing. If irritation occurs, call a physicia	Remove contaminated clothing. Flush skin with water. Wash skin thoroughly with mild soap & water.			
Swallowing or other	Do not induce vomiting. In general no treatment is necessary unless large quantities are ingested. Get medical advice.				
Eye contact	Rinse continuously with water for several minutes. Get medical attention, if irritation persists.				
Protection first-aiders		Disconnecting electrical supply. Ensure adequate ventilation and check that a safe and breathing area is available before entry into confined spaces.			
Section 5: Fire Fighting Measures					
5.1 Extinguishing media					
Unsuitable extinguishing media	Use dry powder, foam, carbon dioxide. Do not use direct water and wet chemicals, or water on the burning product. They may spread the fire. Use foam simultaneously on the surface.				
5.2 Special hazards arising from the substance or mix					
Hazards from the substance or mixture	Flammable liquids in pressurised containers may rupture and when exposed to heat, creating a highly flammable vapour cloud.				
Hazardous thermal decomposition products Incomplete combustion is likely to give rise to a complex mixture of airborne solid and liquid particulates, gases, including carbon monoxide, H <sub>2</sub> S, SO <sub>x</sub> (sulphur oxides) or sulphuric acid and unidentified organic and inorganic compounds.					
5.3 Advice for firefighters					
Special precautions for firefighters	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.				
Special protective equipment for firefighters	Firefighters should wear approprior (SCBA) with a full face- piece open helmets, protective boots and gl	Firefighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face- piece operated in positive pressure mode. Clothing for firefighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.			







6.1 Personal precautions, protective equipment and emergency procedures				
Keep non-involved personnel away from the area of spillage.				
For non-emergency personnel	Alert emergency personnel. Except in case of small spillages, the feasibility of any actions should always be assessed and advised, if possible, by a trained, competent person in charge of managing the emergency. Stop leak if safe to do so. Avoid direct contact with the product. Stay upwind / keep distance from source. In case of large spillages, alert occupants in downwind areas. Eliminate all ignition sources if safe to do so. Spillages of limited amounts of product, especially in the open air when vapours will be usually quickly dispersed, are dynamic situations, which will presumably limit the exposure to dangerous concentrations. Note : Recommended measures are based on the most likely spillage scenarios for this material; however, local conditions (wind, air temperature, wave / current direction and speed) may significantly influence the choice of appropriate actions.			
For emergency responders	For this reason, local experts should be consulted when necessary. Local regulations may also prescribe or limit actions to be taken. Small spillages: Normal antistatic working clothes are usually adequate. Large spillages: Full body suit of chemically resistant and thermal resistant material should be used. Work gloves providing adequate chemical resistance, specifically to aromatic hydrocarbons. Note: Gloves made of PVA are not water-resistant, and are not suitable for emergency use. Safety helmet, antistatic non-skid safety shoes or boots. Goggles and / or face shield, if splashes or contact with eyes is possible or anticipated. Respiratory Protection : A half or full-face respirator with filter(s) for organic vapours (and when applicable for H <sub>2</sub> S) a Self Contained Breathing Apparatus (SCBA) can be used according to the extent of spill and predictable amount of exposure. If the situation cannot be completely assessed, or if an oxygen deficiency is possible, only SCBA's should be used.			
6.2 Environmental precautions	Prevent product from entering sewers, rivers or other bodies of water. If necessary dike the product with dry earth, sand or similar non-combustible materials. In case of soil contamination, remove contaminated soil and treat in accordance with local regulations. In case of small spillages in closed waters (i.e. ports), contain product with floating barriers or other equipment. Collect spilled product by absorbing with specific floating absorbents. If possible, large spillages in open waters should be contained with floating barriers or other mechanical means. If this is not possible, control the spreading of the spillage, and collect the product by skimming or other suitable mechanical means. The use of dispersants should be advised by an expert, and, if required, approved by local authorities.			
6.3 Methods and material for containment and cleaning	up			
Small spill	Stop leak if without risk. Absorb spilled product with suitable non-combustible materials.			
Large spill	Large spillages may be cautiously covered with foam, if available, to limit vapour cloud formation. Do not use water jet. When inside buildings or confined spaces, ensure adequate ventilation. Transfer collected product and other contaminated materials to suitable containers for recovery or safe disposal.			
6.4 Reference to other sections	See Section 1: For emergency contact information. See Section 8: For information on appropriate personal protective equipment. See Section 13: For additional waste treatment information.			
Section 7: Handling and Storage				
7.1 Advice on general information – hygiene, storage	Obtain special instructions before use. Keep away from heat / sparks / open flames/hot surfaces. No smoking. Use and store only outdoors or in a well-ventilated area. Hazard of slipping on spilt product. Avoid release to the environment.			
7.2 Conditions for safe storage including any incompatibilities	Storage area layout, tank design, equipment and operating procedures must comply with the relevant regional, national or local legislation. Storage installations should be designed with adequate bunds in case of leaks or spills. Cleaning, inspection and maintenance of internal structure of storage tanks must be done only by properly equipped and qualified personnel as defined by national, local or company regulations. Store separately from oxidising agents. Keep only in the original container or in a suitable container for this kind of product. Keep container tightly closed and sealed until ready for use. Do not store in unlabelled containers. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Empty containers may contain harmful, flammable / combustible or explosive residue or vapours. Do not cut, grind, drill, weld, reuse or dispose of containers unless adequate precautions are taken against these hazards. Protect from sunlight.			
7.3 Specific end use(s) – Recommendations	Not available			



Density Solubility (ies)



Section 8: Exposure Controls / Personal Prote	ction
The list of Identified Uses in Section 1 should be cons	ulted for any available use-specific information provided in the Exposure Scenario(s).
8.1 Control parameters	
Occupational exposure limits	
Product / Ingredient name	Distillates, mixture of hydrocarbons
Exposure limits values	AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m <sup>3</sup> 8 hours. Form: mist and fume STEL: 3 mg/m <sup>3</sup> 15 minutes. Form: mist and fume [Air contaminant]. AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m <sup>3</sup> 8 hours. Form: mist and fume STEL: 3 mg/m <sup>3</sup> 15 minutes. Form: mist and fume.
Recommended monitoring procedures	If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres – Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres – Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres – General requirements for the performance of procedures for the measurement of chemical agents). Reference to national guidance documents for methods for the determination of hazardous substances will also be required.
8.2 Exposure control Appropriate engineering controls	Mechanical ventilation and local exhaust will reduce exposure via the air. Use oil resistant material in construction of handling equipment. Store under recommended conditions and if heated, temperature control equipment should be used to avoid overheating.
Individual protection measures	
Hygiene measures	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Ensure that eyewash stations and safety showers are close to the workstation location. Wash contaminated clothing before reuse.
Eye / face protection	Recommended: Safety glasses with side shields.
Skin protection	
Hand protection	4 – 8 hours (breakthrough time): nitrile rubber.
Body protection	Wear protective clothing if there is a risk of skin contact. Change contaminated clothes at the end of working shift.
Other skin protection	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary.
Environmental exposure control	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.
Section 9: Physical and Chemical Properties	
Appearance	Clear
Physical state	Smooth & Greyish Black
Colour	Light Yellow
Odor	Petroleum odor
Odour threshold	Not available
Dropping point	280 °C (ASTM D566)
Flash point	> 240°C (MINERAL OIL)
Evaporation rate	Not available
Flammability (solid, gas)	Not available
Flammability limits in air (lower), % by volume	Not available
Flammability limits in air (upper), % by volume	Not available
Vapour pressure	Not volatile







Solubility (water)		Insoluble in wa	ter		
Partition coefficient (n-octanol/water)		Not available			
, , , , , , , , , , , , , , , , , , ,		No data			
Auto-ignition temperature		Not available			
Worked Penetration at 25°C		265-295 (ASTM	D 217)		
Explosive properties		No data			
Oxidising properties		No data			
DMSO extractable compounds for	r base oil substance(s)	Not available			
according to IP346		<3 %			
Section 10: Stability and Rea	activity				
10.1 Reactivity		No specific test	data related to reactivity availa	able for this product or its ingr	edients.
10.2 Chemical stability		Stable under no	ormal conditions		
10.3 Possibility of hazardous rea	actions	Under normal c	conditions of storage and use, I	nazardous reactions will not o	ccur. Oxidising agent.
10.4 Conditions to avoid		Keep away from	n extreme heat and oxidising a	gents.	
10.5 Incompatible materials		Incomplete con particulates, ga	nbustion is likely to give rise to ses, including carbon monoxic	a complex mixture of airborn le, H <sub>3</sub> S, SO, (sulphur oxides) or	e solid and liquid sulphuric acid and
10.6 Hazardous decomposition	products		ganic and inorganic compound		
SECTION 11: Toxicological In	formation				
11.1 Information on toxicologica	al effects				
Acute toxicity					
Product / ingredient name	Result		Species	Dose	Exposure
5	LC 50 Inhalation due	sts and mists	Rat	>2.18mg/l	4 hours
Distillate (Petroleum), hydro	LD 50 Dermal		Rabbit	> 5000 mg/kg	-
treated heavy paraffinic	LD 50 Oral		Rat	>15000 mg/kg	-
Irritation / corrosion					
Skin					
Eye		No known significant effects or critical hazards.			
		No known significant enects of entical hazards.			
Respiratory Sensation					
Skin					
		No known significant effects or critical hazards.			
Respiratory		No data available to indicate product or any components present greater than 0.1 % are			
Mutagenicity		No data available to indicate product or any components present greater than 0.1 % are multigene or genotoxic.			
Carcinogenicity			n this product is based on an s		•
Reproductive toxicity		The product should not be regarded as a carcinogen. Contains no ingredient listed as toxic to reproduction.			
Specific target organ toxicity - sin	ngle exposure	Not classifier d			
Specific target organ toxicity – rep	peated exposure	NOT CLASSIFIED			
Aspiration hazard		Aspiration hazard – Category 1			
Information on likely routes of exp	posure	Not available			
Potential acute health effects					
Eye contact		Eye contact may cause redness and transient pain.			
Inhalation		Inhalation of oil mist or vapours at elevated temperatures may cause respiratory irritation.			
Skin contact		No known sign	ificant effects or critical hazard	S.	
Skin contact	Ingestion		May be fatal if swallowed and enters airways.		
Ingestion			ificant effects or critical hazard	s.	
Reproductive toxicityThe product of Contains no in Conta		The product she Contains no ing Not classified Aspiration haza Not available Eye contact ma Inhalation of oi No known sign	ould not be regarded as a carci gredient listed as toxic to repro ard – Category 1 y cause redness and transient I mist or vapours at elevated te ificant effects or critical hazard	inogen. duction. pain. emperatures may cause respira	







Mutagenicity						
,	eratogenicity		significant effects or critical haz	ards.		
Product / ingredient name						
Fertility effects		Not such the la	1-			
Other information Specific hazard		Not availab	le			
Section 12: Ecological Information						
12.1 Toxicity		Not expected to be harmful to aquatic organisms.				
12.2 Persistence and degradability		Not inherently biodegradable. Bioaccumulation is unlikely to be significant because of the low water solubility of this product.				
12.3 Bioaccumulative potential				nt because of the low water solu	bility of this product.	
12.4 Mobility in soil		Not considered mobile.				
12.5 Results of PBT & vPvB assessment	:	Not applica				
12.6 Other adverse effects			n water. Spills may form a film of nsfer could also be impaired.	n water surfaces causing physica	al damage to organisms.	
Section 13: Disposal Consideration						
The information in this section contains information provided in the Exposure So	generic advice and enario(s).	d guidance. T	he list of Identified Uses in Sect	ion 1 should be consulted for ar	ny available use-specific	
Product Methods of disposal Where possible (e.g. in the absence of relevant contamination), recycling of used substance is feasible and recommended. This substance can be burned or incinerated, subject to national/local authorisations, relevant contamination limits, safety regulations and air quality legislation. Contamin or waste substance (not directly recyclable): Disposal can be carried out directly, or by delivery to qualified waste handlers. National legislation may identify a specific organisation, and/or prescribe composition limits and methods for recovery or disposal			subject to national/local ality legislation. Contaminated rectly, or by delivery to			
Hazardous waste	Yes					
European waste catalogue (EWC) Waste	Waste designation.					
Packaging	Packaging		Mineral-based non-chlorinated insulating and heat transmission oils.			
Methods of disposal		The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.				
Section 14: Transport Information						
International transport regulations						
	ADR / R	ID	ADN	IMO / IMDG Classification	ICAO / IATA Classification	
14.1 UN number	Not regul	ated	Not regulated	Not regulated	Not regulated	
14.2 UN proper shipping name	_		_	_	_	
14.3 Transport hazard class(es)	_		-	_	_	
14.4 Packing group	_		-	_	_	
14.5 Environmental hazards	No		No	No	No	
Additional Information	_		-	-	-	
14.6 Special precautions for user oils						
14.7 Transport in bulk according to An	nex   of MARPOL	73/78 and th	e IBC Code			
Section 15: Regulatory Informatio						
15.1 Safety, health and environmental		slation speci	fic for the substance or mixture	e EU Regulation (EC) No. 1907/	2006 (REACH)	
Annex XIV – List of substances subject to authorisation Annex XIV Substances of very high concern		None of the components are listed				
Annex XVII – Restrictions on the manufa on the market and use of certain danger mixtures and articles.		Not applicable				
International Lists National Inventory		Inventory name				
Australia		Australian I	nventory of Chemical Substanc	es (AICS) – Yes		
Canada		Domestic Substances List (DSL) – Yes Non-Domestic Substances List (NDSL) – No				
China			f Existing Chemical Substances			
		inventory o	. Easting chemical substances			





_	European Inventory of Existing Commercial Chemical Substances (EINECS) – Yes				
Europe	European List of Notified Chemical Substances (ELINCS) – No				
Japan	Inventory of Existing and New Chemical Substances (ENCS) – Yes				
Korea	Existing Chemicals List (ECL) – Yes				
New Zealand	New Zealand Inventory – Yes				
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS) – Yes				
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory – Yes				
	oly with the inventory requirements administered by the governing country(s) uct are not listed or exempt from listing on the inventory administered by the governing country(s).				
Section 16: Other Information					
Revision comments					
Legend to abbreviations					
ADR	European agreement concerning the international carriage of dangerous good by road.				
RID	Regulations agreement concerning the international carriage of dangerous good by rail.				
IMDG Code	International Maritime Dangerous Goods Code.				
ICAO	International Civil Aviation Organization.				
IATA	International Air Transport Association.				
GHS	Globally Harmonized System of Classification and Labeling of Chemicals.				
CLP	Classification, Labelling and Packaging Regulation [Regulation (EC) No.1272/2008].				
SCBA	Self-Contained Breathing Apparatus.				
REACH	Registration, Evaluation, Authorization and Restriction of Chemicals Regulation [Regulation (EC) No. 1907/2006].				
LC 50	Median lethal concentration.				
LD 50	Median lethal dose.				
РВТ	Persistent, Bio accumulative and Toxic.				

GANDHAR OIL REFINERY (INDIA) LTD.			
Taloja Plant	Plot No.10, MIDC, Main Road, Taloja, Taluka Panvel, District - Raigad 410208, India.		
Silvassa Plant	Plot No. 2, Survey No. 678/1/3, Village Naroli, Near Naroli Check Post, Silvassa, Dadra & Nagar Haveli, Union Territory 396230, India.		
Emergency / Info Phone No.	Phone: +91-22-40635600 • Fax: +91-22-40635601		
Email	info@gandharoil.com		





# **DIVYOL TRIBOROL LC 1 GREASE**

Section 1: Identification of the Substance / Mixt	ure				
1.1 Product identifier					
Product name	Divyol Triborol L	C1 Grease			
Product description		Premium Lithium Complex Grease			
Product type	Grease				
MARPOL Annex-1	****				
1.2 Identified uses					
Distribution of substance	Automotive & Inc	dustrial Groaco			
Formulation & (re)packing of substance & mixtures	Automotive & Inc				
Manufacture of substance	Automotive & Inc				
Functional fluids	Automotive & Inc	dustrial Grease			
Section 2: Hazard Identification					
4-Extreme	Health		1		
3-High	Flammability		1		
2-Moderate	Reactivity		0		
1-Slight	Special		-		
Section 3: Compostion / Information on Ingredi	ents				
Chemical Name / Ingredients	% by wt.	Hazardous	CAS No.		
Lithium Hydroxide	0.5 - 3	Yes	1310-66-3		
Mineral Oil	80 - 90	Yes	64742-52-5, 64741-88-4, 64742-54-7, 64742-01-4		
12 HSA	5 -10	No	106-14-9		
нсо	2 - 5	No	8001-78-3		
Complexing Acid	1 - 3	No	Proprietary Mixture		
Additive Package	0 - 4	Yes	Proprietary Mixture		
Zinc Dialkyl Dithiophosphate	0 - 4	Yes	68457-79-4		
Butene, Homo Polyhmer	0 - 4	No	9003-27-4		
Product / Ingredient name	Lithium soaps fro	om natural fatty su	ubstances		
Section 4: First Aid Measures					
Inhalation exposure	Remove to fresh	air & provide oxy	gen, if breathing is difficult. Contact physician		
Skin contact		inated clothing. Fl s, call a physician.	lush skin with water. Wash skin thoroughly with mild soap & water.		
Swallowing or other	Do not induce vo Get medical advi		al no treatment is necessary unless large quantities are ingested.		
Eye contact	Rinse continuous	sly with water for	several minutes. Get medical attention, if irritation persists.		
Protection first-aiders		lectrical supply. Er entry into confine	nsure adequate ventilation and check that a safe and breathing area is ed spaces.		
Section 5: Fire Fighting Measures					
5.1 Extinguishing media					
Unsuitable extinguishing media			xide. Do not use direct water and wet chemicals, or water on the d the fire. Use foam simultaneously on the surface.		
5.2 Special hazards arising from the substance or mix	ture				
Hazards from the substance or mixture	Flammable liquio flammable vapor		containers may rupture and when exposed to heat, creating a highly		
Hazardous thermal decomposition products	Incomplete combustion is likely to give rise to a complex mixture of airborne solid and liquid particulates, gases, including carbon monoxide, $H_2S$ , $SO_x$ (sulphur oxides) or sulphuric acid and unidentified organic and inorganic compounds.				
5.3 Advice for firefighters					
Special precautions for firefighters			oving all persons from the vicinity of the incident if there is a fire. No y personal risk or without suitable training.		
Special protective equipment for firefighters	Firefighters shou (SCBA) with a ful helmets, protect	<ul> <li>action shall be taken involving any personal risk or without suitable training.</li> <li>Firefighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face- piece operated in positive pressure mode. Clothing for firefighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.</li> </ul>			





6.1 Personal precautions, protective equipment and em	ergency procedures			
Keep non-involved personnel away from the area of spillage.				
For non-emergency personnel	Alert emergency personnel. Except in case of small spillage. Alert emergency personnel. Except in case of small spillages, the feasibility of any actions should always be assessed and advised, if possible, by a trained, competent person in charge of managing the emergency. Stop leak if safe to do so. Avoid direct contact with the product. Stay upwind / keep distance from source. In case of large spillages, alert occupants in downwind areas. Eliminate all ignition sources if safe to do so. Spillages of limited amounts of product, especially in the open air when vapours will be usually quickly dispersed, are dynamic situations, which will presumably limit the exposure to dangerous concentrations. Note : Recommended measures are based on the most likely spillage scenarios for this material; however, local conditions (wind, air temperature, wave / current direction and speed) may significantly influence the choice of appropriate actions.			
For emergency responders	For this reason, local experts should be consulted when necessary. Local regulations may also prescribe or limit actions to be taken. Small spillages: Normal antistatic working clothes are usually adequate. Large spillages: Full body suit of chemically resistant and thermal resistant material should be used. Work gloves providing adequate chemical resistance, specifically to aromatic hydrocarbons. Note: Gloves made of PVA are not water-resistant, and are not suitable for emergency use. Safety helmet, antistatic non-skid safety shoes or boots. Goggles and / or face shield, if splashes or contact with eyes is possible or anticipated. Respiratory Protection : A half or full-face respirator with filter(s) for organic vapours (and when applicable for H <sub>2</sub> S) a Self Contained Breathing Apparatus (SCBA) can be used according to the extent of spill and predictable amount of exposure. If the situation cannot be completely assessed, or if an oxygen deficiency is possible, only SCBA's should be used.			
6.2 Environmental precautions	Prevent product from entering sewers, rivers or other bodies of water. If necessary dike the product with dry earth, sand or similar non-combustible materials. In case of soil contamination, remove contaminated soil and treat in accordance with local regulations. In case of small spillages in closed waters (i.e. ports), contain product with floating barriers or other equipment. Collect spilled product by absorbing with specific floating absorbents. If possible, large spillages in open waters should be contained with floating barriers or other mechanical means. If this is not possible, control the spreading of the spillage, and collect the product by skimming or other suitable mechanical means. The use of dispersants should be advised by an expert, and, if required, approved by local authorities.			
6.3 Methods and material for containment and cleaning	up			
Small spill	Stop leak if without risk. Absorb spilled product with suitable non-combustible materials.			
Large spill	Large spillages may be cautiously covered with foam, if available, to limit vapour cloud formation. Do not use water jet. When inside buildings or confined spaces, ensure adequate ventilation. Transfer collected product and other contaminated materials to suitable containers for recovery or safe disposal.			
6.4 Reference to other sections	See Section 1: For emergency contact information. See Section 8: For information on appropriate personal protective equipment. See Section 13: For additional waste treatment information.			
Section 7: Handling and Storage				
7.1 Advice on general information – hygiene, storage	Obtain special instructions before use. Keep away from heat / sparks / open flames/hot surfaces. No smoking. Use and store only outdoors or in a well-ventilated area. Hazard of slipping on spilt product. Avoid release to the environment.			
7.2 Conditions for safe storage including any incompatibilities	Storage area layout, tank design, equipment and operating procedures must comply with the relevant regional, national or local legislation. Storage installations should be designed with adequate bunds in case of leaks or spills. Cleaning, inspection and maintenance of internal structure of storage tanks must be done only by properly equipped and qualified personnel as defined by national, local or company regulations. Store separately from oxidising agents. Keep only in the original container or in a suitable container for this kind of product. Keep container tightly closed and sealed until ready for use. Do not store in unlabelled containers. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Empty containers may contain harmful, flammable / combustible or explosive residue or vapours. Do not cut, grind, drill, weld, reuse or dispose of containers unless adequate precautions are taken against these hazards. Protect from sunlight.			
7.3 Specific end use(s) – Recommendations	Not available			



Density Solubility (ies)



Section 8: Exposure Controls / Personal Protect	tion
The list of Identified Uses in Section 1 should be consu	Ited for any available use-specific information provided in the Exposure Scenario(s).
8.1 Control parameters	
Occupational exposure limits	
Product / Ingredient name	Distillates, mixture of hydrocarbons
Exposure limits values	AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m <sup>3</sup> 8 hours. Form: mist and fume STEL: 3 mg/m <sup>3</sup> 15 minutes. Form: mist and fume [Air contaminant]. AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m <sup>3</sup> 8 hours. Form: mist and fume STEL: 3 mg/m <sup>3</sup> 15 minutes. Form: mist and fume.
Recommended monitoring procedures	If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres – Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres – Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres – General requirements for the performance of procedures for the measurement of chemical agents). Reference to national guidance documents for methods for the determination of hazardous substances will also be required.
8.2 Exposure control Appropriate engineering controls	Mechanical ventilation and local exhaust will reduce exposure via the air. Use oil resistant material in construction of handling equipment. Store under recommended conditions and if heated, temperature control equipment should be used to avoid overheating.
Individual protection measures	
Hygiene measures	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Ensure that eyewash stations and safety showers are close to the workstation location. Wash contaminated clothing before reuse.
Eye / face protection	Recommended: Safety glasses with side shields.
Skin protection	
Hand protection	4 – 8 hours (breakthrough time): nitrile rubber.
Body protection	Wear protective clothing if there is a risk of skin contact. Change contaminated clothes at the end of working shift.
Other skin protection	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary.
Environmental exposure control	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.
Section 9: Physical and Chemical Properties	
Appearance	Clear
Physical state	Smooth, Homogenous & Tacky
Colour	Amber
Odor	Petroleum odor
Odour threshold	Not available
	>265°C (ASTM D-2265)
Dropping point	
Dropping point Flash point	> 230°C (MINERAL OIL)
Flash point Evaporation rate	Not available
Flash point Evaporation rate Flammability (solid, gas)	
Flash point Evaporation rate Flammability (solid, gas) Flammability limits in air (lower), % by volume	Not available
Flash point Evaporation rate Flammability (solid, gas)	Not available       Not available

Not volatile





Solubility (water)		Insoluble in wa	tor		
Partition coefficient (n-octanol/water)		Not available			
· · · · · · · · · · · · · · · · · · ·		No data			
Auto-ignition temperature		Not available			
Worked Penetration at 25°C		310 -340 (ASTM	1 D 217)		
		No data	10217)		
Explosive properties		No data			
Oxidising properties DMSO extractable compounds fo	r baca ail substanca(s)				
according to IP346		Not available <3 %			
Section 10: Stability and Rea	ctivity				
10.1 Reactivity		No specific test	data related to reactivity avail	able for this product or its ingr	edients.
10.2 Chemical stability			ormal conditions		
10.3 Possibility of hazardous rea	octions	Under normal c	conditions of storage and use, I	hazardous reactions will not o	ccur. Oxidising agent.
10.4 Conditions to avoid		Keep away fron	n extreme heat and oxidising a	agents.	
10.5 Incompatible materials		Incomplete con particulates, ga	nbustion is likely to give rise to ses, including carbon monoxic	a complex mixture of airborn de, H <sub>3</sub> S, SO, (sulphur oxides) or	e solid and liquid sulphuric acid and
10.6 Hazardous decomposition	products		ganic and inorganic compound		•
SECTION 11: Toxicological In	formation				
11.1 Information on toxicologica	al effects				
Acute toxicity					
Product / ingredient name	Result		Species	Dose	Exposure
	LC 50 Inhalation due	sts and mists	Rat	>2.18mg/l	4 hours
Distillate (Petroleum), hydro	LD 50 Dermal		Rabbit	> 5000 mg/kg	-
treated heavy paraffinic	LD 50 Ora	al	Rat	>15000 mg/kg	-
Irritation / corrosion					
Skin					
Eye		No known significant effects or critical hazards.			
Respiratory					
Sensation					
Skin					
		No known significant effects or critical hazards.			
Respiratory		No data available to indicate product or any company to present success the 0.1.0/			
Mutagenicity		No data available to indicate product or any components present greater than 0.1 % are multigene or genotoxic.			
Carcinogenicity			n this product is based on an s		
Reproductive toxicity		The product should not be regarded as a carcinogen. Contains no ingredient listed as toxic to reproduction.			
Specific target organ toxicity – sin	igle exposure	Net deside			
Specific target organ toxicity – rep	peated exposure	Not classified			
Aspiration hazard		Aspiration hazard – Category 1			
Information on likely routes of exposure		Not available			
Potential acute health effects					
Eye contact		Eye contact may cause redness and transient pain.			
Inhalation		-	I mist or vapours at elevated te	•	atory irritation.
Skin contact			ificant effects or critical hazard		
Ingestion			wallowed and enters airways.		
Potential chronic health effects		,			
General		No known sign	ificant effects or critical hazard	ls.	
			n this product is based on an s		The product should not be
Carcinogenicity		regarded as a ca			product should not be







Intratagenicity increase of the second seco	Mutagenicity							
<form>          Product, rignedient name         Not available           fertility effects         Not available           Other information Specific hazards         Not available           Section 12: Ecological Information         Not available           12.1 Toxicity         Not expected to be harmful to aquatic organisms.           12.2 Fersitence and degradability         Not inherently biodegradable.           12.3 Bioaccumulative potential         Not aplicable           12.4 Mobility in soil         Not considered mobile.           12.5 Eaclust of PBT &amp; VP&amp; assessmet         Not aplicable           12.6 Other adverse effects         Not aplicable           Toxing the considered mobile.         Not applicable           12.6 Section 13: Disposit Considered and softward and guidance. The list of fertified Ubes in Section 13: should be consulted or any available use specific information provided in the Exposure Section 13: should be consulted or any available use specific information provided in the Exposure Section 13: should be consulted or any available use specific or available in any distributions, relevant contamination, recycling or available in any distributions, relevant contamination, recycling or available in any distributions and alread available information.           Product Methods of disposal         Vest         Vest evant to the available information or increated available information increated available information increated available information increated available information or increated available of avainavailable information available informatinton incre</form>	,							
<form>          Internation Specific hazard         Net available           Other information Specific hazard         Not available           12.1 Toxicity         Not expected to be harmful to aquatic organisms.           12.2 Presistence and degradability in all         Not inherently biologengradability.           12.3 Bioaccumulative potential         Bioaccumulation is unikely to be significant because of the low water solubility of this product.           12.5 Reutis OFPE a/Vb2 assessment         Not applicable           12.6 Toxicity OFPE a/Vb2 assessment         Water possible (on in the absess on contain studin)           12.6 Toxicity OFPE a/Vb2 assessment         Water possible (on in the absess on contain studin)           Product Methods of disposal         Were possible (on in the absess on contain studin)           Product Methods of disposal         Wer</form>	5,		No known s	significant effects or critical haza	ards.			
Other Information Specific hazard         Net available           Section 12: Ecological Information         Not expected to be harmful to aquatic organisms.           12: Parsistence and degradability         Not expected to be harmful to aquatic organisms.           12: A Mobility in soil         Not considered mobile.           12: A Mobility in soil         Not considered mobile. </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>								
Section 12: Ecological Information         Not expected to be harmful ta aquatic organisms.           12.1 Toxidity         Not expected to be harmful ta aquatic organisms.           12.3 Brostneer and degradability         Not expected to be harmful ta aquatic organisms.           12.4 Mobility notel         Not considered mobile.           12.4 Mobility notel         Not considered mobile.           12.5 Results of PBT & VP& assessment         Not applicable           12.6 Other adverse effects         Not applicable           Section 13: Disposal Considerations         The information in this section or talnes generic adverse and guidance. The list of identified Uses in Section 1 should be consulted for any available use specific information provided in the Exposure Scenario(s).           Product Methods of disposal         Where possible leg, in the absence of relevant contamination, recycling of used substance is freasible and recommended. This substance can be burned or innormated autification used substance is composition limits, and recommended. This substance can be burned or innormated autification and used substance is composition limits and methods for recovery or disposal           Hazardous waste         Vos           European waste catalogue (EWC) Wiste Code 13 03 07°         Woste designation.           Not interaction or landifit involution guided waste dusted where very disposal         Inconvertee construction or landifit involution guided waste for any available use specific organisacian.           14.1 UN number         Not /// NO Classification<			Not availab	le				
12.1 privation     Not expected to be harmful to aquatic organisms.       12.2 Prestance and legand bill.     Not anotal-construction is unlikely to be significant to be assue of the low water sub-likely of this product.       12.4 Obtaining the point of the sub-sub-sub-sub-sub-sub-sub-sub-sub-sub-	•	1						
12.2 Persistence and degradability       Not inherently biodegradable.         12.3 Bioaccumulative potential       Bioaccumulation is unlikely to be significant because of the low water solubility of this product.         12.4 Mobility is and       Not considered mobile.         12.5 Results of PBT & vPvB assessment       Not applicable         Insoluble in water. Spills may form a film on water surfaces causing physical damage to organisms. Oxygen transfer could also be impaired.         Section 13: Disposal Considerations       Where possible (eg. in the absence of relevant contamination) recycling of used substance is feasible and recommended. This substance can be burned or indirected, subject to national/local authorisation, relevant contamination limits, stering contamination, and/or prescribe composition limits and methods for recovery or disposal         Product Methods of disposal       Where possible (eg. in the absence of relevant contamination) intrescriber qualified vasates bandles. National legislation may available use-specific composition limits and methods for recovery or disposal         Hazardous waste       Yes         European waste catalogue (EWC) Waste Code 13 03 07*       Waste designation.         Rethods of disposal       The egeneration of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Inclineration or landfill should only be considered when recycled. Inclineration or landfill should only be considered when recycled. Inclineration or landfill should only be considered when recycled. Inclineration or landfill should only be considered when recycled. Inclineration or landfill should only be considered			Not expect	ed to be harmful to aquatic org	anisms.			
12.3 Bracum Jative potential       Not considered mobile.         12.4 Mobility in soil of PT 4 vVP assesmet       Not applicable         12.6 Guites of PT 4 vVP assesmet.       Not applicable.         12.6 Guites of PT 4 vVP assesmet.       Not applicable.         2.6 Guites of PT 4 vVP assesmet.       Not applicable.         2.6 Guites of PT 4 vVP assesmet.       Not applicable.         3.6 Guites adverse effects.       Not applicable.         3.7 Guites adverse effects.       Vertee could also be impaired.         3.7 Guites adverse effects.       Vertee could also be impaired.         3.7 Guites adverse effects.       Vertee could also be impaired.         1.7 Guites adverse effects.       Vertee could also be impaired.         1.7 Guites adverse effects.       Vertee could also be impaired.         1.7 Guites adverse effects.       Vertee could also be impaired.         1.7 Guites adverse effects.       Vertee could also be impaired.         1.7 Guites adverse effects.       Vertee could also be impaired.         1.7 Guites adverse effects.       Vertee could also be impaired.         1.7 Guites adverse effects.       Vertee could also be impaired.         1.7 Guites adverse effects.       Vertee could also be impaired.         1.7 Guites adverse effects.       Vertee could also be impaired.         1.7 Guites adverse effe								
12.4 Mobility in soil       Not considered mobile.         12.5 Results of PRT & VPR assessment       Not applicable         12.6 Other adverse effects       Unsoluble in water. Spills may form a film on water surfaces causing physical damage to organisms. Oxygen transfer could also be impaired.         Section 13: Disposal Considerations       The information in this section contains generic advice and guidance. The list of identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).         Product Methods of disposal       Where possible (e.g. in the absence of relevant contamination limits, adjett regulations, and ang inquality (edjatic). Contaminatolo in guidance. The dist handles. Nationary local disposal authorisation. Intervational legislation may identify a specific organisation. Contaminator in limits, adjett hengiles. National legislation may identify a specific organisation. and/or prescribe composition limits and methods for recovery or disposal         Hazardous waste       Yes         European waste catalogue (EWC) Waste Code 13 03 07*       Waste disgnation.         Packaging       Mineral-based non-chlorinated insulting and heat transmission ells.         The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not faesible.         Section 13: Transport Information       -       -         14.1 UN number       ADR /RID       ADN       MOV /IMDG Classification       MCA / IATA Classification				, ,	nt because of the low water solu	Ibility of this product.		
12.6 Other adverse effects     Nonludie in water. Splits may form a fitm on water surfaces causing physical damage to organisms. Nongen transfer could also be impaired.       Section 13: Disposal Considerations:       Section 13: Disposal Considerations:       Section 13: Disposal Considerations:       The information in this section contains generic advices undividual and be impaired.       Section 13: Disposal Considerations:       The information in this section contains generic advices on tabulation of relevant contamination intervices. Job et or tabulations and arguality legislation.       Note the providual disposal on the commendo of this substance contations and arguality legislation.       Product Methods of disposal       Yes       European waste catalogue (KPC) Waste Code 13 03 07*       Waste designation.       Recident on transport insubstance contains disposal on the recyclic prograsilion on any identify a specific organisation, and/or prescribe composition limits and methods for recovery or disposal       Master dost disposal       Note generation of waste should be avoided or minimised wherever possible Waste packaging should be recyclic prescribe insulating and heat transmission oils.       Note generation of waste should be avoided or minimised wherever possible Waste packaging should be recyclic prescribe.       Note generation of waste should be avoided or minimised wherevere possible (Maste packaging should be recyclic prescribe.								
Application adverse energy       Oxygen transfer could also be impaired.         Section 13: Disposal Considerations       Oxygen transfer could also be impaired.         Section 13: Disposal Considerations       Oxygen transfer could also be impaired.         Section 13: Disposal Considerations       Oxygen transfer could also be impaired.         The information in this section contains generic advice and year optimized in the Exposure Scenario(s).       Where possible (e.g. in the absence of relevant contamination finits, sefery regulations and ar quality explaisation. Contamination finits, sefery regulations and ar quality explaisation. Contamination finits, sefery regulations and ar quality explaisation. Contaminated the finits, sefery regulations and ar quality explaisation. Contaminated the finits, sefery regulations and ar quality explaisation. Contaminated the finits, sefery regulations and ar quality explaisation. The quarter of the explashes on orchorinated insulating and heat transmission and ar quality explaisation. The quarter operation of vaste existion may identify a specific organisation, and/or prescribe composition limits and methods for recovery or disposal         Macadous waste       Yes       The generation of vaste existion or shating and heat transmission oils.         Methods of disposal       Mineral-based non-chlorinated insulating and heat transmission oils.       The generation of vaste existion or the existing explaisation.         Methods of disposal       ADR / RD       ADN       IMO / IMDG Classification       ICAO / IATA Classification         14.1 UN number       ADR / RD       ADN       IMO / IMDG C	12.5 Results of PBT & vPvB assessment	:	Not applica	ble				
The information in this section contains generic advice and substance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario().       Where possible (e.g. in the absence of relevant contamination intervated, subject to national/local authorisation, relevant contamination limits, safety regulations and air quality legislation. Contaminated in this, safety regulations and air quality legislation. Contaminated or qualified wase handlens. National legislation may identify a specific organisation, and/or preservice or wase substance (not directly recyclable): Disposal can be carried out directly, or by delivery to qualified wase handlens. National legislation may identify a specific organisation, and/or preservice or wases catalogue (EWC) Wase Code 13 03 07       Yes         European wase catalogue (EWC) Wase Code 13 03 07       Wast e designation.       Mineral-based non-chlorinated insulating and heat transmission oils.         Nethods of disposal       Yes       The generation of wasts should be avoided or minimission where repossible. Wase packaging should be considered when recyclable.         Nethods of disposal       ADR / IND       ADN       IMO / IMDG Classification       ICAO / IATA Classification         14.1 UN number       ADR / IND       ADN       IMO / IMDG Classification       ICAO / IATA Classification         14.2 UW proper shipping name       -       -       -       -         14.3 Transport hazard class(es)       -       -       -       -         14.3 Faving regulation for user U MARPOLY / Wase U MARPOLY / Wase	12.6 Other adverse effects				n water surfaces causing physica	al damage to organisms.		
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Packaging       Mineral-based non-chlorinated insulating and heat transmission oils.         Methods of disposal       The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.         Section 14: Transport Information       ADR / RID       ADN       IMO / IMDG Classification       ICAO / IATA Classification         14.1 UN number       Not regulated       Not regulated       Not regulated       Not regulated         14.2 UN proper shipping name       -       -       -       -         14.3 Transport hazard class(es)       - <td< td=""><td>Hazardous waste</td><td colspan="3">Hazardous waste</td><td></td><td></td></td<>	Hazardous waste	Hazardous waste						
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	Canada							
	China							







_	European Inventory of Existing Commercial Chemical Substances (EINECS) – Yes				
Europe	European List of Notified Chemical Substances (ELINCS) – No				
Japan	Inventory of Existing and New Chemical Substances (ENCS) – Yes				
Korea	Existing Chemicals List (ECL) – Yes				
New Zealand	New Zealand Inventory – Yes				
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS) – Yes				
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory – Yes				
	oly with the inventory requirements administered by the governing country(s) uct are not listed or exempt from listing on the inventory administered by the governing country(s).				
Section 16: Other Information					
Revision comments					
Legend to abbreviations					
ADR	European agreement concerning the international carriage of dangerous good by road.				
RID	Regulations agreement concerning the international carriage of dangerous good by rail.				
IMDG Code	International Maritime Dangerous Goods Code.				
ICAO	International Civil Aviation Organization.				
IATA	International Air Transport Association.				
GHS	Globally Harmonized System of Classification and Labeling of Chemicals.				
CLP	Classification, Labelling and Packaging Regulation [Regulation (EC) No.1272/2008].				
SCBA	Self-Contained Breathing Apparatus.				
REACH	Registration, Evaluation, Authorization and Restriction of Chemicals Regulation [Regulation (EC) No. 1907/2006].				
LC 50	Median lethal concentration.				
LD 50	Median lethal dose.				
РВТ	Persistent, Bio accumulative and Toxic.				

GANDHAR OIL REFINERY (INDIA) LTD.			
Taloja Plant	Plot No.10, MIDC, Main Road, Taloja, Taluka Panvel, District - Raigad 410208, India.		
Silvassa Plant	Plot No. 2, Survey No. 678/1/3, Village Naroli, Near Naroli Check Post, Silvassa, Dadra & Nagar Haveli, Union Territory 396230, India.		
Emergency / Info Phone No.	Phone: +91-22-40635600 • Fax: +91-22-40635601		
Email	info@gandharoil.com		





# **DIVYOL TRIBOROL LC 2 GREASE**

Section 1: Identification of the Substance / Mixt	ure					
1.1 Product identifier						
Product name	Divyol Triborol L	C2 Grease				
Product description		n Complex Grease				
Product type	Grease	i complex diease				
/1	****					
MARPOL Annex-1						
1.2 Identified uses						
Distribution of substance	Automotive & Inc					
Formulation & (re)packing of substance & mixtures	Automotive & In	dustrial Grease				
Manufacture of substance	Automotive & In	dustrial Grease				
Functional fluids	Automotive & In	dustrial Grease				
Section 2: Hazard Identification						
4-Extreme	Health		1			
3-High	Flammability		1			
2-Moderate	Reactivity		0			
1-Slight	Special		-			
Section 3: Compostion / Information on Ingred						
Chemical Name / Ingredients	% by wt.	Hazardous	CAS No.			
Lithium Hydroxide	0.5 - 3	Yes	1310-66-3			
Mineral Oil	80 - 90	Yes	64742-52-5, 64741-88-4, 64742-54-7, 64742-01-4			
12 HSA	5 -10	No	106-14-9			
НСО	2 - 5	No	8001-78-3			
Complexing Acid	1 - 3	No	Proprietary Mixture			
Additive Package	0 - 4	Yes	Proprietary Mixture			
Zinc Dialkyl Dithiophosphate	0 - 4	Yes	68457-79-4			
Butene, Homo Polyhmer	0 - 4	No	9003-27-4			
Product / Ingredient name	Lithium soaps fro	om natural fatty su	ubstances			
Section 4: First Aid Measures						
Inhalation exposure	Remove to fresh	air & provide oxy	gen, if breathing is difficult. Contact physician			
Skin contact		Remove contaminated clothing. Flush skin with water. Wash skin thoroughly with mild soap & water. If irritation occurs, call a physician.				
Swallowing or other		Do not induce vomiting. In general no treatment is necessary unless large quantities are ingested. Get medical advice.				
Eye contact	Rinse continuous	Rinse continuously with water for several minutes. Get medical attention, if irritation persists.				
Protection first-aiders		Disconnecting electrical supply. Ensure adequate ventilation and check that a safe and breathing area is available before entry into confined spaces.				
Section 5: Fire Fighting Measures	·					
5.1 Extinguishing media						
Unsuitable extinguishing media		Use dry powder, foam, carbon dioxide. Do not use direct water and wet chemicals, or water on the burning product. They may spread the fire. Use foam simultaneously on the surface.				
5.2 Special hazards arising from the substance or mix	ture					
Hazards from the substance or mixture		Flammable liquids in pressurised containers may rupture and when exposed to heat, creating a highly flammable vapour cloud.				
Hazardous thermal decomposition products	particulates, gase	Incomplete combustion is likely to give rise to a complex mixture of airborne solid and liquid particulates, gases, including carbon monoxide, $H_2$ , SO <sub>x</sub> (sulphur oxides) or sulphuric acid and unidentified organic and inorganic compounds.				
5.3 Advice for firefighters						
Special precautions for firefighters			oving all persons from the vicinity of the incident if there is a fire. No v personal risk or without suitable training.			
Special protective equipment for firefighters	Firefighters shou (SCBA) with a ful helmets, protect	Ild wear appropria I face- piece opera	te protective equipment and self-contained breathing apparatus ated in positive pressure mode. Clothing for firefighters (including ves) conforming to European standard EN 469 will provide a basic level			





6.1 Personal precautions, protective equipment and emergency procedures						
Keep non-involved personnel away from the area of spillage.						
For non-emergency personnel	Alert emergency personnel. Except in case of small spillages, the feasibility of any actions should always be assessed and advised, if possible, by a trained, competent person in charge of managing the emergency. Stop leak if safe to do so. Avoid direct contact with the product. Stay upwind / keep distance from source. In case of large spillages, alert occupants in downwind areas. Eliminate all ignition sources if safe to do so. Spillages of limited amounts of product, especially in the open air when vapours will be usually quickly dispersed, are dynamic situations, which will presumably limit the exposure to dangerous concentrations. Note : Recommended measures are based on the most likely spillage scenarios for this material; however, local conditions (wind, air temperature, wave / current direction and speed) may significantly influence the choice of appropriate actions.					
For emergency responders	For this reason, local experts should be consulted when necessary. Local regulations may also prescribe or limit actions to be taken. Small spillages: Normal antistatic working clothes are usually adequate. Large spillages: Full body suit of chemically resistant and thermal resistant material should be used. Work gloves providing adequate chemical resistance, specifically to aromatic hydrocarbons. Note: Gloves made of PVA are not water-resistant, and are not suitable for emergency use. Safety helmet, antistatic non-skid safety shoes or boots. Goggles and / or face shield, if splashes or contact with eyes is possible or anticipated. Respiratory Protection : A half or full-face respirator with filter(s) for organic vapours (and when applicable for H <sub>2</sub> S) a Self Contained Breathing Apparatus (SCBA) can be used according to the extent of spill and predictable amount of exposure. If the situation cannot be completely assessed, or if an oxygen deficiency is possible, only SCBA's should be used.					
6.2 Environmental precautions	Prevent product from entering sewers, rivers or other bodies of water. If necessary dike the product with dry earth, sand or similar non-combustible materials. In case of soil contamination, remove contaminated soil and treat in accordance with local regulations. In case of small spillages in closed waters (i.e. ports), contain product with floating barriers or other equipment. Collect spilled product by absorbing with specific floating absorbents. If possible, large spillages in open waters should be contained with floating barriers or other mechanical means. If this is not possible, control the spreading of the spillage, and collect the product by skimming or other suitable mechanical means. The use of dispersants should be advised by an expert, and, if required, approved by local authorities.					
6.3 Methods and material for containment and cleaning	l up					
Small spill	Stop leak if without risk. Absorb spilled product with suitable non-combustible materials.					
Large spill	Large spillages may be cautiously covered with foam, if available, to limit vapour cloud formation. Do not use water jet. When inside buildings or confined spaces, ensure adequate ventilation. Transfer collected product and other contaminated materials to suitable containers for recovery or safe disposal.					
6.4 Reference to other sections	See Section 1: For emergency contact information. See Section 8: For information on appropriate personal protective equipment. See Section 13: For additional waste treatment information.					
Section 7: Handling and Storage						
7.1 Advice on general information – hygiene, storage	Obtain special instructions before use. Keep away from heat / sparks / open flames/hot surfaces. No smoking. Use and store only outdoors or in a well-ventilated area. Hazard of slipping on spilt product. Avoid release to the environment.					
7.2 Conditions for safe storage including any incompatibilities	Storage area layout, tank design, equipment and operating procedures must comply with the relevant regional, national or local legislation. Storage installations should be designed with adequate bunds in case of leaks or spills. Cleaning, inspection and maintenance of internal structure of storage tanks must be done only by properly equipped and qualified personnel as defined by national, local or company regulations. Store separately from oxidising agents. Keep only in the original container or in a suitable container for this kind of product. Keep container tightly closed and sealed until ready for use. Do not store in unlabelled containers. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Empty containers may contain harmful, flammable / combustible or explosive residue or vapours. Do not cut, grind, drill, weld, reuse or dispose of containers unless adequate precautions are taken against these hazards.					
	Protect from sunlight.					



Density Solubility (ies)



Section 8: Exposure Controls / Personal Protect	ion
The list of Identified Uses in Section 1 should be consul	ted for any available use-specific information provided in the Exposure Scenario(s).
8.1 Control parameters	
Occupational exposure limits	
Product / Ingredient name	Distillates, mixture of hydrocarbons
Exposure limits values	AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m <sup>3</sup> 8 hours. Form: mist and fume STEL: 3 mg/m <sup>3</sup> 15 minutes. Form: mist and fume [Air contaminant]. AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m <sup>3</sup> 8 hours. Form: mist and fume STEL: 3 mg/m <sup>3</sup> 15 minutes. Form: mist and fume.
Recommended monitoring procedures	If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres – Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres – Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres – General requirements for the performance of procedures for the measurement of chemical agents). Reference to national guidance documents for methods for the determination of hazardous substances will also be required.
8.2 Exposure control Appropriate engineering controls	Mechanical ventilation and local exhaust will reduce exposure via the air. Use oil resistant material in construction of handling equipment. Store under recommended conditions and if heated, temperature control equipment should be used to avoid overheating.
Individual protection measures	
Hygiene measures	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Ensure that eyewash stations and safety showers are close to the workstation location. Wash contaminated clothing before reuse.
Eye / face protection	Recommended: Safety glasses with side shields.
Skin protection	
Hand protection	4 – 8 hours (breakthrough time): nitrile rubber.
Body protection	Wear protective clothing if there is a risk of skin contact. Change contaminated clothes at the end of working shift.
Other skin protection	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary.
Environmental exposure control	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.
Section 9: Physical and Chemical Properties	
Appearance	Clear
Physical state	Smooth, Homogenous & Tacky
Colour	Amber
Odor	Petroleum odor
Odour threshold	Not available
Dropping point	>265°C (ASTM D-2265)
Flash point	> 230°C (MINERAL OIL)
Evaporation rate	Not available
Flammability (solid, gas)	Not available
Flammability limits in air (lower), % by volume	Not available
Flammability limits in air (upper), % by volume	Not available
	ALC: Lott



Not volatile





Solubility (water)		Insoluble in wa	ter			
		Not available				
, , ,		No data				
Auto-ignition temperature		Not available				
Worked Penetration at 25°C		310 -340 (ASTM	I D 217)			
Explosive properties		No data	,			
Oxidising properties		No data				
DMSO extractable compounds for according to IP346	r base oil substance(s)	Not available <3 %				
Section 10: Stability and Rea	ctivity	13 /0				
10.1 Reactivity	·····,	No specific test	data related to reactivity avail	able for this product or its ingr	edients.	
10.2 Chemical stability			ormal conditions			
10.3 Possibility of hazardous rea	ctions		conditions of storage and use, I	nazardous reactions will not o	ccur. Oxidising agent.	
10.4 Conditions to avoid			n extreme heat and oxidising a			
10.5 Incompatible materials		Incomplete con	nbustion is likely to give rise to ses, including carbon monoxic	a complex mixture of airborn		
10.6 Hazardous decomposition	products		ganic and inorganic compound		suprune acid and	
SECTION 11: Toxicological In						
11.1 Information on toxicologica	al effects					
Acute toxicity						
Product / ingredient name	Result		Species	Dose	Exposure	
	LC 50 Inhalation due	sts and mists	Rat	>2.18mg/l	4 hours	
Distillate (Petroleum), hydro treated heavy paraffinic	LD 50 Derr	nal	Rabbit	> 5000 mg/kg	-	
treated neavy paraminic	LD 50 Ora	al	Rat	>15000 mg/kg	-	
Irritation / corrosion						
Skin						
Eye		No known significant effects or critical hazards.				
Respiratory						
Sensation						
Skin						
Respiratory		No known significant effects or critical hazards.				
Mutagenicity		No data available to indicate product or any components present greater than 0.1 % are multigene or genotoxic.				
Carcinogenicity			in this product is based on an s	everely hydrotreated distillate		
Reproductive toxicity		The product sh	product should not be regarded as a carcinogen. tains no ingredient listed as toxic to reproduction.			
Specific target organ toxicity – sin	ale exposure	contains no mg	sector in the as toxic to repro			
Specific target organ toxicity – rep		Not classified				
Aspiration hazard		Aspiration haza	rd – Category 1			
Information on likely routes of exp	oosure	Aspiration hazard – Category 1 Not available				
Potential acute health effects		. lot available				
Eye contact		Eve contact ma	y cause redness and transient	pain.		
Inhalation				•	tory irritation	
Skin contact		Inhalation of oil mist or vapours at elevated temperatures may cause respiratory irritation. No known significant effects or critical hazards.				
Ingestion May be fatal if swallowed and enters airways.						
Potential chronic health effects		may be latal II S	wanowed and enters an ways.			
		No known signi	ificant effects or critical bazard	s		
General		No known significant effects or critical hazards. The base oil(s) in this product is based on an severely hydrotreated distillate. The product should not be				
General					The product chould not be	







Mutagenicity							
,	ratogenicity		significant effects or critical haz	ards.			
Product / ingredient name							
Fertility effects							
Other information Specific hazard		Not availab	le				
Section 12: Ecological Information							
12.1 Toxicity		Not expected to be harmful to aquatic organisms.					
12.2 Persistence and degradability			ntly biodegradable.				
12.3 Bioaccumulative potential				nt because of the low water solu	bility of this product.		
12.4 Mobility in soil			ered mobile.				
12.5 Results of PBT & vPvB assessment	:	Not applica					
12.6 Other adverse effects			n water. Spills may form a film of nsfer could also be impaired.	n water surfaces causing physica	al damage to organisms.		
Section 13: Disposal Consideration							
The information in this section contains information provided in the Exposure So	generic advice and enario(s).	d guidance. T	he list of Identified Uses in Sect	ion 1 should be consulted for ar	ny available use-specific		
Product Methods of disposal		feasible and authorisatio or waste su qualified w	d recommended. This substance ons, relevant contamination lim bstance (not directly recyclable	vant contamination), recycling o e can be burned or incinerated, its, safety regulations and air qu ): Disposal can be carried out di on may identify a specific organ ery or disposal	subject to national/local ality legislation. Contaminated rectly, or by delivery to		
Hazardous waste		Yes					
European waste catalogue (EWC) Waste	Code 13 03 07*	Waste designation.					
Packaging		Mineral-ba	sed non-chlorinated insulating	and heat transmission oils.			
Methods of disposal				d or minimised wherever possib y be considered when recycling	1 3 3		
Section 14: Transport Information							
International transport regulations							
	ADR / R	ID	ADN	IMO / IMDG Classification	ICAO / IATA Classification		
14.1 UN number	Not regul	ated	Not regulated	Not regulated	Not regulated		
14.2 UN proper shipping name	_		_	_	_		
14.3 Transport hazard class(es)	_		-	_	_		
14.4 Packing group	_		-	_	_		
14.5 Environmental hazards	No		No	No	No		
Additional Information	_		-	-	-		
14.6 Special precautions for user oils							
14.7 Transport in bulk according to An	nex   of MARPOL	73/78 and th	e IBC Code				
Section 15: Regulatory Informatio							
		slation speci	fic for the substance or mixture	e EU Regulation (EC) No. 1907/	2006 (REACH)		
Annex XIV – List of substances subject to Annex XIV Substances of very high concern	islation specific for the substance or mixture EU Regulation (EC) No. 1907/2006 (REACH) None of the components are listed						
Annex XVII – Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles.			ot applicable				
International Lists National Inventory Inventory name							
Australia	Australian Inventory of Chemical Substances (AICS) – Yes						
Canada		ubstances List (DSL) – Yes stic Substances List (NDSL) – Nc	)				
China			f Existing Chemical Substances				
		inventory o	. Easting chemical substances				





_	European Inventory of Existing Commercial Chemical Substances (EINECS) – Yes				
Europe	European List of Notified Chemical Substances (ELINCS) – No				
Japan	Inventory of Existing and New Chemical Substances (ENCS) – Yes				
Korea	Existing Chemicals List (ECL) – Yes				
New Zealand	New Zealand Inventory – Yes				
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS) – Yes				
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory – Yes				
	oly with the inventory requirements administered by the governing country(s) uct are not listed or exempt from listing on the inventory administered by the governing country(s).				
Section 16: Other Information					
Revision comments					
Legend to abbreviations					
ADR	European agreement concerning the international carriage of dangerous good by road.				
RID	Regulations agreement concerning the international carriage of dangerous good by rail.				
IMDG Code	International Maritime Dangerous Goods Code.				
ICAO	International Civil Aviation Organization.				
IATA	International Air Transport Association.				
GHS	Globally Harmonized System of Classification and Labeling of Chemicals.				
CLP	Classification, Labelling and Packaging Regulation [Regulation (EC) No.1272/2008].				
SCBA	Self-Contained Breathing Apparatus.				
REACH	Registration, Evaluation, Authorization and Restriction of Chemicals Regulation [Regulation (EC) No. 1907/2006].				
LC 50	Median lethal concentration.				
LD 50	Median lethal dose.				
РВТ	Persistent, Bio accumulative and Toxic.				

GANDHAR OIL REFINERY (INDIA) LTD.					
Taloja Plant	Plot No.10, MIDC, Main Road, Taloja, Taluka Panvel, District - Raigad 410208, India.				
Silvassa Plant	Plot No. 2, Survey No. 678/1/3, Village Naroli, Near Naroli Check Post, Silvassa, Dadra & Nagar Haveli, Union Territory 396230, India.				
Emergency / Info Phone No.	Phone: +91-22-40635600 • Fax: +91-22-40635601				
Email	info@gandharoil.com				





# **DIVYOL TRIBOROL LC 3 GREASE**

Section 1: Identification of the Substance / Mixt	ure						
1.1 Product identifier							
Product name	Divvol Triborol L	Divyol Triborol LC3 Grease					
Product description		n Complex Grease					
Product type	Grease	•					
MARPOL Annex-1	****						
1.2 Identified uses							
Distribution of substance	Automotive & Ind	dustrial Grease					
Formulation & (re)packing of substance & mixtures	Automotive & Inc						
Manufacture of substance	Automotive & Inc						
Functional fluids							
	Automotive & Ind	dustrial Grease					
Section 2: Hazard Identification							
4-Extreme	Health		1				
3-High	Flammability		1				
2-Moderate	Reactivity		0				
1-Slight	Special		-				
Section 3: Compostion / Information on Ingredie	ents						
Chemical Name / Ingredients	% by wt.	Hazardous	CAS No.				
Lithium Hydroxide	0.5 - 3	Yes	1310-66-3				
Mineral Oil	80 - 90	Yes	64742-52-5, 64741-88-4, 64742-54-7, 64742-01-4				
12 HSA	5 -10	No	106-14-9				
НСО	2 - 5	No	8001-78-3				
Complexing Acid	1-3	No	Proprietary Mixture				
Additive Package	0 - 4	Yes	Proprietary Mixture				
Zinc Dialkyl Dithiophosphate	0 - 4	Yes	68457-79-4				
Butene, Homo Polyhmer	0-4 No 9003-27-4						
Product / Ingredient name	Lithium soaps fro	om natural fatty su	lbstances				
Section 4: First Aid Measures							
Inhalation exposure			gen, if breathing is difficult. Contact physician				
Skin contact		Remove contaminated clothing. Flush skin with water. Wash skin thoroughly with mild soap & water. If irritation occurs, call a physician.					
Swallowing or other		Do not induce vomiting. In general no treatment is necessary unless large quantities are ingested. Get medical advice.					
Eye contact	Rinse continuous	Rinse continuously with water for several minutes. Get medical attention, if irritation persists.					
Protection first-aiders		Disconnecting electrical supply. Ensure adequate ventilation and check that a safe and breathing area is available before entry into confined spaces.					
Section 5: Fire Fighting Measures							
5.1 Extinguishing media							
Unsuitable extinguishing media			kide. Do not use direct water and wet chemicals, or water on the I the fire. Use foam simultaneously on the surface.				
5.2 Special hazards arising from the substance or mixt	ture						
Hazards from the substance or mixture			ontainers may rupture and when exposed to heat, creating a highly				
Hazardous thermal decomposition products	Incomplete combustion is likely to give rise to a complex mixture of airborne solid and liquid particulates, gases, including carbon monoxide, H <sub>2</sub> S, SO <sub>x</sub> (sulphur oxides) or sulphuric acid and unidentified organic and inorganic compounds.						
5.3 Advice for firefighters							
Special precautions for firefighters			oving all persons from the vicinity of the incident if there is a fire. No v personal risk or without suitable training.				
Special protective equipment for firefighters	Firefighters shou (SCBA) with a full helmets, protecti	ld wear appropria l face- piece opera ive boots and glov	action shall be taken involving any personal risk or without suitable training. Firefighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face- piece operated in positive pressure mode. Clothing for firefighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.				





6.1 Personal precautions protective equipment and em	ergency procedures						
6.1 Personal precautions, protective equipment and emergency procedures							
For non-emergency personnel	Keep non-involved personnel away from the area of spillage. Alert emergency personnel. Except in case of small spillages, the feasibility of any actions should always be assessed and advised, if possible, by a trained, competent person in charge of managing the emergency. Stop leak if safe to do so. Avoid direct contact with the product. Stay upwind / keep distance from source. In case of large spillages, alert occupants in downwind areas. Eliminate all ignition sources if safe to do so. Spillages of limited amounts of product, especially in the open air when vapours will be usually quickly dispersed, are dynamic situations, which will presumably limit the exposure to dangerous concentrations. Note : Recommended measures are based on the most likely spillage scenarios for this material; however, local conditions (wind, air temperature, wave / current direction and speed) may significantly influence the choice of appropriate actions.						
For emergency responders	For this reason, local experts should be consulted when necessary. Local regulations may also prescribe or limit actions to be taken. Small spillages: Normal antistatic working clothes are usually adequate. Large spillages: Full body suit of chemically resistant and thermal resistant material should be used. Work gloves providing adequate chemical resistance, specifically to aromatic hydrocarbons. Note: Gloves made of PVA are not water-resistant, and are not suitable for emergency use. Safety helmet, antistatic non-skid safety shoes or boots. Goggles and / or face shield, if splashes or contact with eyes is possible or anticipated. Respiratory Protection : A half or full-face respirator with filter(s) for organic vapours (and when applicable for H <sub>2</sub> S) a Self Contained Breathing Apparatus (SCBA) can be used according to the extent of spill and predictable amount of exposure. If the situation cannot be completely assessed, or if an oxygen deficiency is possible, only SCBA's should be used.						
6.2 Environmental precautions	Prevent product from entering sewers, rivers or other bodies of water. If necessary dike the product with dry earth, sand or similar non-combustible materials. In case of soil contamination, remove contaminated soil and treat in accordance with local regulations. In case of small spillages in closed waters (i.e. ports), contain product with floating barriers or other equipment. Collect spilled product by absorbing with specific floating absorbents. If possible, large spillages in open waters should be contained with floating barriers or other mechanical means. If this is not possible, control the spreading of the spillage, and collect the product by skimming or other suitable mechanical means. The use of dispersants should be advised by an expert, and, if required, approved by local authorities.						
6.3 Methods and material for containment and cleaning	up						
Small spill	Stop leak if without risk. Absorb spilled product with suitable non-combustible materials.						
Large spill	Large spillages may be cautiously covered with foam, if available, to limit vapour cloud formation. Do not use water jet. When inside buildings or confined spaces, ensure adequate ventilation. Transfer collected product and other contaminated materials to suitable containers for recovery or safe disposal.						
6.4 Reference to other sections	See Section 1: For emergency contact information. See Section 8: For information on appropriate personal protective equipment. See Section 13: For additional waste treatment information.						
Section 7: Handling and Storage							
7.1 Advice on general information – hygiene, storage	Obtain special instructions before use. Keep away from heat / sparks / open flames/hot surfaces. No smoking. Use and store only outdoors or in a well-ventilated area. Hazard of slipping on spilt product. Avoid release to the environment.						
7.2 Conditions for safe storage including any incompatibilities	Storage area layout, tank design, equipment and operating procedures must comply with the relevant regional, national or local legislation. Storage installations should be designed with adequate bunds in case of leaks or spills. Cleaning, inspection and maintenance of internal structure of storage tanks must be done only by properly equipped and qualified personnel as defined by national, local or company regulations. Store separately from oxidising agents. Keep only in the original container or in a suitable container for this kind of product. Keep container tightly closed and sealed until ready for use. Do not store in unlabelled containers. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Empty containers may contain harmful, flammable / combustible or explosive residue or vapours. Do not cut, grind, drill, weld, reuse or dispose of containers unless adequate precautions are taken against these hazards. Protect from sunlight.						
7.3 Specific end use(s) – Recommendations	Not available						



Density Solubility (ies)



Section 8: Exposure Controls / Personal Protect	ion
The list of Identified Uses in Section 1 should be consul	ted for any available use-specific information provided in the Exposure Scenario(s).
8.1 Control parameters	
Occupational exposure limits	
Product / Ingredient name	Distillates, mixture of hydrocarbons
Exposure limits values	AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m <sup>3</sup> 8 hours. Form: mist and fume STEL: 3 mg/m <sup>3</sup> 15 minutes. Form: mist and fume [Air contaminant]. AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m <sup>3</sup> 8 hours. Form: mist and fume STEL: 3 mg/m <sup>3</sup> 15 minutes. Form: mist and fume.
Recommended monitoring procedures	If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres – Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres – Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres – General requirements for the performance of procedures for the measurement of chemical agents). Reference to national guidance documents for methods for the determination of hazardous substances will also be required.
8.2 Exposure control Appropriate engineering controls	Mechanical ventilation and local exhaust will reduce exposure via the air. Use oil resistant material in construction of handling equipment. Store under recommended conditions and if heated, temperature control equipment should be used to avoid overheating.
Individual protection measures	
Hygiene measures	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Ensure that eyewash stations and safety showers are close to the workstation location. Wash contaminated clothing before reuse.
Eye / face protection	Recommended: Safety glasses with side shields.
Skin protection	
Hand protection	4 – 8 hours (breakthrough time): nitrile rubber.
Body protection	Wear protective clothing if there is a risk of skin contact. Change contaminated clothes at the end of working shift.
Other skin protection	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary.
Environmental exposure control	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.
Section 9: Physical and Chemical Properties	
Appearance	Clear
Physical state	Smooth, Homogenous & Tacky
Colour	Amber
Odor	Petroleum odor
Odour threshold	Not available
Dropping point	>265°C (ASTM D-2265)
Flash point	> 230°C (MINERAL OIL)
Evaporation rate	Not available
Flammability (solid, gas)	Not available
Flammability limits in air (lower), % by volume	Not available
Flammability limits in air (upper), % by volume	Not available
	ALC: Lott



Not volatile





Solubility (water)		Insoluble in wa	ter			
Partition coefficient (n-octanol/wa	· · · · · · · · · · · · · · · · · · ·		Not available			
		No data				
Auto-ignition temperature		No data Not available				
Worked Penetration at 25°C	220-250 (ASTM	D 217)				
Explosive properties		No data	0217)			
Oxidising properties		No data				
DMSO extractable compounds for	basa ail substanca(s)	Not available				
according to IP346		<3 %				
Section 10: Stability and Read	ctivity					
10.1 Reactivity		No specific test	data related to reactivity availa	able for this product or its ingr	edients.	
10.2 Chemical stability		Stable under no	ormal conditions			
10.3 Possibility of hazardous read	ctions	Under normal c	conditions of storage and use, I	hazardous reactions will not o	ccur. Oxidising agent.	
10.4 Conditions to avoid		Keep away from	n extreme heat and oxidising a	gents.		
10.5 Incompatible materials			nbustion is likely to give rise to ses, including carbon monoxic			
10.6 Hazardous decomposition p	products		ganic and inorganic compound			
SECTION 11: Toxicological Inf	formation					
11.1 Information on toxicologica	ll effects					
Acute toxicity						
Product / ingredient name	Result		Species	Dose	Exposure	
	LC 50 Inhalation dus	ts and mists	Rat	>2.18mg/l	4 hours	
Distillate (Petroleum), hydro	LD 50 Dermal		Rabbit	> 5000 mg/kg	_	
treated heavy paraffinic	LD 50 Ora	-	Rat	>15000 mg/kg	_	
Irritation / corrector				5 5		
Irritation / corrosion						
Skin						
Eye		Na krawni i i	from the first state of the sta	_		
•		No known signi	ificant effects or critical hazard	S.		
Respiratory		No known signi	ificant effects or critical hazard	s.		
Respiratory Sensation		No known signi	ificant effects or critical hazard	S.		
Respiratory Sensation Skin						
Respiratory Sensation		No known signi	ificant effects or critical hazard	S.		
Respiratory Sensation Skin		No known signi	ificant effects or critical hazard le to indicate product or any c	S.	an 0.1 % are	
Respiratory Sensation Skin Respiratory		No known signi No data availab multigene or ge	ificant effects or critical hazard le to indicate product or any c	s. omponents present greater th		
Respiratory Sensation Skin Respiratory Mutagenicity		No known signi No data availab multigene or ge The base oil(s) i The product sho	ificant effects or critical hazard le to indicate product or any c enotoxic. n this product is based on an s ould not be regarded as a carc	s. omponents present greater th everely hydrotreated distillate inogen.		
Respiratory Sensation Skin Respiratory Mutagenicity Carcinogenicity Reproductive toxicity	ale exposure	No known signi No data availab multigene or ge The base oil(s) i The product sho	ificant effects or critical hazard le to indicate product or any c enotoxic. n this product is based on an s	s. omponents present greater th everely hydrotreated distillate inogen.		
Respiratory Sensation Skin Respiratory Mutagenicity Carcinogenicity Reproductive toxicity Specific target organ toxicity – sing	5 .	No known signi No data availab multigene or ge The base oil(s) i The product sho	ificant effects or critical hazard le to indicate product or any c enotoxic. n this product is based on an s ould not be regarded as a carc	s. omponents present greater th everely hydrotreated distillate inogen.		
Respiratory Sensation Skin Respiratory Mutagenicity Carcinogenicity Reproductive toxicity Specific target organ toxicity – sing Specific target organ toxicity – rep	5 .	No known signi No data availab multigene or ge The base oil(s) i The product she Contains no ing Not classified	ificant effects or critical hazard le to indicate product or any c enotoxic. n this product is based on an s ould not be regarded as a carc gredient listed as toxic to repro	s. omponents present greater th everely hydrotreated distillate inogen.		
Respiratory Sensation Skin Respiratory Mutagenicity Carcinogenicity Reproductive toxicity Specific target organ toxicity – sing Specific target organ toxicity – rep Aspiration hazard	eated exposure	No known signi No data availab multigene or ge The base oil(s) i The product she Contains no ing Not classified Aspiration haza	ificant effects or critical hazard le to indicate product or any c enotoxic. n this product is based on an s ould not be regarded as a carc gredient listed as toxic to repro	s. omponents present greater th everely hydrotreated distillate inogen.		
Respiratory Sensation Skin Respiratory Mutagenicity Carcinogenicity Reproductive toxicity Specific target organ toxicity – rep Aspiration hazard Information on likely routes of exp	eated exposure	No known signi No data availab multigene or ge The base oil(s) i The product she Contains no ing Not classified	ificant effects or critical hazard le to indicate product or any c enotoxic. n this product is based on an s ould not be regarded as a carc gredient listed as toxic to repro	s. omponents present greater th everely hydrotreated distillate inogen.		
Respiratory Sensation Skin Respiratory Mutagenicity Carcinogenicity Reproductive toxicity Specific target organ toxicity – sing Specific target organ toxicity – rep Aspiration hazard Information on likely routes of exp Potential acute health effects	eated exposure	No known signi No data availab multigene or ge The base oil(s) i The product she Contains no ing Not classified Aspiration haza Not available	ificant effects or critical hazard le to indicate product or any c enotoxic. n this product is based on an s ould not be regarded as a carc gredient listed as toxic to repro	s. omponents present greater th everely hydrotreated distillate inogen. duction.		
Respiratory Sensation Skin Respiratory Mutagenicity Carcinogenicity Reproductive toxicity Specific target organ toxicity – sing Specific target organ toxicity – rep Aspiration hazard Information on likely routes of exp Potential acute health effects Eye contact	eated exposure	No known signi No data availab multigene or ge The base oil(s) i The product she Contains no ing Not classified Aspiration haza Not available	ificant effects or critical hazard le to indicate product or any c enotoxic. n this product is based on an s ould not be regarded as a carc gredient listed as toxic to repro ard – Category 1	s. omponents present greater th everely hydrotreated distillate inogen. duction. pain.	•	
Respiratory Sensation Skin Respiratory Mutagenicity Carcinogenicity Reproductive toxicity Specific target organ toxicity – rep Aspiration hazard Information on likely routes of exp Potential acute health effects Eye contact Inhalation	eated exposure	No known signi No data availab multigene or ge The base oil(s) i The product she Contains no ing Not classified Aspiration haza Not available Eye contact may Inhalation of oil	ificant effects or critical hazard le to indicate product or any c enotoxic. n this product is based on an s ould not be regarded as a carc gredient listed as toxic to repro ard – Category 1 y cause redness and transient l mist or vapours at elevated te	s. omponents present greater th everely hydrotreated distillate inogen. duction. pain. emperatures may cause respire	•	
Respiratory Sensation Skin Respiratory Mutagenicity Carcinogenicity Reproductive toxicity Specific target organ toxicity – rep Aspiration hazard Information on likely routes of exp Potential acute health effects Eye contact Inhalation Skin contact	eated exposure	No known signi No data availab multigene or ge The base oil(s) i The product she Contains no ing Not classified Aspiration haza Not available Eye contact ma Inhalation of oil No known signi	ificant effects or critical hazard le to indicate product or any c enotoxic. In this product is based on an s ould not be regarded as a carc gredient listed as toxic to repro ard – Category 1 y cause redness and transient l mist or vapours at elevated te ificant effects or critical hazard	s. omponents present greater th everely hydrotreated distillate inogen. duction. pain. emperatures may cause respire	•	
Respiratory Sensation Skin Skin Respiratory Mutagenicity Carcinogenicity Reproductive toxicity Specific target organ toxicity – rep Aspiration hazard Information on likely routes of exp Potential acute health effects Eye contact Inhalation Skin contact Ingestion	eated exposure	No known signi No data availab multigene or ge The base oil(s) i The product she Contains no ing Not classified Aspiration haza Not available Eye contact ma Inhalation of oil No known signi	ificant effects or critical hazard le to indicate product or any c enotoxic. n this product is based on an s ould not be regarded as a carc gredient listed as toxic to repro ard – Category 1 y cause redness and transient l mist or vapours at elevated te	s. omponents present greater th everely hydrotreated distillate inogen. duction. pain. emperatures may cause respire	•	
Respiratory Sensation Skin Respiratory Mutagenicity Carcinogenicity Carcinogenicity Specific target organ toxicity – sing Specific target organ to	eated exposure	No known signi No data availab multigene or ge The base oil(s) i The product she Contains no ing Not classified Aspiration haza Not available Eye contact ma Inhalation of oil No known signi May be fatal if s	ificant effects or critical hazard le to indicate product or any c enotoxic. n this product is based on an s ould not be regarded as a carc gredient listed as toxic to repro ard – Category 1 y cause redness and transient I mist or vapours at elevated te ificant effects or critical hazard wallowed and enters airways.	s. omponents present greater th everely hydrotreated distillate inogen. duction. pain. emperatures may cause respira s.	•	
Respiratory Sensation Skin Skin Respiratory Mutagenicity Carcinogenicity Reproductive toxicity Specific target organ toxicity – rep Aspiration hazard Information on likely routes of exp Potential acute health effects Eye contact Inhalation Skin contact Ingestion	eated exposure	No known signi No data availab multigene or ge The base oil(s) i The product she Contains no ing Not classified Aspiration haza Not available Eye contact may Inhalation of oil No known signi May be fatal if s	ificant effects or critical hazard le to indicate product or any c enotoxic. In this product is based on an s ould not be regarded as a carc gredient listed as toxic to repro ard – Category 1 y cause redness and transient l mist or vapours at elevated te ificant effects or critical hazard	s. omponents present greater th everely hydrotreated distillate inogen. duction. pain. emperatures may cause respira s.	Itory irritation.	







Intratagenicity increase of the second seco	Mutagenicity						
<form>          Product, rignedient name         Not available           fertility effects         Not available           Other information Specific hazards         Not available           Section 12: Ecological Information         Not available           12.1 Toxicity         Not expected to be harmful to aquatic organisms.           12.2 Fersitence and degradability         Not inherently biodegradable.           12.3 Bioaccumulative potential         Not aplicable           12.4 Mobility in soil         Not considered mobile.           12.5 Eaclust of PBT &amp; VP&amp; assessmet         Not aplicable           12.6 Other adverse effects         Not aplicable           Toxing the considered mobile.         Not applicable           12.6 Section 13: Disposit Considered and softward and guidance. The list of fertified Ubes in Section 13: should be consulted or any available use specific information provided in the Exposure Section 13: should be consulted or any available use specific information provided in the Exposure Section 13: should be consulted or any available use specific or available in any distributions, relevant contamination, recycling or available in any distributions, relevant contamination, recycling or available in any distributions and alrecut por your available use specific or available in the specific or any available use specific or available in any distribution is available in the specific or any available use specintany or any available use specific or any availa</form>	,						
<form>          Internation Specific hazard         Net available           Other information Specific hazard         Not available           12.1 Toxicity         Not expected to be harmful to aquatic organisms.           12.2 Presistence and degradability in all         Not inherently biologengradability.           12.3 Bioaccumulative potential         Bioaccumulation is unikely to be significant because of the low water solubility of this product.           12.5 Reutis OFPE a/Vba assessment         Not applicable           12.6 Toxicity OFPE a/Vba assessment         Wore possible (on in the abnerso of relevant containition), expecting or evaluable use specific torganisms.           Product Methods of disposal         Wore possible (on in the abnerso of relevant containition), expecting or evaluable use specific organisms.           Product Methods of disposal         Were possible (on in the abnerso of relevant containition), expecting or evaluable use specific organisms.           Notardiplicable         Notar evaluable         Notar evaluable or evaluable.           Reading Methods of disposal         Were possible (on in the abnerso of relevant containition), expecting assessment or unatificable and recommended. This substance on the unrend or information organities and recomaninated particity aspectific organisation organid eva</form>	5 ,		No known s	significant effects or critical haza	ards.		
Other Information Specific hazard         Net available           Section 12: Ecological Information         Not expected to be harmful to aquatic organisms.           12: Parsistence and degradability         Not expected to be harmful to aquatic organisms.           12: A Mobility in soil         Not considered mobile.           12: A Mobility in soil         Not considered mobile. </td <td></td> <td></td> <td colspan="4"></td>							
Section 12: Ecological Information         Not expected to be harmful ta aquatic organisms.           12.1 Toxidity         Not expected to be harmful ta aquatic organisms.           12.3 Brostneer and degradability         Not expected to be harmful ta aquatic organisms.           12.4 Mobility notel         Not considered mobile.           12.4 Mobility notel         Not considered mobile.           12.5 Results of PBT & VP& assessment         Not applicable           12.6 Other adverse effects         Not applicable           Section 13: Disposal Considerations         The information in this section or talnes generic adverse and guidance. The list of identified Uses in Section 1 should be consulted for any available use specific information provided in the Exposure Scenario(s).           Product Methods of disposal         Where possible leg, in the absence of relevant contamination, recycling of used substance is freasible and recommended. This substance can be burned or innormated autification used substance is composition limits, and recommended. This substance can be burned or innormated autification and used substance is composition limits and methods for recovery or disposal           Hazardous waste         Vos           European waste catalogue (EWC) Wiste Code 13 03 07°         Woste designation.           Not interaction or landifit involution guided waste dusted where expectible. Not equilated waste should be avoided or minimised where expectible. Woste excellence to found it involution guided waste should be avoided or minimised where expectin should avaide.			Not available				
12.1 privation     Not expected to be harmful to aquatic organisms.       12.2 Prestance and legand bill.     Not anotal-construction is unlikely to be significant to be assue of the low water sub-likely of this product.       12.4 Obtaining the point of the sub-sub-sub-sub-sub-sub-sub-sub-sub-sub-	•	1					
12.2 Persistence and degradability       Not inherently biodegradable.         12.3 Bioaccumulative potential       Bioaccumulation is unlikely to be significant because of the low water solubility of this product.         12.4 Mobility is and       Not considered mobile.         12.5 Results of PBT & vPvB assessment       Not applicable         Insoluble in water. Spills may form a film on water surfaces causing physical damage to organisms. Oxygen transfer could also be impaired.         Section 13: Disposal Considerations       Where possible (eg. in the absence of relevant contamination) recycling of used substance is feasible and recommended. This substance can be burned or indirected, subject to national/local authorisation, relevant contamination limits, stering contamination, and/or prescribe composition limits and methods for recovery or disposal         Product Methods of disposal       Where possible (eg. in the absence of relevant contamination) intrescriber qualified vasates bandles. National legislation may available use-specific composition limits and methods for recovery or disposal         Hazardous waste       Yes         European waste catalogue (EWC) Waste Code 13 03 07*       Waste designation.         Rethods of disposal       The egeneration of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Inclineration or landfill should only be considered when recycled. Inclineration or landfill should only be considered when recycled. Inclineration or landfill should only be considered when recycled. Inclineration or landfill should only be considered when recycled. Inclineration or landfill should only be considered			Not expect	ed to be harmful to aquatic org	anisms.		
12.3 Bracum Jative potential       Not considered mobile.         12.4 Mobility in soil of PT 4 vVP assesmet       Not applicable         12.6 Guites of PT 4 vVP assesmet.       Not applicable.         12.6 Guites of PT 4 vVP assesmet.       Not applicable.         2.6 Guites of PT 4 vVP assesmet.       Not applicable.         2.6 Guites of PT 4 vVP assesmet.       Not applicable.         3.6 Guites adverse effects.       Not applicable.         3.7 Guites adverse effects.       VP recorded also be impaired.         3.7 Guites adverse effects.       VP averse visite (e.g. in the absence of relevant containtation, recycling of used subtance is feasible and commended. This subtance (and incinerated subject to notanillog) adverse subtance is differentiable. National legislation may identify a space and ar quality legislation. Containtand or averse subtance is differentiable. National legislation may identify a space and ar quality legislation. Containtand or averse subtance is differentiable. National legislation may identify a space and ar quality legislation. Containtand or averse subtance is differentiable. National legislation may identify a space and ar quality legislation. Containtand or averse subtance is not incide subtance is not incide subtance. National and are quality legislation. Containtand or averse subtance is not incide subtance. National and an averse subject is not feasible.         Product Methods of disposal       Westere averse containt incide	· · · · · · · · · · · · · · · · · · ·		•				
12.4 Mobility in soil       Not considered mobile.         12.5 Results of PRT & VPR assessment       Not applicable         12.6 Other adverse effects       Unsoluble in water. Spills may form a film on water surfaces causing physical damage to organisms. Oxygen transfer could also be impaired.         Section 13: Disposal Considerations       The information in this section contains generic advice and guidance. The list of identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).         Product Methods of disposal       Where possible (e.g. in the absence of relevant contamination limits, adjett regulations, and ang inquality (edjaticn, contamination), recycling of used substance is trassible and recommended. This substance can be bured on indinerated. Subject to national/local authorisation, relevant contamination limits, adjett regulations and ang inquality (edjaticn, contamination)         Hazardous waste       Yes         European waste catalogue (EWC) Waste Code 13 03 07*       Waste disgination.         Packaging       Mineral-based non -chlorinated insulting and heat transmission ells.         The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or indinities dudied where recycling is not faesible.         Section 13: Transport Information       Incervel Not regulated       Not regulated         14.1 UN number       ADR /RID       ADN       MOV /IMDG Classification       Mod / IATA Classification         14.2 UN proper shipping				, ,	nt because of the low water solu	Ibility of this product.	
12.6 Other adverse effects     Nonludie in water. Splits may form a fitm on water surfaces causing physical damage to organisms. Nongen transfer could also be impaired.       Section 13: Disposal Considerations:       Section 13: Disposal Considerations:       Section 13: Disposal Considerations:       The information in this section contains generic advices undividual and be impaired.       Section 13: Disposal Considerations:       The information in this section contains generic advices on tabulation of relevant contamination intervices. Job et or tabulations and arguality legislation.       Note the providual disposal on the commendo of this substance contations and arguality legislation.       Product Methods of disposal       Yes       European waste catalogue (KPC) Waste Cols 13 03 07*       Waste designation.       Recidention of waste should be avoided or minimised wherever possible. Waste packaging should be recided when recycling in feasible.       Recidention tabuscent colspan="4">Colspan="4"       Colspan= 4							
Application adverse energy       Oxygen transfer could also be impaired.         Section 13: Disposal Considerations       Oxygen transfer could also be impaired.         Section 13: Disposal Considerations       Oxygen transfer could also be impaired.         Product Methods of disposal       Where possible (e.g. in the absence of relevant contamination dimits, sefery regulations and ar quality eligibation. Contamination dimits, sefery regulations and are quality eligibation. Contamination dimits, sefery regulations and are quality eligibation. Contamination dimits, sefery regulations and are quality eligibation. Contamination dimits and methods for recovery or disposal         Macardous waste       Yes       The generation of varies evolution avoided or minimized where versible. Weste packaging should be record or minimized where versible.       Section 13: Neste packaging should be record or minimized where versible.       Section 14: Transport Information         Methods of disposal       ADR / RD       ADN       IMO / IMDO Classification       ICAO / IAIA Classifica	12.5 Results of PBT & vPvB assessment	:	Not applica	ble			
The information in this section contains generic advice and substance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario().       Where possible (e.g. in the absence of relevant contamination intervated, subject to national/local authorisation, relevant contamination limits, safety regulations and air quality legislation. Contaminated in this, safety regulations and air quality legislation. Contaminated or qualified wase handlens. National legislation may identify a specific organisation, and/or preservice or wase substance (not directly recyclable): Disposal can be carried out directly, or by delivery to qualified wase handlens. National legislation may identify a specific organisation, and/or preservice or wases catalogue (EWC) Wase Code 13 03 07       Yes         European wase catalogue (EWC) Wase Code 13 03 07       Wast e designation.       Mineral-based non-chlorinated insulating and heat transmission oils.         Nethods of disposal       Yes       The generation of wasts should be avoided or minimission where repossible. Wase packaging should be considered when recyclable.         Nethods of disposal       ADR / IID       ADN       IMO / IMDG Classification       ICAO / IATA Classification         14.1 UN number       ADR / IID       ADN       IMO / IMDG Classification       ICAO / IATA Classification         14.2 UW proper shipping name       -       -       -       -         14.3 Transport hazard class(es)       -       -       -       -         14.3 Faving regulation for user U MARPOLT/* arother program in bu	12.6 Other adverse effects				n water surfaces causing physica	al damage to organisms.	
Information provided in the Exposure Scenario(s).  Where possible (a, in the absence of relevant contamination), recycling of used substance is the authorisations, relevant contaminated or inclinerated, subject to national/local authorisations, relevant contamination limits, safety regulations and air quality legislation. Contaminated or qualified waste handlers. National legislation may detected out inclinerated, subject to national/local authorisations, relevant contamination limits, safety regulations and air quality legislation. Contaminated or qualified waste handlers. National legislation may detected out inclinerated, subject to national/local authorisations, relevant contaminated is used. The substance can be burned or inclinerated, subject to national/local authorisations, relevant contaminated is used. The substance can be burned or inclinerated, subject to national/local authorisation, and/or prescribe composition limits and methods for recovery or disposal Hazardous waste  Ketods of disposal  Methods of ADR (N  ADR (N  ADR (N  ADR N  ADR N  Mot regulated Not No	Section 13: Disposal Consideration	าร					
Appendix Methods of disposal         Satisble and recommended. This substance and point longet and point and yoal disposal constant and yoal disposal disposal disposal disposal d			d guidance. T	he list of Identified Uses in Secti	ion 1 should be consulted for ar	ny available use-specific	
European waste catalogue (EWC) Waste Cwel 13 03 07*         Meate designation.           Packaging         Mineral-based non-chlorinated insulating and heat transmission oils.           Methods of disposal         The generation of waste should be avoideded or minimised wherever possible. Waste packaging should be creceded or minimised wherever possible. Waste packaging should be creceded or minimised wherever possible. Waste packaging should be creceded or minimised wherever possible. Waste packaging should be creceded or minimised wherever possible. Waste packaging should be creceded or minimised wherever possible. Waste packaging should be creceded or minimised wherever possible. Waste packaging should be creceded or minimised wherever possible. Waste packaging should be creceded or minimised wherever possible. Waste packaging should be creceded or minimised wherever possible. Waste packaging should be creceded or minimised wherever possible. Waste packaging should be creceded or minimised wherever possible. Waste packaging should be creceded or minimised wherever possible. Waste packaging should be creceded or minimised wherever possible. Waste packaging should be creceded or minimised wherever possible. Waste packaging should be creceded or minimised wherever possible. Waste packaging should be creceded or minimised wherever possible. Waste packaging should be creceded or minimised wherever possible. Waste packaging should be creceded or minimised wherever possible. Waste packaging should be created or minimised wherever possible. Waste packaging should be created or minimised where yero should be created or minimised wherever possible. Waste packaging should be created or minimised wherever packaging should	Product Methods of disposal	Product Methods of disposal feasible and recommended. This substance can be burned or incinerated, subject to national/local authorisations, relevant contamination limits, safety regulations and air quality legislation. Contami or waste substance (not directly recyclable): Disposal can be carried out directly, or by delivery to qualified waste handlers. National legislation may identify a specific organisation, and/or prescribe					
Packaging       Mineral-based non-chlorinated insulating and heat transmission oils.         Methods of disposal       The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.         Section 14: Transport Information         International transport regulations         ADR / RID       ADN       IMO / IMDG Classification       ICAO / IATA Classification         14.1 UN number       Not regulated       Not regulated       Not regulated         14.2 UN proper shipping name       -       -       -         14.3 Transport hazerd class(es)       -       -       -         14.4 Packing group       -       -       -       -         14.4 Packing group       -       -       -       -         14.5 Environmental hazards       No       No       No       No         Additional Information       -       -       -       -       -       -         14.5 Environmental hazards       No       Statuset Not (Statuset Not No) </td <td>Hazardous waste</td> <td></td> <td>Yes</td> <td></td> <td></td> <td></td>	Hazardous waste		Yes				
Methods of disposal       The generation of waste should be avoided or minimised wherever possible.       Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.         Section 14: Transport Information         International transport regulations         International transport regulations         14.1 UN number       ADR / IND       ADN       IMO / IMDG Classification       ICAO / IATA Classification         14.2 UN proper shipping name       -       -       -       -         14.3 Transport hazard class(es)       -       -       -       -       -         14.4 Packing group       - <t< td=""><td>European waste catalogue (EWC) Waste</td><td>Code 13 03 07*</td><td colspan="4">Waste designation.</td></t<>	European waste catalogue (EWC) Waste	Code 13 03 07*	Waste designation.				
Methods of disposal       recycled. Incineration or landfill should only be considered when recycling is not feasible.         Section 14: Transport Information         International transport regulations         Methods of disposal       ICAO / IATA Classification         IADR / RID       ADR / RID <th cols<="" td=""><td>Packaging</td><td></td><td>Mineral-ba</td><td>sed non-chlorinated insulating</td><td>and heat transmission oils.</td><td></td></th>	<td>Packaging</td> <td></td> <td>Mineral-ba</td> <td>sed non-chlorinated insulating</td> <td>and heat transmission oils.</td> <td></td>	Packaging		Mineral-ba	sed non-chlorinated insulating	and heat transmission oils.	
International transport regulationsInternational transport regulationsADR / RIDADNIMO / IMDG ClassificationICAO / IATA Classification14.1 UN numberNot regulatedNot regulatedNot regulatedNot regulatedNot regulated14.2 UN proper shipping name14.3 Transport hazard class(es)14.4 Packing group14.4 Packing group14.5 Environmental hazardsNoNoNoNoNoAdditional Information14.6 Special precautions for user oilsNoNoNoNoNo14.6 Special precautions for user oilsMARPOL > TARSPORT in bulk according to Annex I of MARPOL > TARSPORT in bulk according to Annex I of MARPOL > TARSPORT in bulk according to Annex I of MARPOL > TARSPORT in bulk according to Annex I of MARPOL > TARSPORT in bulk according to authorisation Annex XIV - List of substances subject to authorisation Annex XIV - List of substances substances usubstances 	Methods of disposal				•	1 3 3	
ADR / RIDADNIMO / IMDG ClassificationICAO / IATA Classification14.1 UN numberNot regulatedNot regulatedNot regulatedNot regulated14.2 UN proper shipping name14.3 Transport hazard class(es)14.4 Packing group14.4 Packing group14.5 Environmental hazardsNoNoNoNoNoAdditional Information14.6 Special precautions for user oils14.7 Transport in bulk according to Annex I of MARPOL 73/78 and the IBC CodeSection 15: Regulatory InformationSection 15: Regulatory InformationAnnex XIV - List of substances subject to authorisation Annex XIV - List of substances subject to authorisation Annex XIV - List of substances subject to authorisation Annex XIV - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles.Not applicableInternational Lists National InventoryAustraliaAustralian Inventory of Chemical Substances (AICS) - YesCanadaCanadaNo-Domestic Substances List (NDSL) - No	Section 14: Transport Information						
14.1 UN numberNot regulatedNot regulatedNot regulatedNot regulated14.2 UN proper shipping name $  -$ 14.3 Transport hazard class(es) $  -$ 14.4 Packing group $  -$ 14.4 Packing group $  -$ 14.5 Environmental hazardsNoNoNoAdditional Information $  -$ 14.5 Expiration for user oils $  -$ 14.6 Special precautions for user oils $  -$ Transport in bulk according to AmRPO/TYB and the VECOdeSection 15: Regulatory InformationIntervetor Vectors Ve	International transport regulations						
14.2 UN proper shipping name14.3 Transport hazard class(es)14.4 Packing group14.4 Packing group14.5 Environmental hazardsNoNoNoNoAdditional Information14.5 Special precautions for user oils14.6 Special precautions for user oils14.7 Transport in bulk according to Amerve I of MARPOL 7/78 and tBC CodeSection 15: Regulatory InformatiorInstant on provide in the substance or mixture EU Regulation (EC) No. 1907 (REACH)Annex XIV - List of substances subject to a thorisation pane xIV' Substances of very high concernNone of the components are listedAnnex XVI - Restrictions on the manuf-ture, placing on the market and use of certain danger-is substanceNot supplicableInternational Lists National InventoryInventory of Chemical Substances (AICS) - YesAustraliaAustralian Inventory of Chemical Substances (AICS) - YesCanada		ADR / R	ID	ADN	IMO / IMDG Classification	ICAO / IATA Classification	
14.3 Transport hazard class(es) $  -$ 14.4 Packing group $  -$ 14.5 Environmental hazardsNoNoNoAdditional Information $  -$ 14.5 Special precautions for user oils $  -$ 14.6 Special precautions for user oils $  -$ 14.7 Transport in bulk according to America MARPOL 78 and EU $  -$ Section 15: Regulatory InformationSection 15: Regulatory InformationSubstances subject to the MARPOL 78 and EUSubstances subject to the Substance or mixture Section 1907/EUSingle Substances subject to the Substance or mixture Section 1907/EUNone of the substance or mixture EUSubstances of very high concernNone of the components are listedSubstances of very high concernNot applic Substances of very high concernNot applic Substances of very high concernInternational Lists National InventorySubstances of very high concernNot applic Substances of very high concernNot applic Substances of very high concernInternational Lists National InventorySubstances Subject to the substance Substan	14.1 UN number	Not regul	ated	Not regulated	Not regulated	Not regulated	
14.4 Packing group14.5 Environmental hazardsNoNoNoAdditional Information14.6 Special precautions for user oils14.7 Transport in bulk according to Ansert I of MARPOL TV78 and tk EC CodeSection 15: Regulatory InformationInternational transport in bulk according to Ansert I of MARPOL TV78 and tk EC CodeSection 15: Regulatory InformationInternation of the manufacture gulations / legitient of the substance or mixture EV Regulation (EC) No. 1907 (REACH)Annex XIV - List of substances subject to atthorisation Annex XIV - List of substances subject to atthorisation Annex XIV - Substances of very high concernAnnex XVI - Restrictions on the manufacture, placing on the market and use of certain dangerus substances, mixtures and articles.Not applicableInternational Lists National InventoryAustraliaAustraliaCanadaOmestic Substances List (DSL) - Yes Non-Domest List (NDSL) - NetComestic Substances List (NDSL) - Net	14.2 UN proper shipping name	-		-	-	_	
14.5 Environmental hazardsNoNoNoAdditional Information14.6 Special precautions for user oils14.7 Transport in bulk according to Annex VI of MARPOL V78 and the VEV VEV VEV VEV VEV VEV VEV VEV VEV VE	14.3 Transport hazard class(es)	-		-	-	_	
Additional Information	14.4 Packing group			-	-	_	
14.6 Special precautions for user oils         14.7 Transport in bulk according to Annex I of MARPOL 73/78 and the IBC Code         Section 15: Regulatory Information         15.1 Safety, health and environmental regulations / legistion specific for the substance or mixture EU Regulation (EC) No. 1907/2006 (REACH)         Annex XIV – List of substances subject to authorisation Annex XIV       None of the components are listed         Substances of very high concern       None of the components are listed         Annex XVI – Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles.       Not applicable         International Lists National Inventory       Inventory name         Australia       Australian Inventory of Chemical Substances (AICS) – Yes         Canada       Domestic Substances List (NDSL) – No	14.5 Environmental hazards	No		No	No	No	
14.7 Transport in bulk according to Annex I of MARPOL 778 and the IBC Code         Section 15: Regulatory Information         15.1 Safety, health and environmental regulations / legitron specific for the substance or mixture EU Regulation (EC) No. 1907/2006 (REACH)         Annex XIV - List of substances subject to authorisation Annex XIV - Sestrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles.       None of the components are listed         International Lists National Inventory       Inventory name         Australia       Australian Inventory of Chemical Substances (AICS) – Yes         Canada       Domestic Substances List (NDSL) – No	Additional Information	_		-	-	-	
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Australia     Australian Inventory of Chemical Substances (AICS) – Yes       Canada     Domestic Substances List (DSL) – Yes       Non-Domestic Substances List (NDSL) – No	on the market and use of certain danger	Not applicable					
Canada Domestic Substances List (DSL) – Yes Non-Domestic Substances List (NDSL) – No	International Lists National Inventory Inventory name						
Canada Non-Domestic Substances List (NDSL) – No	Australia		Australian I	nventory of Chemical Substanc	es (AICS) – Yes		
	Canada	anada			)		
	China						







	European Inventory of Existing Commercial Chemical Substances (EINECS) – Yes			
Europe	European List of Notified Chemical Substances (ELINCS) – No			
Japan	Inventory of Existing and New Chemical Substances (ENCS) – Yes			
Korea	Existing Chemicals List (ECL) – Yes			
New Zealand	New Zealand Inventory – Yes			
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS) – Yes			
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory – Yes			
	oly with the inventory requirements administered by the governing country(s) uct are not listed or exempt from listing on the inventory administered by the governing country(s).			
Section 16: Other Information				
Revision comments				
Legend to abbreviations				
ADR	European agreement concerning the international carriage of dangerous good by road.			
RID	Regulations agreement concerning the international carriage of dangerous good by rail.			
IMDG Code	International Maritime Dangerous Goods Code.			
ICAO	International Civil Aviation Organization.			
IATA	International Air Transport Association.			
GHS	Globally Harmonized System of Classification and Labeling of Chemicals.			
CLP	Classification, Labelling and Packaging Regulation [Regulation (EC) No.1272/2008].			
SCBA	Self-Contained Breathing Apparatus.			
REACH	Registration, Evaluation, Authorization and Restriction of Chemicals Regulation [Regulation (EC) No. 1907/2006].			
LC 50	Median lethal concentration.			
LD 50	Median lethal dose.			
РВТ	Persistent, Bio accumulative and Toxic.			

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Emergency / Info Phone No.	Phone: +91-22-40635600 • Fax: +91-22-40635601	
Email	info@gandharoil.com	





# **DIVYOL TRIBOROL LC2 (HD) GREASE**

Section 1: Identification of the Substance / Mixt	ure				
1.1 Product identifier					
Product name	Divyol Triborol L	Divyol Triborol LC2 (HD) Grease			
Product description	Premium Lithium	Premium Lithium Complex Grease			
Product type	Grease				
MARPOL Annex-1	****				
1.2 Identified uses					
Distribution of substance	Automotive & Inc	dustrial Grease			
Formulation & (re)packing of substance & mixtures	Automotive & Inc				
Manufacture of substance	Automotive & Inc				
Functional fluids	Automotive & Inc				
Section 2: Hazard Identification	Automotive & m				
4-Extreme	Health		1		
3-High	Flammability		1		
2-Moderate			0		
	Reactivity				
1-Slight	Special		-		
Section 3: Compostion / Information on Ingredi					
Chemical Name / Ingredients	% by wt.	Hazardous	CAS No.		
Lithium Hydroxide	0.5 - 3 80 - 90	Yes	1310-66-3		
Mineral Oil 12 HSA	5 -10	Yes No	64742-52-5, 64741-88-4, 64742-54-7, 64742-01-4 106-14-9		
НСО	2-5	No	8001-78-3		
Complexing Acid	1 - 3	No	Proprietary Mixture		
Additive Package	0 - 4	Yes	Proprietary Mixture		
Zinc Dialkyl Dithiophosphate	0 - 4	Yes	68457-79-4		
Butene, Homo Polyhmer	0 - 4	No	9003-27-4		
Product / Ingredient name	Lithium Comple>	Lithium Complex soaps from natural fatty substances			
Section 4: First Aid Measures					
Inhalation exposure	Remove to fresh	Remove to fresh air & provide oxygen, if breathing is difficult. Contact physician			
Skin contact		Remove contaminated clothing. Flush skin with water. Wash skin thoroughly with mild soap & water. If irritation occurs, call a physician.			
Swallowing or other		Do not induce vomiting. In general no treatment is necessary unless large quantities are ingested. Get medical advice.			
Eye contact	Rinse continuous	Rinse continuously with water for several minutes. Get medical attention, if irritation persists.			
Protection first-aiders		Disconnecting electrical supply. Ensure adequate ventilation and check that a safe and breathing area is available before entry into confined spaces.			
Section 5: Fire Fighting Measures					
5.1 Extinguishing media					
Unsuitable extinguishing media		Use dry powder, foam, carbon dioxide. Do not use direct water and wet chemicals, or water on the burning product. They may spread the fire. Use foam simultaneously on the surface.			
5.2 Special hazards arising from the substance or mix	ture				
Hazards from the substance or mixture		Flammable liquids in pressurised containers may rupture and when exposed to heat, creating a highly flammable vapour cloud.			
Hazardous thermal decomposition products	particulates, gase	Incomplete combustion is likely to give rise to a complex mixture of airborne solid and liquid particulates, gases, including carbon monoxide, H <sub>2</sub> S, SO <sub>x</sub> (sulphur oxides) or sulphuric acid and unidentified organic and inorganic compounds.			
5.3 Advice for firefighters					
Special precautions for firefighters		Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.			
Special protective equipment for firefighters	(SCBA) with a ful helmets, protect	face-piece opera	ate protective equipment and self-contained breathing apparatus ated in positive pressure mode. Clothing for firefighters (including ves) conforming to European standard EN 469 will provide a basic level ts.		





6.1 Personal precautions, protective equipment and em	ergency procedures			
Keep non-involved personnel away from the area of spillage.				
For non-emergency personnel	Alert emergency personnel. Except in case of small spillage. Alert emergency personnel. Except in case of small spillages, the feasibility of any actions should always be assessed and advised, if possible, by a trained, competent person in charge of managing the emergency. Stop leak if safe to do so. Avoid direct contact with the product. Stay upwind / keep distance from source. In case of large spillages, alert occupants in downwind areas. Eliminate all ignition sources if safe to do so. Spillages of limited amounts of product, especially in the open air when vapours will be usually quickly dispersed, are dynamic situations, which will presumably limit the exposure to dangerous concentrations. Note : Recommended measures are based on the most likely spillage scenarios for this material; however, local conditions (wind, air temperature, wave / current direction and speed) may significantly influence the choice of appropriate actions.			
For emergency responders	For this reason, local experts should be consulted when necessary. Local regulations may also prescribe or limit actions to be taken. Small spillages: Normal antistatic working clothes are usually adequate. Large spillages: Full body suit of chemically resistant and thermal resistant material should be used. Work gloves providing adequate chemical resistance, specifically to aromatic hydrocarbons. Note: Gloves made of PVA are not water-resistant, and are not suitable for emergency use. Safety helmet, antistatic non-skid safety shoes or boots. Goggles and / or face shield, if splashes or contact with eyes is possible or anticipated. Respiratory Protection : A half or full-face respirator with filter(s) for organic vapours (and when applicable for H <sub>2</sub> S) a Self Contained Breathing Apparatus (SCBA) can be used according to the extent of spill and predictable amount of exposure. If the situation cannot be completely assessed, or if an oxygen deficiency is possible, only SCBA's should be used.			
6.2 Environmental precautions	Prevent product from entering sewers, rivers or other bodies of water. If necessary dike the product with dry earth, sand or similar non-combustible materials. In case of soil contamination, remove contaminated soil and treat in accordance with local regulations. In case of small spillages in closed waters (i.e. ports), contain product with floating barriers or other equipment. Collect spilled product by absorbing with specific floating absorbents. If possible, large spillages in open waters should be contained with floating barriers or other mechanical means. If this is not possible, control the spreading of the spillage, and collect the product by skimming or other suitable mechanical means. The use of dispersants should be advised by an expert, and, if required, approved by local authorities.			
6.3 Methods and material for containment and cleaning	up			
Small spill	Stop leak if without risk. Absorb spilled product with suitable non-combustible materials.			
Large spill	Large spillages may be cautiously covered with foam, if available, to limit vapour cloud formation. Do not use water jet. When inside buildings or confined spaces, ensure adequate ventilation. Transfer collected product and other contaminated materials to suitable containers for recovery or safe disposal.			
6.4 Reference to other sections	See Section 1: For emergency contact information. See Section 8: For information on appropriate personal protective equipment. See Section 13: For additional waste treatment information.			
Section 7: Handling and Storage				
7.1 Advice on general information – hygiene, storage	Obtain special instructions before use. Keep away from heat / sparks / open flames/hot surfaces. No smoking. Use and store only outdoors or in a well-ventilated area. Hazard of slipping on spilt product. Avoid release to the environment.			
7.2 Conditions for safe storage including any incompatibilities	Storage area layout, tank design, equipment and operating procedures must comply with the relevant regional, national or local legislation. Storage installations should be designed with adequate bunds in case of leaks or spills. Cleaning, inspection and maintenance of internal structure of storage tanks must be done only by properly equipped and qualified personnel as defined by national, local or company regulations. Store separately from oxidising agents. Keep only in the original container or in a suitable container for this kind of product. Keep container tightly closed and sealed until ready for use. Do not store in unlabelled containers. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Empty containers may contain harmful, flammable / combustible or explosive residue or vapours. Do not cut, grind, drill, weld, reuse or dispose of containers unless adequate precautions are taken against these hazards. Protect from sunlight.			
7.3 Specific end use(s) – Recommendations	Not available			



Density Solubility (ies)



Section 8: Exposure Controls / Personal Protect	
The list of Identified Uses in Section 1 should be consu	Ited for any available use-specific information provided in the Exposure Scenario(s).
8.1 Control parameters	
Occupational exposure limits	
Product / Ingredient name	Distillates, mixture of hydrocarbons
Exposure limits values	AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m <sup>3</sup> 8 hours. Form: mist and fume STEL: 3 mg/m <sup>3</sup> 15 minutes. Form: mist and fume [Air contaminant]. AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m <sup>3</sup> 8 hours. Form: mist and fume STEL: 3 mg/m <sup>3</sup> 15 minutes. Form: mist and fume.
Recommended monitoring procedures	If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres – Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres – Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres – General requirements for the performance of procedures for the measurement of chemical agents). Reference to national guidance documents for methods for the determination of hazardous substances will also be required.
8.2 Exposure control Appropriate engineering controls	Mechanical ventilation and local exhaust will reduce exposure via the air. Use oil resistant material in construction of handling equipment. Store under recommended conditions and if heated, temperature control equipment should be used to avoid overheating.
Individual protection measures	
Hygiene measures	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Ensure that eyewash stations and safety showers are close to the workstation location. Wash contaminated clothing before reuse.
Eye / face protection	Recommended: Safety glasses with side shields.
Skin protection	
Hand protection	4 – 8 hours (breakthrough time): nitrile rubber.
Body protection	Wear protective clothing if there is a risk of skin contact. Change contaminated clothes at the end of working shift.
Other skin protection	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary.
Environmental exposure control	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.
Section 9: Physical and Chemical Properties	
Appearance	Clear
Physical state	Smooth, Homogenous & Tacky
Colour	Amber
Odor	Petroleum odor
Odour threshold	Not available
Dropping point	>270°C (ASTM D-2265)
Flash point	230°C (MINERAL OIL)
Evaporation rate	Not available
Flammability (solid, gas)	Not available
Flammability limits in air (lower), % by volume	Not available
hammability limits in all (lower), % by volume	
Flammability limits in air (upper), % by volume	Not available

Not volatile

0.87 - 0.9 Kg/L





Solubility (water)		Insoluble in wa	ter			
Partition coefficient (n-octanol/water)		Not available				
	· · · · · · · · · · · · · · · · · · ·		No data			
		Not available				
Worked Penetration at 25°C		265- 295 (ASTM	1 D 217)			
Explosive properties		No data				
Oxidising properties		No data				
DMSO extractable compounds for according to IP346	r base oil substance(s)	Not available <3 %				
Section 10: Stability and Rea	ctivity	13 /0				
10.1 Reactivity	·····,	No specific test	data related to reactivity avail	able for this product or its ingr	edients.	
10.2 Chemical stability			ormal conditions	<u> </u>		
10.3 Possibility of hazardous rea	ctions		conditions of storage and use, l	hazardous reactions will not o	ccur. Oxidising agent.	
10.4 Conditions to avoid			n extreme heat and oxidising a			
10.5 Incompatible materials		Incomplete con	mbustion is likely to give rise to uses, including carbon monoxic	a complex mixture of airborn		
10.6 Hazardous decomposition	products		ganic and inorganic compound		suprune acid and	
SECTION 11: Toxicological In						
11.1 Information on toxicologica	al effects					
Acute toxicity						
Product / ingredient name	Result		Species	Dose	Exposure	
	LC 50 Inhalation due	sts and mists	Rat	>2.18mg/l	4 hours	
Distillate (Petroleum), hydro treated heavy paraffinic	LD 50 Derr	nal	Rabbit	> 5000 mg/kg	-	
treated neavy paraminic	LD 50 Ora	al	Rat	>15000 mg/kg	-	
Irritation / corrosion						
Skin						
Eye		No known significant effects or critical hazards.				
Respiratory						
Sensation						
Skin						
Respiratory		No known significant effects or critical hazards.				
Mutagenicity		No data available to indicate product or any components present greater than 0.1 % are multigene or genotoxic.				
Carcinogenicity		The base oil(s) in this product is based on an severely hydrotreated distillate.				
Reproductive toxicity The product sho		product should not be regarded as a carcinogen. ains no ingredient listed as toxic to reproduction.				
Specific target organ toxicity – sin	ale exposure	Contains no Ing	greaterit listed as toxic to repro			
Specific target organ toxicity – rep		Not classified				
Aspiration hazard	searce exposure	Aspiration hazard – Category 1				
Aspiration nazard Information on likely routes of exposure		Not available				
Potential acute health effects	JUJUIC					
Eye contact		Eye contact may cause redness and transient pain.				
Inhalation			on of oil mist or vapours at elevated temperatures may cause respiratory irritation.			
Skin contact			No known significant effects or critical hazards.			
Ingestion		-		3.		
Potential chronic health effects		may be latal if s	swallowed and enters airways.			
		No known sizzi	ificant offorts or suitical barrad			
General		No known significant effects or critical hazards.				
Carcinogenicity		The base oil(s) in this product is based on an severely hydrotreated distillate. The product should not be regarded as a carcinogen.				







Mutagenicity Teratogenicity					
		No known s	significant effects or critical haz	ards.	
Product / ingredient name					
Fertility effects		NI	1		
Other information Specific hazard		Not availab	le		
Section 12: Ecological Information	1				
12.1 Toxicity			ed to be harmful to aquatic org	anisms.	
12.2 Persistence and degradability			ntly biodegradable.		
12.3 Bioaccumulative potential				nt because of the low water solu	ibility of this product.
12.4 Mobility in soil			ered mobile.		
12.5 Results of PBT & vPvB assessment		Not applica			
12.6 Other adverse effects			n water. Spills may form a film or nsfer could also be impaired.	n water surfaces causing physica	al damage to organisms.
Section 13: Disposal Consideration	15				
The information in this section contains information provided in the Exposure Sc		d guidance. T	he list of Identified Uses in Sect	ion 1 should be consulted for ar	ny available use-specific
Product Methods of disposal		feasible and authorisatio or waste su qualified w	d recommended. This substance ons, relevant contamination lim bstance (not directly recyclable	vant contamination), recycling of e can be burned or incinerated, its, safety regulations and air qu ): Disposal can be carried out di on may identify a specific organ ery or disposal	subject to national/local iality legislation. Contaminated rectly, or by delivery to
Hazardous waste	Hazardous waste				
European waste catalogue (EWC) Waste Code 13 03 07*		Waste designation.			
Packaging		Mineral-ba	sed non-chlorinated insulating	and heat transmission oils.	
Methods of disposal		The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.			
Section 14: Transport Information					
International transport regulations					
	ADR / R	ID	ADN	IMO / IMDG Classification	ICAO / IATA Classification
14.1 UN number	Not regul	ated	Not regulated	Not regulated	Not regulated
14.2 UN proper shipping name	-		_	-	-
14.3 Transport hazard class(es)	-		_	-	-
14.4 Packing group	-		-	-	-
14.5 Environmental hazards	No		No	No	No
Additional Information	_		_	_	_
14.6 Special precautions for user oils	rautions for user oils			·	
14.7 Transport in bulk according to An	nex Lof MARPOL	73/78 and th	e IBC Code		
Section 15: Regulatory Informatio		c,, o ana th			
15.1 Safety, health and environmental		slation speci	fic for the substance or mixture	e FU Regulation (FC) No. 1907/	2006 (REACH)
Annex XIV – List of substances subject to authorisation Annex XIV Substances of very high concern		None of the components are listed			
Annex XVII – Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles.		Not applicable			
International Lists National Inventory		Inventory name			
Australia		Australian Inventory of Chemical Substances (AICS) – Yes			
Canada		Domestic Substances List (DSL) – Yes Non-Domestic Substances List (NDSL) – No			
China					
China	Inventory of Existing Chemical Substances in China (IECSC) – Yes				







	European Inventory of Existing Commercial Chemical Substances (EINECS) – Yes		
Europe	European List of Notified Chemical Substances (ELINCS) – No		
Japan	Inventory of Existing and New Chemical Substances (ENCS) – Yes		
Korea	Existing Chemicals List (ECL) – Yes		
New Zealand	New Zealand Inventory – Yes		
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS) – Yes		
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory – Yes		
	oly with the inventory requirements administered by the governing country(s) uct are not listed or exempt from listing on the inventory administered by the governing country(s).		
Section 16: Other Information			
Revision comments			
Legend to abbreviations			
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SCBA	Self-Contained Breathing Apparatus.		
REACH	Registration, Evaluation, Authorization and Restriction of Chemicals Regulation [Regulation (EC) No. 1907/2006].		
LC 50	Median lethal concentration.		
LD 50	Median lethal dose.		
PBT	Persistent, Bio accumulative and Toxic.		

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Emergency / Info Phone No.	Phone: +91-22-40635600 • Fax: +91-22-40635601	
Email	info@gandharoil.com	





# **DIVYOL TRIBOROL LC 3 (HD) GREASE**

Section 1: Identification of the Substance / Mixt	ure			
1.1 Product identifier				
Product name	Divvol Triborol L	Divyol Triborol LC3 (HD) Grease		
Product description		n Complex Grease	1	
Product type	Grease			
MARPOL Annex-1	****			
1.2 Identified uses				
Distribution of substance	Automotive & Inc	dustrial Crosso		
Formulation & (re)packing of substance & mixtures	Automotive & Inc			
Manufacture of substance	Automotive & Inc			
Functional fluids	Automotive & Inc	dustrial Grease		
Section 2: Hazard Identification				
4-Extreme	Health		1	
3-High	Flammability		1	
2-Moderate	Reactivity		0	
1-Slight	Special		-	
Section 3: Compostion / Information on Ingredi	ents			
Chemical Name / Ingredients	% by wt.	Hazardous	CAS No.	
Lithium Hydroxide	0.5 - 3	Yes	1310-66-3	
Mineral Oil	80 - 90	Yes	64742-52-5, 64741-88-4, 64742-54-7, 64742-01-4	
12 HSA	5 -10	No	106-14-9	
НСО	2 - 5	No	8001-78-3	
Complexing Acid	1 - 3	No	Proprietary Mixture	
Additive Package	0 - 4	Yes	Proprietary Mixture	
Zinc Dialkyl Dithiophosphate	0 - 4	Yes	68457-79-4	
Butene, Homo Polyhmer	0 - 4	No	9003-27-4	
Product / Ingredient name	Lithium Complex	soaps from natu	ral fatty substances	
Section 4: First Aid Measures				
Inhalation exposure	Remove to fresh	Remove to fresh air & provide oxygen, if breathing is difficult. Contact physician		
Skin contact		Remove contaminated clothing. Flush skin with water. Wash skin thoroughly with mild soap & water. If irritation occurs, call a physician.		
Swallowing or other		Do not induce vomiting. In general no treatment is necessary unless large quantities are ingested. Get medical advice.		
Eye contact	Rinse continuous	Rinse continuously with water for several minutes. Get medical attention, if irritation persists.		
Protection first-aiders	5	Disconnecting electrical supply. Ensure adequate ventilation and check that a safe and breathing area is available before entry into confined spaces.		
Section 5: Fire Fighting Measures				
5.1 Extinguishing media				
Unsuitable extinguishing media		Use dry powder, foam, carbon dioxide. Do not use direct water and wet chemicals, or water on the burning product. They may spread the fire. Use foam simultaneously on the surface.		
5.2 Special hazards arising from the substance or mixture				
Hazards from the substance or mixture		Flammable liquids in pressurised containers may rupture and when exposed to heat, creating a highly flammable vapour cloud.		
Hazardous thermal decomposition products	particulates, gase	Incomplete combustion is likely to give rise to a complex mixture of airborne solid and liquid particulates, gases, including carbon monoxide, H <sub>2</sub> S, SO <sub>x</sub> (sulphur oxides) or sulphuric acid and unidentified organic and inorganic compounds.		
5.3 Advice for firefighters				
Special precautions for firefighters			oving all persons from the vicinity of the incident if there is a fire. No / personal risk or without suitable training.	
Special protective equipment for firefighters	(SCBA) with a full helmets, protecti	l face- piece opera	ate protective equipment and self-contained breathing apparatus ated in positive pressure mode. Clothing for firefighters (including ves) conforming to European standard EN 469 will provide a basic level ts.	





Resp. non-involved personnel away from the area of spillage.         Resp. non-involved personnel away from the area of spillage, the fashibility of any actions shull always be arsessed and adviced. If possible by a trained, compotent person in charge of managing the meregone, Stope kir fashe 1 do 6 a. Nod direct concurs with the product. Stay wymid / keep distance from source. In case of farge spillages, aler occupants in downid areas.           For non-emergency personnel.         Eleminate all injustice using injustice and the one Spillage of limited anounts of product, especially in the open aris when vapours will be usually quickly dispersed, are dynamic situations, which will presumably limit the copparate to dangerous concentrations.           Note:         Recommended messures are based on the most likely spillage scenarios of this materia bowever, buccal conditions of long darge darget be and the spillage.           For emergency responders         Por this reason, folding adequate to consulted when necessary. Local regulations may also prescribe or limit actions to be taken.           For emergency responders         Por emergency responders are usually adequate.           Large spillages. Full body usi of chemical restance, and thermal restance.           For emergency responders         Prevert product from sometring severs, fives or other to dets of yourt in decessary. ECRA or on constant whe severs of spillade for the systep sole of and the severe of spillade for the systep.           For emergency responders         Sole (Berk f without risk. Absorb Spille product by absorbing and equate conconsom the systep.           La	6.1 Personal precautions, protective equipment and emo	ergency procedures			
Alert emergency personnel: Except in case of small spillages, the exception in charge of mansing the emergency. Stop leak if safe to do so. Avoid direct contact with the poduct. Stay upwind / keep distance from source. In case of arges gallages, elart coursats in downwind areas. Note: Recommended measures are abased on the most likely spillage scenarios for this material; however, inter the exposure to dangerous concentration. Note: Recommended measures are abased on the most likely spillage scenarios for this material; however, the choice of appropriate actions. The choice of appropriate actions.For nemergency respondersFor this reason, local resports of the struct and the net struct and the net point of the choice of appropriate actions. The choice of appropriate actions.For nemergency respondersFor this reason, local resports of the struct and and end struct and appropriate action and speed in my significant in the appropriate action and speed in my si					
For this reason, local experts should be consulted when necessary. Local regulations may also prescribe or limit actions to be taken.         Small spillages: Normal antistatic working clothes are usually adequate.         Large spillages: Normal antistatic working clothes are usually adequate.         For emergency responders         Note: Gloves made of PVA are not water-resistant, and erns stubble for emergency use. Safety helmet, Note: Gloves made of PVA are not water-resistant, and are not stubble for emergency use. Safety helmet, antistatic morskid safety blobes or boots. Coggles and / or face shield, if spialses or contact with eyes is possible or anticipated.         Respiratory Protection: A half of full-face respirator with filter(s) for organic vapours (and when applicable for H,5) a Self Contained Breathing Appartatus (SCBA) can be used according to the extent of spill and predictable amount of exposure. If the situation cannot be completely assessed, or if an oxygen deficiency is possible, only SCBA's should be used.         6.2 Environmental precautions       Prevent product from entring severs, rivers or other bodies of water. If necessary dike the product with dy earth, sand or similar non-combustible materials. In case of soil contamination, remove contaminated soil and treat na accordance with local regulations.         6.3 Environmental precautions       Stop leak if without risk. Absorb spilled product by absorbing with specific floating absorbents. In case of small spill         5.4 Environmental precautions       Stop leak if without risk. Absorb spilled product with spillage, and collect the product by skinning or other spillage. Spillage spillage spillage spillage spillage spillage spinges and spillage in open waters should be	For non-emergency personnel	Alert emergency personnel. Except in case of small spillages, the feasibility of any actions should always be assessed and advised, if possible, by a trained, competent person in charge of managing the emergency. Stop leak if safe to do so. Avoid direct contact with the product. Stay upwind / keep distance from source. In case of large spillages, alert occupants in downwind areas. Eliminate all ignition sources if safe to do so. Spillages of limited amounts of product, especially in the open air when vapours will be usually quickly dispersed, are dynamic situations, which will presumably limit the exposure to dangerous concentrations. Note : Recommended measures are based on the most likely spillage scenarios for this material; however, local conditions (wind, air temperature, wave / current direction and speed) may significantly influence			
6.2 Environmental precautionswith dry earth, sand or similar non-combustible materials. In case of soil contamination, remove contaminated soil and treat in accordance with local regulations. In case of small spillages in closed waters (ile. ports), contain product with floating barriers or other equipment. Collect spilled product by absorbing with specific floating absorbents. If possible, loarer spillages in open waters should be contained with floating barriers or other mechanical means. If this is not possible, control the spreading of the spillage, and collect the product by skinming or other suitable mechanical means. The use of dispersants should be advised by an expert, and, if required. Paproved by local authorities.6.3 Methods and material for containment and clearurStop leak if without risk. Absorb spilled product with suitable non-combustible materials. It are spillages my be cautiously covered with floating the ventilation. Transfer collector use water jet. When inside buildings or confined spaces, source adequate ventilation. Transfer collector is ease Section 1: For emergency contact information. See Section 1: For additional waste treatment information. See Section 1: For additional waste treatment information. See Section 1: For additional waste treatment information. See Section 1: For additional uses for ency on the addition of spaces, and solut addition of properties equipment. See Section 1: For additional waste treatment information. See Section 1: For additional waste treatment information. See Section 1: For additional waste treatment information. See Section 1: For emergency contact were spaces of additional solut additional waste on a well-ventilated area. Hazard of slipping on spill product. Avoi	For emergency responders	or limit actions to be taken. Small spillages: Normal antistatic working clothes are usually adequate. Large spillages: Full body suit of chemically resistant and thermal resistant material should be used. Work gloves providing adequate chemical resistance, specifically to aromatic hydrocarbons. Note: Gloves made of PVA are not water-resistant, and are not suitable for emergency use. Safety helmet, antistatic non-skid safety shoes or boots. Goggles and / or face shield, if splashes or contact with eyes is possible or anticipated. Respiratory Protection : A half or full-face respirator with filter(s) for organic vapours (and when applicable for H <sub>2</sub> S) a Self Contained Breathing Apparatus (SCBA) can be used according to the extent of spill and predictable amount of exposure. If the situation cannot be completely assessed, or if an oxygen deficiency is possible, only SCBA's should be used.			
Small spillStop leak if without risk. Absorb spilled product with suitable non-combustible materials.Large spillLarge spillages may be cautiously covered with foam, if available, to limit vapour cloud formation. Do not use water jet. When inside buildings or confined spaces, ensure adequate ventilation. Transfer collected product and other contaminated materials to suitable containers for recovery or safe disposal.6.4 Reference to other sectionsSee Section 1: For emergency contact information. See Section 13: For additional waste treatment information.Section 7: Handling and StorageObtain special instructions before use. Keep away from heat / sparks / open flames/hot surfaces. No smoking. Use and store only outdoors or in a well-ventilated area. Hazard of slipping on spilt product. Avoid release to the environment.7.1 Advice on general information – hygiene, storage incompatibilitiesObtain special instructions before use. Keep away from heat / sparks / open flames/hot surfaces. No smoking. Use and store only outdoors or in a well-ventilated area. Hazard of slipping on spilt product. Avoid release to the environment.7.2 Conditions for safe storage including any incompatibilitiesStorge area layout, tank design, equipment and operating procedures must comply with the relevant regional, national or local legislation. Storage installations should be designed with adequate bunds in case of leaks or spills. Cleaning, inspection and maintenance of internal structure of storage tanks must be done only by properly equipped and qualified personnel as defined by national, local or company regulations. Store separately from oxidising agents. Keep only in the original container or in a suitable container for this kind of product. Keep container tightly closed and sealed until ready for use. Do not store in un	6.2 Environmental precautions	with dry earth, sand or similar non-combustible materials. In case of soil contamination, remove contaminated soil and treat in accordance with local regulations. In case of small spillages in closed waters (i.e. ports), contain product with floating barriers or other equipment. Collect spilled product by absorbing with specific floating absorbents. If possible, large spillages in open waters should be contained with floating barriers or other mechanical means. If this is not possible, control the spreading of the spillage, and collect the product by skimming or other suitable mechanical means. The use of dispersants should be advised by an expert, and, if			
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7.1 Advice on general information - hygiene, storageObtain special instructions before use. Keep away from heat / sparks / open flames/hot surfaces. No smoking. Use and store only outdoors or in a well-ventilated area. Hazard of slipping on spilt product. Avoid release to the environment.7.2 Conditions for safe storage including any incompatibilitiesStorage area layout, tank design, equipment and operating procedures must comply with the relevant regional, national or local legislation. Storage installations should be designed with adequate bunds in case of leaks or spills. Cleaning, inspection and maintenance of internal structure of storage tanks must be done only by properly equipped and qualified personnel as defined by national, local or company regulations. Store separately from oxidising agents. Keep only in the original container or in a suitable container for this kind of product. Keep container tightly closed and sealed until ready for use. Do not store in unlabelled containers. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Empty containers may contain harmful, flammable / combustible or explosive residue or vapours. Do not cut, grind, drill, weld, reuse or dispose of containers unless adequate precautions are taken against these hazards.	6.4 Reference to other sections	See Section 8: For information on appropriate personal protective equipment.			
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		regional, national or local legislation. Storage installations should be designed with adequate bunds in			
7.3 Specific end use(s) - Recommendations     Not available		regulations. Store separately from oxidising agents. Keep only in the original container or in a suitable container for this kind of product. Keep container tightly closed and sealed until ready for use. Do not store in unlabelled containers. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Empty containers may contain harmful, flammable / combustible or explosive residue or vapours. Do not cut, grind, drill, weld, reuse or dispose of containers unless adequate precautions are taken against these hazards.			



Density Solubility (ies)



Section 8: Exposure Controls / Personal Protecti	on
The list of Identified Uses in Section 1 should be consult	ed for any available use-specific information provided in the Exposure Scenario(s).
8.1 Control parameters	
Occupational exposure limits	
Product / Ingredient name	Distillates, mixture of hydrocarbons
Exposure limits values	AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m <sup>3</sup> 8 hours. Form: mist and fume STEL: 3 mg/m <sup>3</sup> 15 minutes. Form: mist and fume [Air contaminant]. AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m <sup>3</sup> 8 hours. Form: mist and fume STEL: 3 mg/m <sup>3</sup> 15 minutes. Form: mist and fume.
Recommended monitoring procedures	If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres – Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres – Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres – General requirements for the performance of procedures for the measurement of chemical agents). Reference to national guidance documents for methods for the determination of hazardous substances will also be required.
8.2 Exposure control Appropriate engineering controls	Mechanical ventilation and local exhaust will reduce exposure via the air. Use oil resistant material in construction of handling equipment. Store under recommended conditions and if heated, temperature control equipment should be used to avoid overheating.
Individual protection measures	
Hygiene measures	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Ensure that eyewash stations and safety showers are close to the workstation location. Wash contaminated clothing before reuse.
Eye / face protection	Recommended: Safety glasses with side shields.
Skin protection	
Hand protection	4 – 8 hours (breakthrough time): nitrile rubber.
Body protection	Wear protective clothing if there is a risk of skin contact. Change contaminated clothes at the end of working shift.
Other skin protection	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary.
Environmental exposure control	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.
Section 9: Physical and Chemical Properties	
Appearance	Clear
Physical state	Smooth, Homogenous & Tacky
Colour	Amber
Odor	Petroleum odor
	Not available
Odour threshold	
Odour threshold Dropping point	>270°C (ASTM D-2265)
	>270°C (ASTM D-2265) > 230°C (MINERAL OIL)
Dropping point	
Dropping point Flash point	> 230°C (MINERAL OIL)
Dropping point Flash point Evaporation rate	> 230°C (MINERAL OIL)       Not available



Not volatile





solubility (Hutch)		Insoluble in wat	ter			
Solubility (water) Partition coefficient (n-octanol/water)		Not available				
Decomposition temperature		Not available				
Auto-ignition temperature		Not available				
Worked Penetration at 25°C			D 217)			
		220-250 (ASTM D 217)				
Explosive properties		No data No data				
Oxidising properties	baca ail substanco(s)					
DMSO extractable compounds for base oil substance(s) according to IP346		Not available <3 %				
Section 10: Stability and Reactivity						
10.1 Reactivity		No specific test	data related to reactivity availa	able for this product or its ingr	edients.	
10.2 Chemical stability		Stable under no	ormal conditions			
10.3 Possibility of hazardous read	ctions	Under normal c	conditions of storage and use, I	hazardous reactions will not o	ccur. Oxidising agent.	
10.4 Conditions to avoid		Keep away from	n extreme heat and oxidising a	gents.		
10.5 Incompatible materials			nbustion is likely to give rise to ses, including carbon monoxic			
10.6 Hazardous decomposition p	products		ganic and inorganic compound			
SECTION 11: Toxicological Inf	formation					
11.1 Information on toxicologica	l effects					
Acute toxicity						
Product / ingredient name	Result		Species	Dose	Exposure	
	LC 50 Inhalation dus	ts and mists	Rat	>2.18mg/l	4 hours	
Distillate (Petroleum), hydro	LD 50 Dern		Rabbit	> 5000 mg/kg	_	
treated heavy paraffinic	LD 50 Oral		Rat	>15000 mg/kg	_	
Invitation / convector						
Irritation / corrosion						
Skin						
		Nelway		_		
Eye		No known signi	ificant effects or critical hazard	S.		
Eye Respiratory		No known signi	ificant effects or critical hazard	S.		
Eye Respiratory Sensation		No known signi	ificant effects or critical hazard	S.		
Eye Respiratory Sensation Skin						
Eye Respiratory Sensation		No known signi	ificant effects or critical hazard	S.		
Eye Respiratory Sensation Skin Respiratory		No known signi	ificant effects or critical hazard le to indicate product or any c	S.	an 0.1 % are	
Eye Respiratory Sensation Skin Respiratory		No known signi No data availab multigene or ge	ificant effects or critical hazard le to indicate product or any c	s. omponents present greater th		
Eye Respiratory Sensation Skin Respiratory Mutagenicity		No known signi No data availab multigene or ge The base oil(s) i The product sho	ificant effects or critical hazard le to indicate product or any c enotoxic. n this product is based on an s ould not be regarded as a carc	s. omponents present greater th everely hydrotreated distillate inogen.		
Eye Respiratory Sensation Skin Respiratory Mutagenicity Carcinogenicity	gle exposure	No known signi No data availab multigene or ge The base oil(s) i The product she Contains no ing	ificant effects or critical hazard le to indicate product or any c enotoxic. n this product is based on an s	s. omponents present greater th everely hydrotreated distillate inogen.		
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Mutagenicity						
Teratogenicity						
Product / ingredient name		No known s	significant effects or critical haz	ards.		
Fertility effects						
Other information Specific hazard		Not availab	lo			
		NOL availab				
Section 12: Ecological Information		Not over a st				
12.1 Toxicity			ed to be harmful to aquatic org	anisms.		
12.2 Persistence and degradability			ntly biodegradable.		ubilita a fabia yaya aku at	
12.3 Bioaccumulative potential		Bioaccumulation is unlikely to be significant because of the low water solubility of this product. Not considered mobile.				
12.4 Mobility in soil						
12.5 Results of PBT & vPvB assessment		Not applica	n water. Spills may form a film or	a water surfaces causing physic	al damago to organisms	
12.6 Other adverse effects			nsfer could also be impaired.	Twater surfaces causing physics	al damage to organisms.	
Section 13: Disposal Consideration	ns					
The information in this section contains information provided in the Exposure So	generic advice and enario(s).	d guidance. T	he list of Identified Uses in Sect	ion 1 should be consulted for ar	ny available use-specific	
Product Methods of disposal		Where possible (e.g. in the absence of relevant contamination), recycling of used substance is feasible and recommended. This substance can be burned or incinerated, subject to national/local authorisations, relevant contamination limits, safety regulations and air quality legislation. Contaminated or waste substance (not directly recyclable): Disposal can be carried out directly, or by delivery to qualified waste handlers. National legislation may identify a specific organisation, and/or prescribe composition limits and methods for recovery or disposal				
Hazardous waste		Yes				
European waste catalogue (EWC) Waste	Code 13 03 07*	Waste desi	gnation.			
Packaging		Mineral-ba	sed non-chlorinated insulating	and heat transmission oils.		
Methods of disposal			The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.			
Section 14: Transport Information		-				
International transport regulations						
	ADR / R	ID	ADN	IMO / IMDG Classification	ICAO / IATA Classification	
14.1 UN number	Not regul	ated	Not regulated	Not regulated	Not regulated	
14.2 UN proper shipping name	-		_	_	_	
14.3 Transport hazard class(es)	-		_	-	-	
14.4 Packing group	_		_	_	_	
14.5 Environmental hazards	No		No	No	No	
Additional Information	_		-	_	-	
14.6 Special precautions for user oils						
14.7 Transport in bulk according to An		73/78 and th	e IBC Code			
Section 15: Regulatory Informatio		Si i o anu th				
		dation energy	fic for the substance or misture	ELL Regulation (EC) No. 1007/		
15.1 Safety, health and environmental regulations / legi Annex XIV – List of substances subject to authorisation Annex XIV Substances of very high concern		slation specific for the substance or mixture EU Regulation (EC) No. 1907/2006 (REACH) None of the components are listed				
Annex XVII – Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles.		Not applicable				
International Lists National Inventory		Inventory name				
Australia		Australian Inventory of Chemical Substances (AICS) – Yes				
Canada		Domestic Substances List (DSL) – Yes				
China		Non-Domestic Substances List (NDSL) – No				
China		Inventory of Existing Chemical Substances in China (IECSC) – Yes				





	European Inventory of Existing Commercial Chemical Substances (EINECS) – Yes				
Europe	European List of Notified Chemical Substances (ELINCS) – No				
Japan	Inventory of Existing and New Chemical Substances (ENCS) – Yes				
Korea	Existing Chemicals List (ECL) – Yes				
New Zealand	New Zealand Inventory – Yes				
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS) – Yes				
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory – Yes				
	oly with the inventory requirements administered by the governing country(s) uct are not listed or exempt from listing on the inventory administered by the governing country(s).				
Section 16: Other Information					
Revision comments					
Legend to abbreviations					
ADR	European agreement concerning the international carriage of dangerous good by road.				
RID	Regulations agreement concerning the international carriage of dangerous good by rail.				
IMDG Code	International Maritime Dangerous Goods Code.				
ICAO	International Civil Aviation Organization.				
IATA	International Air Transport Association.				
GHS	Globally Harmonized System of Classification and Labeling of Chemicals.				
CLP	Classification, Labelling and Packaging Regulation [Regulation (EC) No.1272/2008].				
SCBA	Self-Contained Breathing Apparatus.				
REACH	Registration, Evaluation, Authorization and Restriction of Chemicals Regulation [Regulation (EC) No. 1907/2006].				
LC 50	Median lethal concentration.				
LD 50	Median lethal dose.				
PBT	Persistent, Bio accumulative and Toxic.				

GANDHAR OIL REFINERY (INDIA) LTD.			
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Emergency / Info Phone No.	Phone: +91-22-40635600 • Fax: +91-22-40635601		
Email	info@gandharoil.com		





### **DIVYOL TRIBOROL PD 0 GREASE**

Section 1: Identification of the Substance / Mixte	Iro				
1.1 Product identifier					
Product name	Divvol Triborol Pl	DOGrazsa			
Product description	Divyol Triborol PD 0 Grease High Performance Lithium Base Grease		roace		
Product type	Grease	5			
MARPOL Annex-1	****				
1.2 Identified uses					
Distribution of substance	Automotive & Inc	dustrial Groaco			
Formulation & (re)packing of substance & mixtures Manufacture of substance		Automotive & Industrial Grease			
Functional fluids		Automotive & Industrial Grease Automotive & Industrial Grease			
Section 2: Hazard Identification	Automotive & mo	uustriai Grease			
4-Extreme	Health		1		
3-High					
2-Moderate		Flammability 1			
1-Slight	Special	Reactivity 0 Special –			
Section 3: Compostion / Information on Ingredie					
Chemical Name / Ingredients	% by wt.	Hazardous		CAS No.	
Lithium Hydroxide	0.2 - 1	Yes		1310-66-3	
Mineral Oil	70 - 80	Yes		64741-88-4, 64742-54-7, 64742-01-4, 64742-52-5	
12 HSA	1-5	Yes		106-14-9	
НСО	0 - 1	No		8001-78-3	
		Yes		Proprietary Mixture	
Additive Package	1 - 5	No		13397-26-7	
Zinc Dialkyl Dithiophosphate	1 - 4			68457-79-4	
Butene, Homo Polyhmer	0 - 2	No		9003-27-4	
Vegetable Oil Eater	5 -20	No		68412-26-0	
Molybdenum, bis (Dibutylcarbamodithioato) diMu Oxodioxodi - Sulfurized	0 - 2	0 - 2 Yes			
Thiadiazole derivative	0 - 1	-		13539-13-4	
Product / Ingredient name	Lithium soaps from natural fatty substances				
Section 4: First Aid Measures					
Inhalation exposure	Remove to fresh	air & provide oxy	gen,	if breathing is difficult. Contact physician	
Skin contact		Remove contaminated clothing. Flush skin with water. Wash skin thoroughly with mild soap & wate If irritation occurs, call a physician.		skin with water. Wash skin thoroughly with mild soap & water.	
Swallowing or other		Do not induce vomiting. In general no treatment is necessary unless large quantities are ingested. Get medical advice.		treatment is necessary unless large quantities are ingested.	
Eye contact	Rinse continuous	Rinse continuously with water for several minutes. Get medical attention, if irritation persists.			
Protection first-aiders	Disconnecting electrical supply. Ensure adequate ventilation and check that a safe and breathing area is available before entry into confined spaces.				
Section 5: Fire Fighting Measures					
5.1 Extinguishing media					
Unsuitable extinguishing media				Do not use direct water and wet chemicals, or water on the fire. Use foam simultaneously on the surface.	
5.2 Special hazards arising from the substance or mixt					
Hazards from the substance or mixture	Flammable liquids in pressurised containers may rupture and when exposed to heat, creating a highl flammable vapour cloud.				
Hazardous thermal decomposition products	Incomplete combustion is likely to give rise to a complex mixture of airborne solid and liquid particulates, gases, including carbon monoxide, H <sub>2</sub> S, SO <sub>x</sub> (sulphur oxides) or sulphuric acid and unidentified organic and inorganic compounds.				
5.3 Advice for firefighters					
Special precautions for firefighters	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.				
Special protective equipment for firefighters	Firefighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face- piece operated in positive pressure mode. Clothing for firefighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.				





6.1 Personal precautions, protective equipment and em	ergency procedures
processie processie equipment and en	Keep non-involved personnel away from the area of spillage.
For non-emergency personnel	Alert emergency personnel. Except in case of small spillage. Alert emergency personnel. Except in case of small spillages, the feasibility of any actions should always be assessed and advised, if possible, by a trained, competent person in charge of managing the emergency. Stop leak if safe to do so. Avoid direct contact with the product. Stay upwind / keep distance from source. In case of large spillages, alert occupants in downwind areas. Eliminate all ignition sources if safe to do so. Spillages of limited amounts of product, especially in the open air when vapours will be usually quickly dispersed, are dynamic situations, which will presumably limit the exposure to dangerous concentrations. Note : Recommended measures are based on the most likely spillage scenarios for this material; however, local conditions (wind, air temperature, wave / current direction and speed) may significantly influence the choice of appropriate actions.
For emergency responders	For this reason, local experts should be consulted when necessary. Local regulations may also prescribe or limit actions to be taken. Small spillages: Normal antistatic working clothes are usually adequate. Large spillages: Full body suit of chemically resistant and thermal resistant material should be used. Work gloves providing adequate chemical resistance, specifically to aromatic hydrocarbons. Note: Gloves made of PVA are not water-resistant, and are not suitable for emergency use. Safety helmet, antistatic non-skid safety shoes or boots. Goggles and / or face shield, if splashes or contact with eyes is possible or anticipated. Respiratory Protection : A half or full-face respirator with filter(s) for organic vapours (and when applicable for H <sub>2</sub> S) a Self Contained Breathing Apparatus (SCBA) can be used according to the extent of spill and predictable amount of exposure. If the situation cannot be completely assessed, or if an oxygen deficiency is possible, only SCBA's should be used.
6.2 Environmental precautions	Prevent product from entering sewers, rivers or other bodies of water. If necessary dike the product with dry earth, sand or similar non-combustible materials. In case of soil contamination, remove contaminated soil and treat in accordance with local regulations. In case of small spillages in closed waters (i.e. ports), contain product with floating barriers or other equipment. Collect spilled product by absorbing with specific floating absorbents. If possible, large spillages in open waters should be contained with floating barriers or other mechanical means. If this is not possible, control the spreading of the spillage, and collect the product by skimming or other suitable mechanical means. The use of dispersants should be advised by an expert, and, if required, approved by local authorities.
6.3 Methods and material for containment and cleaning	l up
Small spill	Stop leak if without risk. Absorb spilled product with suitable non-combustible materials.
Large spill	Large spillages may be cautiously covered with foam, if available, to limit vapour cloud formation. Do not use water jet. When inside buildings or confined spaces, ensure adequate ventilation. Transfer collected product and other contaminated materials to suitable containers for recovery or safe disposal.
6.4 Reference to other sections	See Section 1: For emergency contact information. See Section 8: For information on appropriate personal protective equipment. See Section 13: For additional waste treatment information.
Section 7: Handling and Storage	
7.1 Advice on general information – hygiene, storage	Obtain special instructions before use. Keep away from heat / sparks / open flames/hot surfaces. No smoking. Use and store only outdoors or in a well-ventilated area. Hazard of slipping on spilt product. Avoid release to the environment.
7.2 Conditions for safe storage including any	Storage area layout, tank design, equipment and operating procedures must comply with the relevant regional, national or local legislation. Storage installations should be designed with adequate bunds in case of leaks or spills. Cleaning, inspection and maintenance of internal structure of storage tanks must be done only by properly equipped and qualified personnel as defined by national, local or company regulations. Store separately from oxidising agents. Keep only in the original container or in a suitable container for this kind of product. Keep container tightly closed and sealed until ready for use. Do not store in unlabelled containers. Containers that have
incompatibilities	been opened must be carefully resealed and kept upright to prevent leakage. Empty containers may contain harmful, flammable / combustible or explosive residue or vapours. Do not cut, grind, drill, weld, reuse or dispose of containers unless adequate precautions are taken against these hazards. Protect from sunlight.



Density Solubility (ies)



Section 8: Exposure Controls / Personal Protection	ulted for any available use-specific information provided in the Exposure Scenario(s).	
8.1 Control parameters	uned for any available use-specific information provided in the exposure scenario(s).	
Occupational exposure limits		
Product / Ingredient name	Distillates, mixture of hydrocarbons	
rioduct/ ingredient name	AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m <sup>3</sup> 8 hours. Form: mist and fume STEL: 3 mg/m <sup>3</sup> 15 minutes.	
Exposure limits values	Form: mist and fume [Air contaminant]. AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m <sup>3</sup> 8 hours. Form: mist and fume STEL: 3 mg/m <sup>3</sup> 15 minutes. Form: mist and fume.	
Recommended monitoring procedures	If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres – Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres – Guide for the application and use of procedures for the assessment of exposure to chemical agents for the performance of procedures for the measurement of chemical agents). Reference to national guidance documents for methods for the determination of hazardous substances will also be required.	
8.2 Exposure control Appropriate engineering controls	Mechanical ventilation and local exhaust will reduce exposure via the air. Use oil resistant material in construction of handling equipment. Store under recommended conditions and if heated, temperature control equipment should be used to avoid overheating.	
Individual protection measures		
Hygiene measures	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Ensure that eyewash stations and safety showers are close to the workstation location. Wash contaminated clothing before reuse.	
Eye / face protection	Recommended: Safety glasses with side shields.	
Skin protection		
Hand protection	4 – 8 hours (breakthrough time): nitrile rubber.	
Body protection	Wear protective clothing if there is a risk of skin contact. Change contaminated clothes at the end of working shift.	
Other skin protection	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.	
Respiratory protection	Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary.	
Environmental exposure control	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptabl levels.	
Section 9: Physical and Chemical Properties		
Appearance	Clear	
Physical state	Semi Fluid & Smooth	
Colour	Orange Yellowish	
Odor	Petroleum odor	
Odour threshold	Not available	
Dropping point	>180°C (ASTM D-2265)	
Flash point	>180°C (MINERAL OIL)	
Evaporation rate	Not available	
Flammability (solid, gas)	Not available	
Flammability limits in air (lower), % by volume	Not available	
Flammability limits in air (upper), % by volume	Not available	
Vapour pressure	Not volatile	
Density Calubility (iss)		



0.87 - 0.9 Kg/L





Solubility (water)		Insoluble in wa	ter		
		Not available			
		No data			
		Not available			
Worked Penetration at 25°C		355 -385 (ASTN	1 D 217)		
Explosive properties		No data			
Oxidising properties		No data			
DMSO extractable compounds for according to IP346	r base oil substance(s)	Not available <3 %			
Section 10: Stability and Rea	ctivity				
10.1 Reactivity		No specific test	data related to reactivity availa	able for this product or its ingr	edients.
10.2 Chemical stability			ormal conditions		
10.3 Possibility of hazardous rea	ctions	Under normal o	conditions of storage and use, I	nazardous reactions will not o	ccur. Oxidising agent.
10.4 Conditions to avoid			n extreme heat and oxidising a		
10.5 Incompatible materials		Incomplete con	nbustion is likely to give rise to ses, including carbon monoxic	a complex mixture of airborn	
10.6 Hazardous decomposition	•		ganic and inorganic compound		
SECTION 11: Toxicological In	formation				
11.1 Information on toxicologica	al effects				
Acute toxicity					
Product / ingredient name	Result		Species	Dose	Exposure
	LC 50 Inhalation due	ts and mists	Rat	>2.18mg/l	4 hours
Distillate (Petroleum), hydro treated heavy paraffinic	LD 50 Derr	nal	Rabbit	> 5000 mg/kg	_
treated heavy paraminic	LD 50 Ora	al	Rat	>15000 mg/kg	-
Irritation / corrosion					
Skin					
Eye		No known significant effects or critical hazards.			
Respiratory					
Sensation					
Skin					
Respiratory		No known significant effects or critical hazards.			
Mutagenicity		No data available to indicate product or any components present greater than 0.1 % are multigene or genotoxic.			
Carcinogenicity		The base oil(s) in this product is based on an severely hydrotreated distillate.			
Reproductive toxicity		The product should not be regarded as a carcinogen. Contains no ingredient listed as toxic to reproduction.			
Specific target organ toxicity – sin	ale exposure				
Specific target organ toxicity – rep		Not classified			
Aspiration hazard		Aspiration haza	rd – Category 1		
Information on likely routes of exp	oosure	Not available			
Potential acute health effects					
Eye contact		Eye contact may cause redness and transient pain.			
Inhalation		Inhalation of oil mist or vapours at elevated temperatures may cause respiratory irritation.			
Skin contact			ificant effects or critical hazard		,
Ingestion			wallowed and enters airways.	5.	
Potential chronic health effects		may be latar II 3	manowed and enters an ways.		
General		No known sign	ificant effects or critical hazard	s	
General					The product should not be
Carcinogenicity		The base oil(s) in this product is based on an severely hydrotreated distillate. The product should not be regarded as a carcinogen.			







Mutagenicity						
Teratogenicity						
Product / ingredient name		No known s	significant effects or critical haza	ards.		
Fertility effects						
Other information Specific hazard		Not availab	lo			
•		NOT availab				
Section 12: Ecological Information		Not over a st	ad ta ha hawaful ta awatia awa			
12.1 Toxicity			Not expected to be harmful to aquatic organisms.			
12.2 Persistence and degradability			ntly biodegradable.		ubilita a fabia yana aku at	
12.3 Bioaccumulative potential		Bioaccumulation is unlikely to be significant because of the low water solubility of this product. Not considered mobile.				
12.4 Mobility in soil 12.5 Results of PBT & vPvB assessment						
12.5 Results of PBT & VPVB assessment		Not applica	water. Spills may form a film or	a water surfaces causing physic	al damago to organisms	
12.6 Other adverse effects			nsfer could also be impaired.	Twater surfaces causing physics	al damage to organisms.	
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The information in this section contains information provided in the Exposure Sc	generic advice and enario(s).	d guidance. T	he list of Identified Uses in Secti	ion 1 should be consulted for ar	ny available use-specific	
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Hazardous waste		Yes				
European waste catalogue (EWC) Waste Code 13 03 07*		Waste designation.				
Packaging		Mineral-ba	sed non-chlorinated insulating	and heat transmission oils.		
Methods of disposal		The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.				
Section 14: Transport Information						
International transport regulations						
	ADR / R	ID	ADN	IMO / IMDG Classification	ICAO / IATA Classification	
14.1 UN number	Not regul	ated	Not regulated	Not regulated	Not regulated	
14.2 UN proper shipping name	-		_	_	_	
14.3 Transport hazard class(es)	-		-	-	-	
14.4 Packing group	-		_	_	_	
14.5 Environmental hazards	No		No	No	No	
Additional Information	_		_	_	-	
14.6 Special precautions for user oils						
14.7 Transport in bulk according to An		73/78 and th	e IBC Code			
Section 15: Regulatory Informatio		Si i o anu th				
		dation energy	fic for the substance or misture	ELL Regulation (EC) No. 1007/		
Annex XIV – List of substances subject to authorisation Annex XIV – Substances subject to authorisation Annex XIV Substances of very high concern		islation specific for the substance or mixture EU Regulation (EC) No. 1907/2006 (REACH) None of the components are listed				
Annex XVII – Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles.		Not applicable				
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China	Inventory of Existing Chemical Substances in China (IECSC) – Yes					





_	European Inventory of Existing Commercial Chemical Substances (EINECS) – Yes			
Europe	European List of Notified Chemical Substances (ELINCS) – No			
Japan	Inventory of Existing and New Chemical Substances (ENCS) – Yes			
Korea	Existing Chemicals List (ECL) – Yes			
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	oly with the inventory requirements administered by the governing country(s) uct are not listed or exempt from listing on the inventory administered by the governing country(s).			
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Legend to abbreviations				
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IMDG Code	International Maritime Dangerous Goods Code.			
ICAO	International Civil Aviation Organization.			
IATA	International Air Transport Association.			
GHS	Globally Harmonized System of Classification and Labeling of Chemicals.			
CLP	Classification, Labelling and Packaging Regulation [Regulation (EC) No.1272/2008].			
SCBA	Self-Contained Breathing Apparatus.			
REACH	Registration, Evaluation, Authorization and Restriction of Chemicals Regulation [Regulation (EC) No. 1907/2006].			
LC 50	Median lethal concentration.			
LD 50	Median lethal dose.			
РВТ	Persistent, Bio accumulative and Toxic.			

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Emergency / Info Phone No.	Phone: +91-22-40635600 • Fax: +91-22-40635601			
Email	info@gandharoil.com			





### **DIVYOL TRIBOROL PD 00 GREASE**

Section 1: Identification of the Substance / Mix				
1.1 Product identifier	ture			
Product name	Divavel Triberel Pl	D 00 Groaco		
	Divyol Triborol PD 00 Grease			
Product description	High Performance Lithium Base Grease			
Product type	Grease			
MARPOL Annex-1				
1.2 Identified uses				
Distribution of substance	Automotive & Inc			
Formulation & (re)packing of substance & mixtures	Automotive & Inc			
Manufacture of substance	Automotive & Inc			
Functional fluids	Automotive & Inc	dustrial Grease		
Section 2: Hazard Identification				
4-Extreme	Health		1	
3-High	Flammability		1	
2-Moderate	Reactivity		0	
1-Slight	Special		-	
Section 3: Compostion / Information on Ingred	ients			
Chemical Name / Ingredients	% by wt.	Hazardous		CAS No.
Lithium Hydroxide	0.2 - 1	Yes		1310-66-3
Mineral Oil	70 - 80	Yes	e	54741-88-4, 64742-54-7, 64742-01-4, 64742-52-5
12 HSA	1 - 5	No		106-14-9
НСО	0 - 1	No		8001-78-3
Additive Deckerse	1 5	Yes		Proprietary Mixture
Additive Package	1 - 5	No		13397-26-7
Zinc Dialkyl Dithiophosphate	1 - 4	Yes		68457-79-4
Butene, Homo Polyhmer	0 - 2	No		9003-27-4
Vegetable Oil Eater	5 -20	No No		Proprietary Mixture 366313-30-8
Molybdenum, bis (Dibutylcarbamodithioato)	0.2			
diMu Oxodioxodi - Sulfurized	0 - 2	Yes		68412-26-0
Thiadiazole derivative	0 - 1	-		13539-13-4
Product / Ingredient name	Lithium soaps fro	om natural fatty su	lbstances	
Section 4: First Aid Measures				
Inhalation exposure	Remove to fresh	air & provide oxyg	jen, if breathi	ng is difficult. Contact physician
Skin contact		inated clothing. Fl s, call a physician.	ush skin with	water. Wash skin thoroughly with mild soap & water.
Swallowing or other	Do not induce vo Get medical advi		l no treatmen	t is necessary unless large quantities are ingested.
Eye contact	Rinse continuous	sly with water for s	several minut	es. Get medical attention, if irritation persists.
Protection first-aiders	Disconnecting el		isure adequat	e ventilation and check that a safe and breathing area is
Section 5: Fire Fighting Measures				
5.1 Extinguishing media				
Unsuitable extinguishing media		,		se direct water and wet chemicals, or water on the foam simultaneously on the surface.
5.2 Special hazards arising from the substance or mix			the fire. Ose i	
Hazards from the substance or mixture			ontainers mag	y rupture and when exposed to heat, creating a highly
Hazardous thermal decomposition products	Incomplete combustion is likely to give rise to a complex mixture of airborne solid and liquid particulates, gases, including carbon monoxide, H <sub>2</sub> S, SO <sub>x</sub> (sulphur oxides) or sulphuric acid and unidentified organic and inorganic compounds.			
5.3 Advice for firefighters	, , , , , , , , , , , , , , , , , , , ,	-		
Special precautions for firefighters				ons from the vicinity of the incident if there is a fire. No or without suitable training.
Special protective equipment for firefighters	<ul> <li>action shall be taken involving any personal risk or without suitable training.</li> <li>Firefighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face- piece operated in positive pressure mode. Clothing for firefighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.</li> </ul>			





6.1 Personal precautions, protective equipment and emergency procedures					
Keep non-involved personnel away from the area of spillage.					
For non-emergency personnel	Alert emergency personnel. Except in case of small spillages, the feasibility of any actions should always be assessed and advised, if possible, by a trained, competent person in charge of managing the emergency. Stop leak if safe to do so. Avoid direct contact with the product. Stay upwind / keep distance from source. In case of large spillages, alert occupants in downwind areas. Eliminate all ignition sources if safe to do so. Spillages of limited amounts of product, especially in the open air when vapours will be usually quickly dispersed, are dynamic situations, which will presumably limit the exposure to dangerous concentrations. Note : Recommended measures are based on the most likely spillage scenarios for this material; however, local conditions (wind, air temperature, wave / current direction and speed) may significantly influence the choice of appropriate actions.				
For emergency responders	For this reason, local experts should be consulted when necessary. Local regulations may also prescribe or limit actions to be taken. Small spillages: Normal antistatic working clothes are usually adequate. Large spillages: Full body suit of chemically resistant and thermal resistant material should be used. Work gloves providing adequate chemical resistance, specifically to aromatic hydrocarbons. Note: Gloves made of PVA are not water-resistant, and are not suitable for emergency use. Safety helmet, antistatic non-skid safety shoes or boots. Goggles and / or face shield, if splashes or contact with eyes is possible or anticipated. Respiratory Protection : A half or full-face respirator with filter(s) for organic vapours (and when applicable for H <sub>2</sub> S) a Self Contained Breathing Apparatus (SCBA) can be used according to the extent of spill and predictable amount of exposure. If the situation cannot be completely assessed, or if an oxygen deficiency is possible, only SCBA's should be used.				
6.2 Environmental precautions	Prevent product from entering sewers, rivers or other bodies of water. If necessary dike the product with dry earth, sand or similar non-combustible materials. In case of soil contamination, remove contaminated soil and treat in accordance with local regulations. In case of small spillages in closed waters (i.e. ports), contain product with floating barriers or other equipment. Collect spilled product by absorbing with specific floating absorbents. If possible, large spillages in open waters should be contained with floating barriers or other mechanical means. If this is not possible, control the spreading of the spillage, and collect the product by skimming or other suitable mechanical means. The use of dispersants should be advised by an expert, and, if required, approved by local authorities.				
6.3 Methods and material for containment and cleaning	up				
Small spill	Stop leak if without risk. Absorb spilled product with suitable non-combustible materials.				
Large spill	Large spillages may be cautiously covered with foam, if available, to limit vapour cloud formation. Do not use water jet. When inside buildings or confined spaces, ensure adequate ventilation. Transfer collected product and other contaminated materials to suitable containers for recovery or safe disposal.				
6.4 Reference to other sections	See Section 1: For emergency contact information. See Section 8: For information on appropriate personal protective equipment. See Section 13: For additional waste treatment information.				
Section 7: Handling and Storage					
7.1 Advice on general information – hygiene, storage	Obtain special instructions before use. Keep away from heat / sparks / open flames/hot surfaces. No smoking. Use and store only outdoors or in a well-ventilated area. Hazard of slipping on spilt product. Avoid release to the environment.				
7.2 Conditions for safe storage including any incompatibilities	Storage area layout, tank design, equipment and operating procedures must comply with the relevant regional, national or local legislation. Storage installations should be designed with adequate bunds in case of leaks or spills. Cleaning, inspection and maintenance of internal structure of storage tanks must be done only by properly equipped and qualified personnel as defined by national, local or company regulations. Store separately from oxidising agents. Keep only in the original container or in a suitable container for this kind of product. Keep container tightly closed and sealed until ready for use. Do not store in unlabelled containers. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Empty containers may contain harmful, flammable / combustible or explosive residue or vapours. Do not cut, grind, drill, weld, reuse or dispose of containers unless adequate precautions are taken against these hazards. Protect from sunlight.				
7.3 Specific end use(s) – Recommendations	Not available				



Density Solubility (ies)



Section 8: Exposure Controls / Personal Prote	ction
The list of Identified Uses in Section 1 should be cons	ulted for any available use-specific information provided in the Exposure Scenario(s).
8.1 Control parameters	
Occupational exposure limits	
Product / Ingredient name	Distillates, mixture of hydrocarbons
Exposure limits values	AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m <sup>3</sup> 8 hours. Form: mist and fume STEL: 3 mg/m <sup>3</sup> 15 minutes. Form: mist and fume [Air contaminant]. AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m <sup>3</sup> 8 hours. Form: mist and fume STEL: 3 mg/m <sup>3</sup> 15 minutes. Form: mist and fume.
Recommended monitoring procedures	If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres – Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres – Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres – General requirements for the performance of procedures for the measurement of chemical agents). Reference to national guidance documents for methods for the determination of hazardous substances will also be required.
8.2 Exposure control Appropriate engineering controls	Mechanical ventilation and local exhaust will reduce exposure via the air. Use oil resistant material in construction of handling equipment. Store under recommended conditions and if heated, temperature control equipment should be used to avoid overheating.
Individual protection measures	
Hygiene measures	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Ensure that eyewash stations and safety showers are close to the workstation location. Wash contaminated clothing before reuse.
Eye / face protection	Recommended: Safety glasses with side shields.
Skin protection	
Hand protection	4 – 8 hours (breakthrough time): nitrile rubber.
Body protection	Wear protective clothing if there is a risk of skin contact. Change contaminated clothes at the end of working shift.
Other skin protection	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary.
Environmental exposure control	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.
Section 9: Physical and Chemical Properties	
Appearance	Clear
Physical state	Semi Fluid & Smooth
Colour	Orange Yellowish
Odor	Petroleum odor
Odour threshold	Not available
Dropping point	>170°C (ASTM D-2265)
Flash point	>170°C (MINERAL OIL)
Evaporation rate	Not available
Flammability (solid, gas)	Not available
Flammability limits in air (lower), % by volume	Not available
Flammability limits in air (upper), % by volume	Not available
Vapour pressure	Not volatile



0.87 - 0.9 Kg/L





		luce hubbe in wee				
Solubility (water) Partition coefficient (n-octanol/water)		Insoluble in water				
, ,		Not available				
Decomposition temperature		No data				
Auto-ignition temperature		Not available				
Worked Penetration at 25°C		400 - 430 (ASTN	10217)			
Explosive properties		No data				
Oxidising properties		No data				
DMSO extractable compounds for according to IP346	base oil substance(s)	Not available <3 %				
Section 10: Stability and Rea	ctivity					
10.1 Reactivity		No specific test	data related to reactivity availa	able for this product or its ingr	redients.	
10.2 Chemical stability		Stable under no	ormal conditions			
10.3 Possibility of hazardous rea	ctions	Under normal c	onditions of storage and use, I	nazardous reactions will not o	ccur. Oxidising agent.	
10.4 Conditions to avoid		Keep away from	n extreme heat and oxidising a	gents.		
10.5 Incompatible materials		Incomplete con	nbustion is likely to give rise to ses, including carbon monoxic	a complex mixture of airborn le. H.S. SO (sulphur oxides) or	e solid and liquid sulphuric acid and	
10.6 Hazardous decomposition	products		ganic and inorganic compound			
SECTION 11: Toxicological In	formation					
11.1 Information on toxicologica	al effects					
Acute toxicity						
Product / ingredient name	Result		Species	Dose	Exposure	
	LC 50 Inhalation due	sts and mists	Rat	>2.18mg/l	4 hours	
Distillate (Petroleum), hydro	LD 50 Derr		Rabbit	> 5000 mg/kg		
treated heavy paraffinic	LD 50 Ora		Rat	>15000 mg/kg	_	
Irritation / corrosion						
Skin						
		No known significant effects or critical hazards.				
Eye						
Respiratory						
Sensation						
Skin		No known significant effects or critical hazards.				
Respiratory						
Mutagenicity		No data available to indicate product or any components present greater than 0.1 % are multigene or genotoxic.				
Carcinogenicity		The base oil(s) i	n this product is based on an s	everely hydrotreated distillate		
Reproductive toxicity		The product should not be regarded as a carcinogen. Contains no ingredient listed as toxic to reproduction.				
Specific target organ toxicity – sin	gle exposure					
Specific target organ toxicity – rep		Not classified				
Aspiration hazard		Aspiration hazard – Category 1				
Information on likely routes of exp	oosure	Not available				
Potential acute health effects						
Eye contact		Eye contact may cause redness and transient pain.				
Inhalation		Inhalation of oil mist or vapours at elevated temperatures may cause respiratory irritation.				
Skin contact			ficant effects or critical hazard		,	
Ingestion			wallowed and enters airways.			
Potential chronic health effects			in ways.			
General		No known signi	ficant effects or critical hazard	s		
		-	n this product is based on an s		The product should not be	
Carcinogenicity		regarded as a ca			a me product should not be	







Mutagenicity						
eratogenicity		No known s	significant effects or critical haz	ards.		
Product / ingredient name						
Fertility effects		Not such the la	1-			
Other information Specific hazard		Not availab	le			
Section 12: Ecological Information						
12.1 Toxicity		Not expected to be harmful to aquatic organisms.				
12.2 Persistence and degradability		Not inherently biodegradable.				
12.3 Bioaccumulative potential		Bioaccumulation is unlikely to be significant because of the low water solubility of this product. Not considered mobile.				
12.4 Mobility in soil						
12.5 Results of PBT & vPvB assessment	:	Not applica				
12.6 Other adverse effects			n water. Spills may form a film of nsfer could also be impaired.	n water surfaces causing physica	al damage to organisms.	
Section 13: Disposal Consideration						
The information in this section contains information provided in the Exposure So	generic advice and enario(s).	d guidance. T	he list of Identified Uses in Sect	ion 1 should be consulted for ar	ny available use-specific	
Product Methods of disposal Product Methods of disposal Pr			e can be burned or incinerated, its, safety regulations and air qu ): Disposal can be carried out di on may identify a specific organ	subject to national/local ality legislation. Contaminated rectly, or by delivery to		
Hazardous waste		Yes				
European waste catalogue (EWC) Waste Code 13 03 07*		Waste designation.				
Packaging		Mineral-ba	sed non-chlorinated insulating	and heat transmission oils.		
Methods of disposal	Methods of disposal		The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.			
Section 14: Transport Information						
International transport regulations						
	ADR / R	ID	ADN	IMO / IMDG Classification	ICAO / IATA Classification	
14.1 UN number	Not regul	ated	Not regulated	Not regulated	Not regulated	
14.2 UN proper shipping name	_		_	_	_	
14.3 Transport hazard class(es)	_		-	_	_	
14.4 Packing group	_		-	_	_	
14.5 Environmental hazards	No		No	No	No	
Additional Information	_		-	-	-	
14.6 Special precautions for user oils						
14.7 Transport in bulk according to An	nex   of MARPOL	73/78 and th	e IBC Code			
Section 15: Regulatory Informatio						
15.1 Safety, health and environmental		slation speci	fic for the substance or mixture	e EU Regulation (EC) No. 1907/	2006 (REACH)	
Annex XIV – List of substances subject to authorisation Annex XIV Substances of very high concern		None of the components are listed				
Annex XVII – Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles.		Not applicable				
International Lists National Inventory		Inventory name				
Australia		Australian Inventory of Chemical Substances (AICS) – Yes				
Canada		Domestic Substances List (DSL) – Yes Non-Domestic Substances List (NDSL) – No				
China		Inventory of Existing Chemical Substances in China (IECSC) – Yes				
		inventory o	. Easting chemical substances			





	European Inventory of Existing Commercial Chemical Substances (EINECS) – Yes				
Europe	European List of Notified Chemical Substances (ELINCS) – No				
Japan	Inventory of Existing and New Chemical Substances (ENCS) – Yes				
Korea	Existing Chemicals List (ECL) – Yes				
New Zealand	New Zealand Inventory – Yes				
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS) – Yes				
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory – Yes				
	oly with the inventory requirements administered by the governing country(s) uct are not listed or exempt from listing on the inventory administered by the governing country(s).				
Section 16: Other Information					
Revision comments					
Legend to abbreviations					
ADR	European agreement concerning the international carriage of dangerous good by road.				
RID	Regulations agreement concerning the international carriage of dangerous good by rail.				
IMDG Code	International Maritime Dangerous Goods Code.				
ICAO	International Civil Aviation Organization.				
IATA	International Air Transport Association.				
GHS	Globally Harmonized System of Classification and Labeling of Chemicals.				
CLP	Classification, Labelling and Packaging Regulation [Regulation (EC) No.1272/2008].				
SCBA	Self-Contained Breathing Apparatus.				
REACH	Registration, Evaluation, Authorization and Restriction of Chemicals Regulation [Regulation (EC) No. 1907/2006].				
LC 50	Median lethal concentration.				
LD 50	Median lethal dose.				
PBT	Persistent, Bio accumulative and Toxic.				

GANDHAR OIL REFINERY (INDIA) LTD.				
Taloja Plant	Plot No.10, MIDC, Main Road, Taloja, Taluka Panvel, District - Raigad 410208, India.			
Silvassa Plant	Plot No. 2, Survey No. 678/1/3, Village Naroli, Near Naroli Check Post, Silvassa, Dadra & Nagar Haveli, Union Territory 396230, India.			
Emergency / Info Phone No.	Phone: +91-22-40635600 • Fax: +91-22-40635601			
Email	info@gandharoil.com			





# **DIVYOL TRIBOROL PD 000 GREASE**

1.1 Product identifier	Discol Table 10					
Product name		Divyol Triborol PD 000 Grease				
Product description		ce Lithium Base Gi	rease			
Product type	Grease					
MARPOL Annex-1	****	****				
1.2 Identified uses						
Distribution of substance	Automotive & In					
Formulation & (re)packing of substance & mixtures	Automotive & In					
Manufacture of substance	Automotive & In					
Functional fluids	Automotive & In	dustrial Grease				
Section 2: Hazard Identification						
4-Extreme	Health		1			
3-High	Flammability		1			
2-Moderate	Reactivity		0			
1-Slight	Special		-			
Section 3: Compostion / Information on Ingred	ients					
Chemical Name / Ingredients	% by wt.	Hazardous		CAS No.		
Lithium Hydroxide	0.2 - 1	Yes		1310-66-3		
Mineral Oil	70 - 80	Yes		64741-88-4, 64742-54-7, 64742-01-4, 64742-52-5		
12 HSA	1 - 5	No		106-14-9		
НСО	0 - 1	No		8001-78-3		
Addition De altre ere	1 5	Yes		Proprietary Mixture		
Additive Package	1 - 5	No		13397-26-7		
Zinc Dialkyl Dithiophosphate	1 - 4	Yes		68457-79-4		
Butene, Homo Polyhmer	0 - 2	No		9003-27-4		
Manatakla Oil Fatar	5 20	No		Proprietary Mixture		
Vegetable Oil Eater	5 -20	No		366313-30-8		
Molybdenum, bis (Dibutylcarbamodithioato) diMu Oxodioxodi - Sulfurized	0 - 2	Yes		68412-26-0		
Thiadiazole derivative	0 - 1	-		13539-13-4		
Product / Ingredient name	Lithium soaps from natural fatty substances			nces		
Section 4: First Aid Measures		,				
Inhalation exposure	Remove to fresh	air & provide oxy	aen, i	f breathing is difficult. Contact physician		
Skin contact	Remove contam		lush s	skin with water. Wash skin thoroughly with mild soap & water.		
Swallowing or other		omiting. In genera		treatment is necessary unless large quantities are ingested.		
Eye contact	Rinse continuou	sly with water for	sever	ral minutes. Get medical attention, if irritation persists.		
Protection first-aiders		lectrical supply. Er entry into confine		adequate ventilation and check that a safe and breathing area is aces.		
Section 5: Fire Fighting Measures						
5.1 Extinguishing media						
Unsuitable extinguishing media				Do not use direct water and wet chemicals, or water on the fire. Use foam simultaneously on the surface.		
5.2 Special hazards arising from the substance or mix						
Hazards from the substance or mixture	Flammable liqui flammable vapo		onta	iners may rupture and when exposed to heat, creating a highly		
Hazardous thermal decomposition products	Incomplete combustion is likely to give rise to a complex mixture of airborne solid and liquid particulates, gases, including carbon monoxide, H <sub>2</sub> S, SO <sub>x</sub> (sulphur oxides) or sulphuric acid and unidentified organic and inorganic compounds.					
5.3 Advice for firefighters		5				
Special precautions for firefighters	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.					
Special protective equipment for firefighters	<ul> <li>Firefighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face- piece operated in positive pressure mode. Clothing for firefighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.</li> </ul>					







6.1 Personal precautions, protective equipment and emergency procedures					
Keep non-involved personnel away from the area of spillage.					
For non-emergency personnel	Alert emergency personnel. Except in case of small spillages, the feasibility of any actions should always be assessed and advised, if possible, by a trained, competent person in charge of managing the emergency. Stop leak if safe to do so. Avoid direct contact with the product. Stay upwind / keep distance from source. In case of large spillages, alert occupants in downwind areas. Eliminate all ignition sources if safe to do so. Spillages of limited amounts of product, especially in the open air when vapours will be usually quickly dispersed, are dynamic situations, which will presumably limit the exposure to dangerous concentrations. Note : Recommended measures are based on the most likely spillage scenarios for this material; however, local conditions (wind, air temperature, wave / current direction and speed) may significantly influence the choice of appropriate actions.				
For emergency responders	For this reason, local experts should be consulted when necessary. Local regulations may also prescribe or limit actions to be taken. Small spillages: Normal antistatic working clothes are usually adequate. Large spillages: Full body suit of chemically resistant and thermal resistant material should be used. Work gloves providing adequate chemical resistance, specifically to aromatic hydrocarbons. Note: Gloves made of PVA are not water-resistant, and are not suitable for emergency use. Safety helmet, antistatic non-skid safety shoes or boots. Goggles and / or face shield, if splashes or contact with eyes is possible or anticipated. Respiratory Protection : A half or full-face respirator with filter(s) for organic vapours (and when applicable for H <sub>2</sub> S) a Self Contained Breathing Apparatus (SCBA) can be used according to the extent of spill and predictable amount of exposure. If the situation cannot be completely assessed, or if an oxygen deficiency is possible, only SCBA's should be used.				
6.2 Environmental precautions	Prevent product from entering sewers, rivers or other bodies of water. If necessary dike the product with dry earth, sand or similar non-combustible materials. In case of soil contamination, remove contaminated soil and treat in accordance with local regulations. In case of small spillages in closed waters (i.e. ports), contain product with floating barriers or other equipment. Collect spilled product by absorbing with specific floating absorbents. If possible, large spillages in open waters should be contained with floating barriers or other mechanical means. If this is not possible, control the spreading of the spillage, and collect the product by skimming or other suitable mechanical means. The use of dispersants should be advised by an expert, and, if required, approved by local authorities.				
6.3 Methods and material for containment and cleaning	up				
Small spill	Stop leak if without risk. Absorb spilled product with suitable non-combustible materials.				
Large spill	Large spillages may be cautiously covered with foam, if available, to limit vapour cloud formation. Do not use water jet. When inside buildings or confined spaces, ensure adequate ventilation. Transfer collected product and other contaminated materials to suitable containers for recovery or safe disposal.				
6.4 Reference to other sections	See Section 1: For emergency contact information. See Section 8: For information on appropriate personal protective equipment. See Section 13: For additional waste treatment information.				
Section 7: Handling and Storage					
7.1 Advice on general information – hygiene, storage	Obtain special instructions before use. Keep away from heat / sparks / open flames/hot surfaces. No smoking. Use and store only outdoors or in a well-ventilated area. Hazard of slipping on spilt product. Avoid release to the environment.				
7.2 Conditions for safe storage including any incompatibilities	Storage area layout, tank design, equipment and operating procedures must comply with the relevant regional, national or local legislation. Storage installations should be designed with adequate bunds in case of leaks or spills. Cleaning, inspection and maintenance of internal structure of storage tanks must be done only by properly equipped and qualified personnel as defined by national, local or company regulations. Store separately from oxidising agents. Keep only in the original container or in a suitable container for this kind of product. Keep container tightly closed and sealed until ready for use. Do not store in unlabelled containers. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Empty containers may contain harmful, flammable / combustible or explosive residue or vapours. Do not cut, grind, drill, weld, reuse or dispose of containers unless adequate precautions are taken against these hazards.				
	Protect from sunlight.				



Density Solubility (ies)



Section 8: Exposure Controls / Personal Protect	ction
The list of Identified Uses in Section 1 should be const	ulted for any available use-specific information provided in the Exposure Scenario(s).
8.1 Control parameters	
Occupational exposure limits	
Product / Ingredient name	Distillates, mixture of hydrocarbons
Exposure limits values	AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m <sup>3</sup> 8 hours. Form: mist and fume STEL: 3 mg/m <sup>3</sup> 15 minutes. Form: mist and fume [Air contaminant]. AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m <sup>3</sup> 8 hours. Form: mist and fume STEL: 3 mg/m <sup>3</sup> 15 minutes. Form: mist and fume.
Recommended monitoring procedures	If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres – Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres – Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres – General requirements for the performance of procedures for the measurement of chemical agents). Reference to national guidance documents for methods for the determination of hazardous substances will also be required.
8.2 Exposure control Appropriate engineering controls	Mechanical ventilation and local exhaust will reduce exposure via the air. Use oil resistant material in construction of handling equipment. Store under recommended conditions and if heated, temperature control equipment should be used to avoid overheating.
Individual protection measures	
Hygiene measures	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Ensure that eyewash stations and safety showers are close to the workstation location. Wash contaminated clothing before reuse.
Eye / face protection	Recommended: Safety glasses with side shields.
Skin protection	
Hand protection	4 – 8 hours (breakthrough time): nitrile rubber.
Body protection	Wear protective clothing if there is a risk of skin contact. Change contaminated clothes at the end of working shift.
Other skin protection	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary.
Environmental exposure control	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptabl levels.
Section 9: Physical and Chemical Properties	
Appearance	Clear
Physical state	Semi Fluid & Smooth
Colour	Orange Yellowish
Odor	Petroleum odor
Odour threshold	Not available
Dropping point	>160°C (ASTM D-2265)
Flash point	> 200°C (MINERAL OIL)
Evaporation rate	Not available
Flammability (solid, gas)	Not available
Flammability limits in air (lower), % by volume	Not available
Flammability limits in air (upper), % by volume	Not available
Vapour pressure	Not volatile



0.87 - 0.9 Kg/L





Solubility (water)		Insoluble in wat	ter			
Partition coefficient (n-octanol/water)		Not available				
Decomposition temperature		No data				
Auto-ignition temperature		Not available				
Worked Penetration at 25°C		455- 475 (ASTM	I D 217)			
Explosive properties		No data				
Oxidising properties		No data				
DMSO extractable compounds for	r hase oil substance(s)	Not available				
according to IP346		<3 %				
Section 10: Stability and Rea	ctivity	1				
10.1 Reactivity		No specific test	data related to reactivity avail	able for this product or its ingr	edients.	
10.2 Chemical stability			ormal conditions			
10.3 Possibility of hazardous rea	octions	Under normal c	conditions of storage and use, I	hazardous reactions will not o	ccur. Oxidising agent.	
10.4 Conditions to avoid		Keep away from	n extreme heat and oxidising a	agents.		
10.5 Incompatible materials		Incomplete con particulates, ga	nbustion is likely to give rise to ses, including carbon monoxic	o a complex mixture of airborn de, H <sub>2</sub> S, SO. (sulphur oxides) or	e solid and liquid sulphuric acid and	
10.6 Hazardous decomposition	products		ganic and inorganic compound			
SECTION 11: Toxicological In						
11.1 Information on toxicologica	al effects					
Acute toxicity						
Product / ingredient name	Result		Species	Dose	Exposure	
	LC 50 Inhalation dusts and mists		Rat	>2.18mg/l	4 hours	
Distillate (Petroleum), hydro treated heavy paraffinic	LD 50 Dermal		Rabbit	> 5000 mg/kg	_	
treated neavy paraminic	LD 50 Ora	al	Rat	>15000 mg/kg	-	
Irritation / corrosion						
Skin						
Eye		No known significant effects or critical hazards.				
Respiratory						
Sensation						
Skin						
Respiratory		No known significant effects or critical hazards.				
		No data availab	le to indicate product or any c	components present greater th	an 0.1% are	
Mutagenicity		No data available to indicate product or any components present greater than 0.1 % are multigene or genotoxic.				
Carcinogenicity			in this product is based on an s			
Reproductive toxicity		The product should not be regarded as a carcinogen. Contains no ingredient listed as toxic to reproduction.				
Specific target organ toxicity – sin	gle exposure					
Specific target organ toxicity – rep		Not classified				
Aspiration hazard		Aspiration hazard – Category 1				
Information on likely routes of exp	oosure	Not available				
Potential acute health effects						
Eye contact may cause redness and trar			y cause redness and transient	pain.		
Inhalation				itory irritation.		
Skin contact     No known significant effects or critical hazards.						
Ingestion May be fatal if swallowed and enters airways.						
Potential chronic health effects						
General		No known signi	ificant effects or critical hazard	ls		
General			in this product is based on an s		The product should not be	
Carcinogenicity		regarded as a ca		severely hydrotreated distillate	. The product should not be	







Mutagenicity						
Teratogenicity		No known s	significant effects or critical haz	ards.		
Product / ingredient name						
Fertility effects		Not such the la	1-			
Other information Specific hazard		Not availab	le			
Section 12: Ecological Information						
12.1 Toxicity	Not expected to be harmful to aquatic organisms.					
12.2 Persistence and degradability		Not inherently biodegradable.				
12.3 Bioaccumulative potential		Bioaccumulation is unlikely to be significant because of the low water solubility of this product.				
12.4 Mobility in soil			ered mobile.			
12.5 Results of PBT & vPvB assessment	:	Not applica				
12.6 Other adverse effects			n water. Spills may form a film of nsfer could also be impaired.	n water surfaces causing physica	al damage to organisms.	
Section 13: Disposal Consideration						
The information in this section contains information provided in the Exposure So	generic advice and enario(s).	d guidance. T	he list of Identified Uses in Sect	ion 1 should be consulted for ar	ny available use-specific	
Product Methods of disposal         Where possible (e.g. in the absence of relevant contamination), recycling of used substance is feasible and recommended. This substance can be burned or incinerated, subject to national/ authorisations, relevant contamination limits, safety regulations and air quality legislation. Co or waste substance (not directly recyclable): Disposal can be carried out directly, or by delivery qualified waste handlers. National legislation may identify a specific organisation, and/or pres composition limits and methods for recovery or disposal				subject to national/local ality legislation. Contaminated rectly, or by delivery to		
Hazardous waste		Yes				
European waste catalogue (EWC) Waste	Code 13 03 07*	Waste designation.				
Packaging		Mineral-based non-chlorinated insulating and heat transmission oils.				
Methods of disposal		The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.				
Section 14: Transport Information						
International transport regulations						
	ADR / R	ID	ADN	IMO / IMDG Classification	ICAO / IATA Classification	
14.1 UN number	Not regul	ated	Not regulated	Not regulated	Not regulated	
14.2 UN proper shipping name	_		_	_	_	
14.3 Transport hazard class(es)	_		-	_	_	
14.4 Packing group	_		-	_	_	
14.5 Environmental hazards	No		No	No	No	
Additional Information	_		-	-	-	
14.6 Special precautions for user oils						
14.7 Transport in bulk according to An	nex   of MARPOL	73/78 and th	e IBC Code			
Section 15: Regulatory Informatio						
		slation speci	fic for the substance or mixture	e EU Regulation (EC) No. 1907/	2006 (REACH)	
Annex XIV – List of substances subject to Annex XIV Substances of very high concern	islation specific for the substance or mixture EU Regulation (EC) No. 1907/2006 (REACH) None of the components are listed					
Annex XVII – Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles.			Not applicable			
International Lists National Inventory	I Lists National Inventory Inventory name					
Australia	Australian Inventory of Chemical Substances (AICS) – Yes					
Canada	Domestic Substances List (DSL) – Yes Non-Domestic Substances List (NDSL) – No					
China			f Existing Chemical Substances			
		inventory o	. Easting chemical substances			







	European Inventory of Existing Commercial Chemical Substances (EINECS) – Yes			
Europe	European List of Notified Chemical Substances (ELINCS) – No			
Japan	Inventory of Existing and New Chemical Substances (ENCS) – Yes			
Korea	Existing Chemicals List (ECL) – Yes			
New Zealand	New Zealand Inventory – Yes			
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS) – Yes			
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory – Yes			
	oly with the inventory requirements administered by the governing country(s) uct are not listed or exempt from listing on the inventory administered by the governing country(s).			
Section 16: Other Information				
Revision comments				
Legend to abbreviations				
ADR	European agreement concerning the international carriage of dangerous good by road.			
RID	Regulations agreement concerning the international carriage of dangerous good by rail.			
IMDG Code	International Maritime Dangerous Goods Code.			
ICAO	International Civil Aviation Organization.			
IATA	International Air Transport Association.			
GHS	Globally Harmonized System of Classification and Labeling of Chemicals.			
CLP	Classification, Labelling and Packaging Regulation [Regulation (EC) No.1272/2008].			
SCBA	Self-Contained Breathing Apparatus.			
REACH	Registration, Evaluation, Authorization and Restriction of Chemicals Regulation [Regulation (EC) No. 1907/2006].			
LC 50	Median lethal concentration.			
LD 50	Median lethal dose.			
PBT	Persistent, Bio accumulative and Toxic.			

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Silvassa Plant	Plot No. 2, Survey No. 678/1/3, Village Naroli, Near Naroli Check Post, Silvassa, Dadra & Nagar Haveli, Union Territory 396230, India.			
Emergency / Info Phone No.	Phone: +91-22-40635600 • Fax: +91-22-40635601			
Email	info@gandharoil.com			





# **DIVYOL TRIBOROL PD 2 GREASE**

Section 1: Identification of the Substance / Mix	ture							
1.1 Product identifier								
Product name	Divyol Triborol PD 2 Grease							
Product description		High Performance Lithium Base Grease						
Product type	Grease							
MARPOL Annex-1	****							
1.2 Identified uses								
Distribution of substance	Automotive & Industrial Grease							
Formulation & (re)packing of substance & mixtures	Automotive & Industrial Grease							
Manufacture of substance								
	Automotive & Industrial Grease							
Functional fluids	Automotive & Industrial Grease							
Section 2: Hazard Identification								
4-Extreme	Health	1						
3-High	Flammability	1						
2-Moderate	Reactivity	0						
1-Slight	Special	-						
Section 3: Compostion / Information on Ingred	lients							
Chemical Name / Ingredients	% by wt.	Hazardous	CAS No.					
Lithium Hydroxide	0.5-12	Yes	1310-66-3					
Mineral Oil	70 - 80	Yes	64741-88-4, 64742-54-7, 64742- 01-4, 64742-52-5					
12 HSA	1 - 6	No	106-14-9					
НСО	0 - 2	No	8001-78-3					
	0 2	Yes	Proprietary Mixture					
Additive Package	1 - 5	No	13397-26-7					
Zine Diellud Dithiemheenhete	1 4							
Zinc Dialkyl Dithiophosphate	1-4	Yes	68457-79-4					
Butene, Homo Polyhmer	0 - 2	No	9003-27-4					
Vegetable Oil Eater	5 -20	No No	Proprietary Mixture 36631-30-8					
Molybdenum, bis (Dibutylcarbamodithioato) diMu Oxodioxodi - Sulfurized	0 - 2	Yes	68412-26-0					
Thiadiazole derivative	0-1 – 13539-13-4							
Product / Ingredient name	Lithium soaps from natural fatty	v substances						
Section 4: First Aid Measures								
Inhalation exposure	Remove to fresh air & provide oxygen, if breathing is difficult. Contact physician							
Skin contact		Remove contaminated clothing. Flush skin with water. Wash skin thoroughly with mild soap & water.						
Swallowing or other		eral no treatment is necessary unles	s large quantities are ingested.					
Eye contact	Rinse continuously with water for	or several minutes. Get medical atte	ention, if irritation persists.					
Protection first-aiders		Ensure adequate ventilation and ch	neck that a safe and breathing area is					
Section 5: Fire Fighting Measures 5.1 Extinguishing media								
Unsuitable extinguishing media		ioxide. Do not use direct water and						
5.2 Special hazards arising from the substance or mi		ad the fire. Use foam simultaneousl	ly on the surface.					
Hazards from the substance or mixture		d containers may rupture and when	exposed to heat, creating a highly					
Hazardous thermal decomposition products	flammable vapour cloud. Incomplete combustion is likely to give rise to a complex mixture of airborne solid and liquid particulates, gases, including carbon monoxide, H <sub>2</sub> S, SO <sub>x</sub> (sulphur oxides) or sulphuric acid and unidentified organic and inorganic compounds.							
5.3 Advice for firefighters	andentined organic and morga	nic compounds.						
Special precautions for firefighters			y of the incident if there is a fire. No					
Special protective equipment for firefighters	Firefighters should wear approp (SCBA) with a full face- piece op helmets, protective boots and g	action shall be taken involving any personal risk or without suitable training. Firefighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face- piece operated in positive pressure mode. Clothing for firefighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.						





6.1 Personal precautions, protective equipment and emergency procedures						
Keep non-involved personnel away from the area of spillage.						
For non-emergency personnel	Alert emergency personnel. Except in case of small spillages, the feasibility of any actions should always be assessed and advised, if possible, by a trained, competent person in charge of managing the emergency. Stop leak if safe to do so. Avoid direct contact with the product. Stay upwind / keep distance from source. In case of large spillages, alert occupants in downwind areas. Eliminate all ignition sources if safe to do so. Spillages of limited amounts of product, especially in the open air when vapours will be usually quickly dispersed, are dynamic situations, which will presumably limit the exposure to dangerous concentrations. Note : Recommended measures are based on the most likely spillage scenarios for this material; however, local conditions (wind, air temperature, wave / current direction and speed) may significantly influence the choice of appropriate actions.					
For emergency responders	For this reason, local experts should be consulted when necessary. Local regulations may also prescribe or limit actions to be taken. Small spillages: Normal antistatic working clothes are usually adequate. Large spillages: Full body suit of chemically resistant and thermal resistant material should be used. Work gloves providing adequate chemical resistance, specifically to aromatic hydrocarbons. Note: Gloves made of PVA are not water-resistant, and are not suitable for emergency use. Safety helmet, antistatic non-skid safety shoes or boots. Goggles and / or face shield, if splashes or contact with eyes is possible or anticipated. Respiratory Protection : A half or full-face respirator with filter(s) for organic vapours (and when applicable for H <sub>2</sub> S) a Self Contained Breathing Apparatus (SCBA) can be used according to the extent of spill and predictable amount of exposure. If the situation cannot be completely assessed, or if an oxygen deficiency is possible, only SCBA's should be used.					
6.2 Environmental precautions	Prevent product from entering sewers, rivers or other bodies of water. If necessary dike the product with dry earth, sand or similar non-combustible materials. In case of soil contamination, remove contaminated soil and treat in accordance with local regulations. In case of small spillages in closed waters (i.e. ports), contain product with floating barriers or other equipment. Collect spilled product by absorbing with specific floating absorbents. If possible, large spillages in open waters should be contained with floating barriers or other mechanical means. If this is not possible, control the spreading of the spillage, and collect the product by skimming or other suitable mechanical means. The use of dispersants should be advised by an expert, and, if required, approved by local authorities.					
6.3 Methods and material for containment and cleaning up						
Small spill	Stop leak if without risk. Absorb spilled product with suitable non-combustible materials.					
Large spill	Large spillages may be cautiously covered with foam, if available, to limit vapour cloud formation. Do not use water jet. When inside buildings or confined spaces, ensure adequate ventilation. Transfer collected product and other contaminated materials to suitable containers for recovery or safe disposal.					
6.4 Reference to other sections	See Section 1: For emergency contact information. See Section 8: For information on appropriate personal protective equipment. See Section 13: For additional waste treatment information.					
Section 7: Handling and Storage						
7.1 Advice on general information – hygiene, storage	Obtain special instructions before use. Keep away from heat / sparks / open flames/hot surfaces. No smoking. Use and store only outdoors or in a well-ventilated area. Hazard of slipping on spilt product. Avoid release to the environment.					
7.2 Conditions for safe storage including any incompatibilities	Storage area layout, tank design, equipment and operating procedures must comply with the relevant regional, national or local legislation. Storage installations should be designed with adequate bunds in case of leaks or spills. Cleaning, inspection and maintenance of internal structure of storage tanks must be done only by properly equipped and qualified personnel as defined by national, local or company regulations. Store separately from oxidising agents. Keep only in the original container or in a suitable container for this kind of product. Keep container tightly closed and sealed until ready for use. Do not store in unlabelled containers. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Empty containers may contain harmful, flammable / combustible or explosive residue or vapours. Do not cut, grind, drill, weld, reuse or dispose of containers unless adequate precautions are taken against these hazards. Protect from sunlight.					
7.3 Specific end use(s) – Recommendations	Not available					



Density Solubility (ies)



Section 8: Exposure Controls / Personal Protection	ction
The list of Identified Uses in Section 1 should be const	ulted for any available use-specific information provided in the Exposure Scenario(s).
8.1 Control parameters	
Occupational exposure limits	
Product / Ingredient name	Distillates, mixture of hydrocarbons
Exposure limits values	AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m <sup>3</sup> 8 hours. Form: mist and fume STEL: 3 mg/m <sup>3</sup> 15 minutes. Form: mist and fume [Air contaminant]. AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m <sup>3</sup> 8 hours. Form: mist and fume STEL: 3 mg/m <sup>3</sup> 15 minutes. Form: mist and fume.
Recommended monitoring procedures	If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres – Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres – Guide for the application and use of procedures for the assessment of exposure to chemical agents for the performance of procedures for the measurement of chemical agents). Reference to national guidance documents for methods for the determination of hazardous substances will also be required.
8.2 Exposure control Appropriate engineering controls	Mechanical ventilation and local exhaust will reduce exposure via the air. Use oil resistant material in construction of handling equipment. Store under recommended conditions and if heated, temperature control equipment should be used to avoid overheating.
Individual protection measures	
Hygiene measures	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Ensure that eyewash stations and safety showers are close to the workstation location. Wash contaminated clothing before reuse.
Eye / face protection	Recommended: Safety glasses with side shields.
Skin protection	
Hand protection	4 – 8 hours (breakthrough time): nitrile rubber.
Body protection	Wear protective clothing if there is a risk of skin contact. Change contaminated clothes at the end of working shift.
Other skin protection	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary.
Environmental exposure control	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptabl levels.
Section 9: Physical and Chemical Properties	
Appearance	Clear
Physical state	Smooth & Buttery
Colour	Orange Yellowish
Odor	Petroleum odor
Odour threshold	Not available
Dropping point	>200°C (ASTM D-2265)
Flash point	> 200°C (MINERAL OIL)
Evaporation rate	Not available
Flammability (solid, gas)	Not available
Flammability limits in air (lower), % by volume	Not available
Flammability limits in air (upper), % by volume	Not available
Vapour pressure	Not volatile



0.88 - 0.95 Kg/L





Solubility (water)		Insoluble in wa	ter			
		Not available				
Decomposition temperature		No data				
Auto-ignition temperature		Not available				
Worked Penetration at 25°C		265- 295 (ASTM	1 D 217)			
Explosive properties		No data				
Oxidising properties		No data				
DMSO extractable compounds for according to IP346	r base oil substance(s)	Not available <3 %				
Section 10: Stability and Rea	ctivity	13 /0				
10.1 Reactivity	·····,	No specific test	data related to reactivity avail	able for this product or its ingr	edients.	
10.2 Chemical stability			ormal conditions	<u> </u>		
10.3 Possibility of hazardous rea	ctions		conditions of storage and use, l	hazardous reactions will not o	ccur. Oxidising agent.	
10.4 Conditions to avoid			n extreme heat and oxidising a			
10.5 Incompatible materials		Incomplete con	mbustion is likely to give rise to uses, including carbon monoxic	a complex mixture of airborn		
10.6 Hazardous decomposition	products		ganic and inorganic compound		suprune acid and	
SECTION 11: Toxicological In						
11.1 Information on toxicologica	al effects					
Acute toxicity						
Product / ingredient name	Result		Species	Dose	Exposure	
	LC 50 Inhalation due	sts and mists	Rat	>2.18mg/l	4 hours	
Distillate (Petroleum), hydro treated heavy paraffinic	LD 50 Dermal		Rabbit	> 5000 mg/kg	-	
treated neavy paraminic	LD 50 Ora	al	Rat	>15000 mg/kg	-	
Irritation / corrosion						
Skin						
Eye		No known signi	ificant effects or critical hazard	S.		
Respiratory						
Sensation						
Skin						
Respiratory		No known significant effects or critical hazards.				
Mutagenicity		No data available to indicate product or any components present greater than 0.1 % are				
Carcinogenicity		multigene or genotoxic. The base oil(s) in this product is based on an severely hydrotreated distillate.				
Reproductive toxicity		The product sh	e product should not be regarded as a carcinogen.			
Specific target organ toxicity – sin	ale exposure	Contains no Ing	greaterit listed as toxic to repro			
Specific target organ toxicity – rep		Not classified				
Aspiration hazard	searce exposure	Aspiration haza	ard – Category 1			
Information on likely routes of exp	oosure	Aspiration hazard – Category 1 Not available				
Potential acute health effects	JUJUIC					
Eye contact		Eve contact ma	y cause redness and transient	nain		
Inhalation			I mist or vapours at elevated te	•	atory irritation	
Skin contact						
Ingestion						
Potential chronic health effects		may be latal if s	wanowed and enters alrways.			
General		No known sizzi	ificant offorts or suitical barrad			
Genelal		No known significant effects or critical hazards.				
Carcinogenicity The base oil(s) in this product is based on an severely hydrotreated distillate. The product should regarded as a carcinogen.						







Mutagenicity							
Teratogenicity		No known s	significant effects or critical haz	ards.			
Product / ingredient name	<u> </u>						
Fertility effects	•						
Other information Specific hazard		Not availab	le				
Section 12: Ecological Information							
12.1 Toxicity			ed to be harmful to aquatic org	anisms.			
12.2 Persistence and degradability			ntly biodegradable.				
12.3 Bioaccumulative potential				nt because of the low water solu	ibility of this product.		
12.4 Mobility in soil			ered mobile.				
12.5 Results of PBT & vPvB assessment		Not applica					
12.6 Other adverse effects			n water. Spills may form a film or nsfer could also be impaired.	n water surfaces causing physica	al damage to organisms.		
Section 13: Disposal Consideration	ıs						
The information in this section contains information provided in the Exposure Sc		d guidance. T	he list of Identified Uses in Sect	ion 1 should be consulted for ar	ny available use-specific		
Product Methods of disposal	Where possible (e.g. in the absence of relevant contamination), recycling of used substance is feasible and recommended. This substance can be burned or incinerated, subject to national/local authorisations, relevant contamination limits, safety regulations and air quality legislation. Contaminated or waste substance (not directly recyclable): Disposal can be carried out directly, or by delivery to qualified waste handlers. National legislation may identify a specific organisation, and/or prescribe composition limits and methods for recovery or disposal						
Hazardous waste		Yes					
European waste catalogue (EWC) Waste	Waste designation.						
Packaging		Mineral-based non-chlorinated insulating and heat transmission oils.					
Methods of disposal		The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.					
Section 14: Transport Information							
International transport regulations							
	ADR / R	ID	ADN	IMO / IMDG Classification	ICAO / IATA Classification		
14.1 UN number	Not regul	ated	Not regulated	Not regulated	Not regulated		
14.2 UN proper shipping name	-		_	-	-		
14.3 Transport hazard class(es)	-		_	-	-		
14.4 Packing group	-		-	-	-		
14.5 Environmental hazards	No		No	No	No		
Additional Information	_		_	-	_		
14.6 Special precautions for user oils				·			
14.7 Transport in bulk according to An	nex Lof MARPOL	73/78 and th	e IBC Code				
Section 15: Regulatory Informatio		c,, o ana m					
		slation speci	fic for the substance or mixture	e FU Regulation (FC) No. 1907/	2006 (REACH)		
	Annex XIV – List of substances subject to authorisation Annex XIV N			slation specific for the substance or mixture EU Regulation (EC) No. 1907/2006 (REACH) None of the components are listed			
Annex XVII – Restrictions on the manufa on the market and use of certain danger mixtures and articles.	Not applicable						
International Lists National Inventory	ernational Lists National Inventory Inventory name						
Australia		Australian Inventory of Chemical Substances (AICS) – Yes					
Canada	Domestic Substances List (DSL) – Yes Non-Domestic Substances List (NDSL) – No						
China			f Existing Chemical Substances				
China		inventory 0	a chemical substances	$\frac{1}{1000} = 1000$			







	European Inventory of Existing Commercial Chemical Substances (EINECS) – Yes		
Europe	European List of Notified Chemical Substances (ELINCS) – No		
Japan	Inventory of Existing and New Chemical Substances (ENCS) – Yes		
Korea	Existing Chemicals List (ECL) – Yes		
New Zealand	New Zealand Inventory – Yes		
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS) – Yes		
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory – Yes		
	oly with the inventory requirements administered by the governing country(s) uct are not listed or exempt from listing on the inventory administered by the governing country(s).		
Section 16: Other Information			
Revision comments			
Legend to abbreviations			
ADR	European agreement concerning the international carriage of dangerous good by road.		
RID	Regulations agreement concerning the international carriage of dangerous good by rail.		
IMDG Code	International Maritime Dangerous Goods Code.		
ICAO	International Civil Aviation Organization.		
IATA	International Air Transport Association.		
GHS	Globally Harmonized System of Classification and Labeling of Chemicals.		
CLP	Classification, Labelling and Packaging Regulation [Regulation (EC) No.1272/2008].		
SCBA	Self-Contained Breathing Apparatus.		
REACH	Registration, Evaluation, Authorization and Restriction of Chemicals Regulation [Regulation (EC) No. 1907/2006].		
LC 50	Median lethal concentration.		
LD 50	Median lethal dose.		
PBT	Persistent, Bio accumulative and Toxic.		

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Emergency / Info Phone No.	Phone: +91-22-40635600 • Fax: +91-22-40635601
Email	info@gandharoil.com





# **DIVYOL TRIBOROL SMB GREASE**

Section 1: Identification of the Substance / Mixt	ure		
1.1 Product identifier			
Product name	Divyol Triborol SI	MB Grease	
Product description	Metal Complex S		
Product type	Grease		
MARPOL Annex-1	****		
1.2 Identified uses			
Distribution of substance	Automotive & Inc	dustrial Grease	
Formulation & (re)packing of substance & mixtures	Automotive & Inc		
Manufacture of substance	Automotive & Inc		
Functional fluids	Automotive & Inc		
Section 2: Hazard Identification			
4-Extreme	Health		1
3-High	Flammability		1
2-Moderate	Reactivity		0
1-Slight	Special		_
Section 3: Compostion / Information on Ingredi			
Chemical Name / Ingredients	% by wt.	Hazardous	CAS No.
Lithium Hydroxide	02 - 1	Yes	1310-66-3
Mineral Oil	70 - 80	Yes	64742-52-5, 64741-88-4, 64742-01-4, 64742-65-0
12 HSA	1 - 4	No	106-14-9
НСО	0 -1	No	8001-78-3
Zinc Dialkyl Dithiophosphate	1 - 5	Yes	68457-79-4
Calcite	0.5 - 5	No	13397-26-7
Butene, Homo Polyhmer	4 - 12	No	9003-27-4
Additives	0 - 4	Yes	Proprietary Mixture
Graphite Powder	5 - 15	Yes	7782-42-5
Polymer	0 - 5	Yes	9010-79-1
Thiadiazole Derivative	0 - 1	-	13539-13-4
Product / Ingredient name	Metal Complex se	oaps from natural	l fatty substances
Section 4: First Aid Measures			
Inhalation exposure			gen, if breathing is difficult. Contact physician
Skin contact	Remove contami If irritation occurs		lush skin with water. Wash skin thoroughly with mild soap & water.
Swallowing or other	Do not induce vo Get medical advi		I no treatment is necessary unless large quantities are ingested.
Eye contact	Rinse continuous	ly with water for	several minutes. Get medical attention, if irritation persists.
Protection first-aiders	Disconnecting el available before e		nsure adequate ventilation and check that a safe and breathing area is ed spaces.
Section 5: Fire Fighting Measures			
5.1 Extinguishing media			
Unsuitable extinguishing media	Use dry powder, foam, carbon dioxide. Do not use direct water and wet chemicals, or water on the burning product. They may spread the fire. Use foam simultaneously on the surface.		
5.2 Special hazards arising from the substance or mix			
Hazards from the substance or mixture		•	containers may rupture and when exposed to heat, creating a highly
Hazardous thermal decomposition products		es, including carbo	give rise to a complex mixture of airborne solid and liquid on monoxide, $H_2S$ , SO <sub>x</sub> (sulphur oxides) or sulphuric acid and c compounds.
5.3 Advice for firefighters			
Special precautions for firefighters			oving all persons from the vicinity of the incident if there is a fire. No y personal risk or without suitable training.
Special protective equipment for firefighters	(SCBA) with a full	face- piece operative boots and glov	ate protective equipment and self-contained breathing apparatus ated in positive pressure mode. Clothing for firefighters (including ves) conforming to European standard EN 469 will provide a basic leve ts.





6.1 Personal precautions, protective equipment and em	ergency procedures
stri i cisonal precations, protective equipment and em	Keep non-involved personnel away from the area of spillage.
For non-emergency personnel	Alert emergency personnel. Except in case of small spillage. Alert emergency personnel. Except in case of small spillages, the feasibility of any actions should always be assessed and advised, if possible, by a trained, competent person in charge of managing the emergency. Stop leak if safe to do so. Avoid direct contact with the product. Stay upwind / keep distance from source. In case of large spillages, alert occupants in downwind areas. Eliminate all ignition sources if safe to do so. Spillages of limited amounts of product, especially in the open air when vapours will be usually quickly dispersed, are dynamic situations, which will presumably limit the exposure to dangerous concentrations. Note : Recommended measures are based on the most likely spillage scenarios for this material; however, local conditions (wind, air temperature, wave / current direction and speed) may significantly influence the choice of appropriate actions.
For emergency responders	For this reason, local experts should be consulted when necessary. Local regulations may also prescribe or limit actions to be taken. Small spillages: Normal antistatic working clothes are usually adequate. Large spillages: Full body suit of chemically resistant and thermal resistant material should be used. Work gloves providing adequate chemical resistance, specifically to aromatic hydrocarbons. Note: Gloves made of PVA are not water-resistant, and are not suitable for emergency use. Safety helmet, antistatic non-skid safety shoes or boots. Goggles and / or face shield, if splashes or contact with eyes is possible or anticipated. Respiratory Protection : A half or full-face respirator with filter(s) for organic vapours (and when applicable for H <sub>2</sub> S) a Self Contained Breathing Apparatus (SCBA) can be used according to the extent of spill and predictable amount of exposure. If the situation cannot be completely assessed, or if an oxygen deficiency is possible, only SCBA's should be used.
6.2 Environmental precautions	Prevent product from entering sewers, rivers or other bodies of water. If necessary dike the product with dry earth, sand or similar non-combustible materials. In case of soil contamination, remove contaminated soil and treat in accordance with local regulations. In case of small spillages in closed waters (i.e. ports), contain product with floating barriers or other equipment. Collect spilled product by absorbing with specific floating absorbents. If possible, large spillages in open waters should be contained with floating barriers or other mechanical means. If this is not possible, control the spreading of the spillage, and collect the product by skimming or other suitable mechanical means. The use of dispersants should be advised by an expert, and, if required, approved by local authorities.
6.3 Methods and material for containment and cleaning	up
Small spill	Stop leak if without risk. Absorb spilled product with suitable non-combustible materials.
Large spill	Large spillages may be cautiously covered with foam, if available, to limit vapour cloud formation. Do not use water jet. When inside buildings or confined spaces, ensure adequate ventilation. Transfer collected product and other contaminated materials to suitable containers for recovery or safe disposal.
6.4 Reference to other sections	See Section 1: For emergency contact information. See Section 8: For information on appropriate personal protective equipment. See Section 13: For additional waste treatment information.
Section 7: Handling and Storage	
7.1 Advice on general information – hygiene, storage	Obtain special instructions before use. Keep away from heat / sparks / open flames/hot surfaces. No smoking. Use and store only outdoors or in a well-ventilated area. Hazard of slipping on spilt product. Avoid release to the environment.
7.2 Conditions for safe storage including any incompatibilities	Storage area layout, tank design, equipment and operating procedures must comply with the relevant regional, national or local legislation. Storage installations should be designed with adequate bunds in case of leaks or spills. Cleaning, inspection and maintenance of internal structure of storage tanks must be done only by properly equipped and qualified personnel as defined by national, local or company regulations. Store separately from oxidising agents. Keep only in the original container or in a suitable container for this kind of product. Keep container tightly closed and sealed until ready for use. Do not store in unlabelled containers. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Empty containers may contain harmful, flammable / combustible or explosive residue or vapours. Do not cut, grind, drill, weld, reuse or dispose of containers unless adequate precautions are taken against these hazards. Protect from sunlight.
7.3 Specific end use(s) – Recommendations	Not available



Vapour pressure

Density Solubility (ies)



Section 8: Exposure Controls / Personal Protection	on
The list of Identified Uses in Section 1 should be consulted	ed for any available use-specific information provided in the Exposure Scenario(s).
8.1 Control parameters	
Occupational exposure limits	
Product / Ingredient name	Distillates, mixture of hydrocarbons
Exposure limits values	AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m <sup>3</sup> 8 hours. Form: mist and fume STEL: 3 mg/m <sup>3</sup> 15 minutes. Form: mist and fume [Air contaminant]. AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m <sup>3</sup> 8 hours. Form: mist and fume STEL: 3 mg/m <sup>3</sup> 15 minutes. Form: mist and fume.
Recommended monitoring procedures	If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres – Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres – Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres – General requirements for the performance of procedures for the measurement of chemical agents). Reference to national guidance documents for methods for the determination of hazardous substances will also be required.
8.2 Exposure control Appropriate engineering controls	Mechanical ventilation and local exhaust will reduce exposure via the air. Use oil resistant material in construction of handling equipment. Store under recommended conditions and if heated, temperature control equipment should be used to avoid overheating.
Individual protection measures	
Hygiene measures	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Ensure that eyewash stations and safety showers are close to the workstation location. Wash contaminated clothing before reuse.
Eye / face protection	Recommended: Safety glasses with side shields.
Skin protection	
Hand protection	4 – 8 hours (breakthrough time): nitrile rubber.
Body protection	Wear protective clothing if there is a risk of skin contact. Change contaminated clothes at the end of working shift.
Other skin protection	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary.
Environmental exposure control	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.
Section 9: Physical and Chemical Properties	
Appearance	Clear
Physical state	Homogenous & Greyish Black
Colour	Greyish Black
Odor	Petroleum odor
Odour threshold	Not available
Dropping point	> 185°C (ASTM D -2265)
Flash point	> 200°C (MINERAL OIL)
Evaporation rate	Not available
	Not available
Flammability (solid, gas)	Not available
Flammability (solid, gas) Flammability limits in air (lower), % by volume	Not available



Not volatile

0.88 - 0.95 Kg/L





Solubility (water)     Insoluble in water       Partition coefficient (n-octanol/water)     Not available       Decomposition temperature     No data					
	Insoluble in water Not available				
Auto-ignition temperature Not available					
Worked Penetration at 25°C 350-360 (ASTM D 217)					
Explosive properties No data					
Oxidising properties No data					
DMSO extractable compounds for base oil substance(s) Not available					
according to IP346 <3 %					
Section 10: Stability and Reactivity					
<b>10.1 Reactivity</b> No specific test data related to reactivity available for this product or its ingredients.	No specific test data related to reactivity available for this product or its ingredients.				
10.2 Chemical stability     Stable under normal conditions					
10.3 Possibility of hazardous reactions Under normal conditions of storage and use, hazardous reactions will not occur. Oxidis	ing agent.				
<b>10.4 Conditions to avoid</b> Keep away from extreme heat and oxidising agents.					
<b>10.5 Incompatible materials</b> Incomplete combustion is likely to give rise to a complex mixture of airborne solid and particulates, gases, including carbon monoxide, H <sub>2</sub> S, SO <sub>x</sub> (sulphur oxides) or sulphuric	liquid acid and				
10.6 Hazardous decomposition products unidentified organic and inorganic compounds.					
SECTION 11: Toxicological Information					
11.1 Information on toxicological effects					
Acute toxicity					
Product / ingredient name Result Species Dose	Exposure				
LC 50 Inhalation dusts and mists Rat >2.18mg/l	4 hours				
Distillate (Petroleum), hydro         LD 50 Dermal         Rabbit         > 5000 mg/kg	-				
treated heavy paraffinic LD 50 Oral Rat >5000 mg/kg	_				
Irritation / corrosion					
Skin					
	No known significant effects or critical hazards.				
Respiratory Sensation					
	No known significant effects or critical hazards.				
Skin No known significant effects or critical hazards.					
Respiratory No data available to indicate product or any components present greater than 0.1 % a					
Mutagenicity multigene or genotoxic.	No data available to indicate product or any components present greater than 0.1 % are multigene or genotoxic.				
Carcinogenicity The base oil(s) in this product is based on an severely hydrotreated distillate.					
Reproductive toxicityThe product should not be regarded as a carcinogen. Contains no ingredient listed as toxic to reproduction.					
Specific target organ toxicity – single exposure					
Specific target organ toxicity – repeated exposure					
Aspiration hazard Aspiration hazard – Category 1	Aspiration hazard – Category 1				
Information on likely routes of exposure Not available	Not available				
Potential acute health effects					
Eye contact may cause redness and transient pain.	Eye contact may cause redness and transient pain.				
Inhalation Inhalation of oil mist or vapours at elevated temperatures may cause respiratory irritat	Inhalation of oil mist or vapours at elevated temperatures may cause respiratory irritation.				
Skin contact No known significant effects or critical hazards.					
Ingestion May be fatal if swallowed and enters airways.					
Potential chronic health effects					
General No known significant effects or critical hazards.	No known significant effects or critical hazards.				
	The base oil(s) in this product is based on an severely hydrotreated distillate. The product should not be regarded as a carcinogen.				







Mutagenicity		No known significant effects or critical hazards.				
Teratogenicity						
Product / ingredient name						
Fertility effects		Natariala				
Other information Specific hazard		Not availab	Not available			
Section 12: Ecological Information						
12.1 Toxicity		Not expected to be harmful to aquatic organisms.				
12.2 Persistence and degradability		Not inherently biodegradable.				
12.3 Bioaccumulative potential		Bioaccumulation is unlikely to be significant because of the low water solubility of this product.				
12.4 Mobility in soil		Not considered mobile.				
12.5 Results of PBT & vPvB assessment	:	Not applicable Insoluble in water. Spills may form a film on water surfaces causing physical damage to organisms.				
12.6 Other adverse effects			n water. Spills may form a film of nsfer could also be impaired.	n water surfaces causing physica	al damage to organisms.	
Section 13: Disposal Consideration						
The information in this section contains information provided in the Exposure So	d guidance. T	he list of Identified Uses in Sect	ion 1 should be consulted for ar	ny available use-specific		
Product Methods of disposal	feasible and rec authorisations, or waste substa qualified waste		re possible (e.g. in the absence of relevant contamination), recycling of used substance is ole and recommended. This substance can be burned or incinerated, subject to national/local orisations, relevant contamination limits, safety regulations and air quality legislation. Contaminated ste substance (not directly recyclable): Disposal can be carried out directly, or by delivery to fied waste handlers. National legislation may identify a specific organisation, and/or prescribe position limits and methods for recovery or disposal			
Hazardous waste		Yes				
European waste catalogue (EWC) Waste	Code 13 03 07*	Waste desi	gnation.			
Packaging		Mineral-ba	sed non-chlorinated insulating	and heat transmission oils.		
Methods of disposal		The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.				
Section 14: Transport Information						
International transport regulations						
	ADR / R	ID	ADN	IMO / IMDG Classification	ICAO / IATA Classification	
14.1 UN number	Not regul	ated	Not regulated	Not regulated	Not regulated	
14.2 UN proper shipping name	_		_	_	_	
14.3 Transport hazard class(es)	_		-	_	_	
14.4 Packing group	_		-	_	_	
14.5 Environmental hazards	No		No	No	No	
Additional Information	_		-	-	-	
14.6 Special precautions for user oils						
14.7 Transport in bulk according to An	nex   of MARPOL	73/78 and th	e IBC Code			
Section 15: Regulatory Informatio						
15.1 Safety, health and environmental		slation speci	fic for the substance or mixture	e EU Regulation (EC) No. 1907/	2006 (REACH)	
Annex XIV – List of substances subject to Annex XIV Substances of very high concern		None of the components are listed				
Annex XVII – Restrictions on the manufa on the market and use of certain danger mixtures and articles.		Not applicable				
International Lists National Inventory		Inventory name				
Australia		Australian Inventory of Chemical Substances (AICS) – Yes				
Canada			Domestic Substances List (DSL) – Yes Non-Domestic Substances List (NDSL) – No			
China		Inventory of Existing Chemical Substances in China (IECSC) – Yes				
		inventory o	. Easting chemical substances			







	European Inventory of Existing Commercial Chemical Substances (EINECS) – Yes
Europe	European List of Notified Chemical Substances (ELINCS) – No
Japan	Inventory of Existing and New Chemical Substances (ENCS) – Yes
Korea	Existing Chemicals List (ECL) – Yes
New Zealand	New Zealand Inventory – Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS) – Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory – Yes
	oly with the inventory requirements administered by the governing country(s) uct are not listed or exempt from listing on the inventory administered by the governing country(s).
Section 16: Other Information	
Revision comments	
Legend to abbreviations	
ADR	European agreement concerning the international carriage of dangerous good by road.
RID	Regulations agreement concerning the international carriage of dangerous good by rail.
IMDG Code	International Maritime Dangerous Goods Code.
ICAO	International Civil Aviation Organization.
IATA	International Air Transport Association.
GHS	Globally Harmonized System of Classification and Labeling of Chemicals.
CLP	Classification, Labelling and Packaging Regulation [Regulation (EC) No.1272/2008].
SCBA	Self-Contained Breathing Apparatus.
REACH	Registration, Evaluation, Authorization and Restriction of Chemicals Regulation [Regulation (EC) No. 1907/2006].
LC 50	Median lethal concentration.
LD 50	Median lethal dose.
PBT	Persistent, Bio accumulative and Toxic.

GANDHAR OIL REFINERY (INDIA) LTD.	
Taloja Plant	Plot No.10, MIDC, Main Road, Taloja, Taluka Panvel, District - Raigad 410208, India.
Silvassa Plant	Plot No. 2, Survey No. 678/1/3, Village Naroli, Near Naroli Check Post, Silvassa, Dadra & Nagar Haveli, Union Territory 396230, India.
Emergency / Info Phone No.	Phone: +91-22-40635600 • Fax: +91-22-40635601
Email	info@gandharoil.com





# **DIVYOL TRIBOROL SS 6801 GREASE**

Section 1: Identification of the Substance / Mixt	ure			
1.1 Product identifier				
Product name	Divyol Triborol S	S 6801 Grease		
Product description	,	Stainless Steel Grease		
Product type		Grease		
MARPOL Annex-1	****			
1.2 Identified uses				
Distribution of substance	Automotivo 9 In	ductrial Crosco		
		Automotive & Industrial Grease		
Formulation & (re)packing of substance & mixtures		Automotive & Industrial Grease		
Manufacture of substance	Automotive & Inc			
Functional fluids	Automotive & Inc	Automotive & Industrial Grease		
Section 2: Hazard Identification				
4-Extreme	Health	Health 1		
3-High	Flammability		1	
2-Moderate	Reactivity		0	
1-Slight	Special		-	
Section 3: Compostion / Information on Ingredients				
Chemical Name / Ingredients	% by wt.	Hazardous	CAS No.	
Lithium Hydroxide	0.5 - 3	Yes	1310-66-3	
Mineral Oil	80 - 90	Yes	64742-52-5, 64741-88-4, 64742-54-7, 64742-01-4	
12 HSA	5 - 10	No	106-14-9	
НСО	2 - 5	No	8001-78-3	
Complexing Acid	1 - 3	No	Proprietary Mixture	
Additive Package	0 - 4	Yes	Proprietary Mixture	
Zincdialkyl Dithiophosphate	0 - 4	Yes	68457-79-4	
Butene, Homo Polymer	0 - 4	No	9003-27-4	
Product / Ingredient name	Lithium Complex	k soaps from natu	ral fatty substances	
Section 4: First Aid Measures				
Inhalation exposure	Remove to fresh	air & provide oxy	gen, if breathing is difficult. Contact physician	
Skin contact		inated clothing. Fl s, call a physician.	lush skin with water. Wash skin thoroughly with mild soap & water.	
Swallowing or other	Do not induce vo Get medical advi		al no treatment is necessary unless large quantities are ingested.	
Eye contact	Rinse continuou:	sly with water for	several minutes. Get medical attention, if irritation persists.	
Protection first-aiders	Disconnecting e	Disconnecting electrical supply. Ensure adequate ventilation and check that a safe and breathing area is available before entry into confined spaces.		
Section 5: Fire Fighting Measures		· ·		
5.1 Extinguishing media				
Unsuitable extinguishing media		Use dry powder, foam, carbon dioxide. Do not use direct water and wet chemicals, or water on the burning product. They may spread the fire. Use foam simultaneously on the surface.		
5.2 Special hazards arising from the substance or mix			, · · · · · · · · · · · · · · · · · · ·	
Hazards from the substance or mixture	Flammable liquio flammable vapo		containers may rupture and when exposed to heat, creating a highly	
Hazardous thermal decomposition products	Incomplete com particulates, gase	bustion is likely to	o give rise to a complex mixture of airborne solid and liquid on monoxide, $H_2S$ , $SO_x$ (sulphur oxides) or sulphuric acid and c compounds.	
5.3 Advice for firefighters				
Special precautions for firefighters			oving all persons from the vicinity of the incident if there is a fire. No y personal risk or without suitable training.	
Special protective equipment for firefighters	Firefighters shou (SCBA) with a ful helmets, protect	Ild wear appropria I face- piece opera	ate protective equipment and self-contained breathing apparatus ated in positive pressure mode. Clothing for firefighters (including ves) conforming to European standard EN 469 will provide a basic leve	





6.1 Personal precautions, protective equipment and em	ergency procedures
	Keep non-involved personnel away from the area of spillage.
For non-emergency personnel	Alert emergency personnel. Except in case of small spillages, the feasibility of any actions should always be assessed and advised, if possible, by a trained, competent person in charge of managing the emergency. Stop leak if safe to do so. Avoid direct contact with the product. Stay upwind / keep distance from source. In case of large spillages, alert occupants in downwind areas. Eliminate all ignition sources if safe to do so. Spillages of limited amounts of product, especially in the open air when vapours will be usually quickly dispersed, are dynamic situations, which will presumably limit the exposure to dangerous concentrations. Note : Recommended measures are based on the most likely spillage scenarios for this material; however, local conditions (wind, air temperature, wave / current direction and speed) may significantly influence the choice of appropriate actions.
For emergency responders	For this reason, local experts should be consulted when necessary. Local regulations may also prescribe or limit actions to be taken. Small spillages: Normal antistatic working clothes are usually adequate. Large spillages: Full body suit of chemically resistant and thermal resistant material should be used. Work gloves providing adequate chemical resistance, specifically to aromatic hydrocarbons. Note: Gloves made of PVA are not water-resistant, and are not suitable for emergency use. Safety helmet, antistatic non-skid safety shoes or boots. Goggles and / or face shield, if splashes or contact with eyes is possible or anticipated. Respiratory Protection : A half or full-face respirator with filter(s) for organic vapours (and when applicable for H <sub>2</sub> S) a Self Contained Breathing Apparatus (SCBA) can be used according to the extent of spill and predictable amount of exposure. If the situation cannot be completely assessed, or if an oxygen deficiency is possible, only SCBA's should be used.
6.2 Environmental precautions	Prevent product from entering sewers, rivers or other bodies of water. If necessary dike the product with dry earth, sand or similar non-combustible materials. In case of soil contamination, remove contaminated soil and treat in accordance with local regulations. In case of small spillages in closed waters (i.e. ports), contain product with floating barriers or other equipment. Collect spilled product by absorbing with specific floating absorbents. If possible, large spillages in open waters should be contained with floating barriers or other mechanical means. If this is not possible, control the spreading of the spillage, and collect the product by skimming or other suitable mechanical means. The use of dispersants should be advised by an expert, and, if required, approved by local authorities.
6.3 Methods and material for containment and cleaning	up
Small spill	Stop leak if without risk. Absorb spilled product with suitable non-combustible materials.
Large spill	Large spillages may be cautiously covered with foam, if available, to limit vapour cloud formation. Do not use water jet. When inside buildings or confined spaces, ensure adequate ventilation. Transfer collected product and other contaminated materials to suitable containers for recovery or safe disposal.
6.4 Reference to other sections	See Section 1: For emergency contact information. See Section 8: For information on appropriate personal protective equipment. See Section 13: For additional waste treatment information.
Section 7: Handling and Storage	
7.1 Advice on general information – hygiene, storage	Obtain special instructions before use. Keep away from heat / sparks / open flames/hot surfaces. No smoking. Use and store only outdoors or in a well-ventilated area. Hazard of slipping on spilt product. Avoid release to the environment.
7.2 Conditions for safe storage including any incompatibilities	Storage area layout, tank design, equipment and operating procedures must comply with the relevant regional, national or local legislation. Storage installations should be designed with adequate bunds in case of leaks or spills. Cleaning, inspection and maintenance of internal structure of storage tanks must be done only by properly equipped and qualified personnel as defined by national, local or company regulations. Store separately from oxidising agents. Keep only in the original container or in a suitable container for this kind of product. Keep container tightly closed and sealed until ready for use. Do not store in unlabelled containers. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Empty containers may contain harmful, flammable / combustible or explosive residue or vapours. Do not cut, grind, drill, weld, reuse or dispose of containers unless adequate precautions are taken against these hazards. Protect from sunlight.
7.3 Specific end use(s) – Recommendations	Not available



Vapour pressure Density Solubility (ies)



Section 8: Exposure Controls / Personal Protection	n
-	d for any available use-specific information provided in the Exposure Scenario(s).
8.1 Control parameters	
Occupational exposure limits	
Product / Ingredient name	Distillates, mixture of hydrocarbons
Exposure limits values	AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m <sup>3</sup> 8 hours. Form: mist and fume STEL: 3 mg/m <sup>3</sup> 15 minutes. Form: mist and fume [Air contaminant]. AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m <sup>3</sup> 8 hours. Form: mist and fume STEL: 3 mg/m <sup>3</sup> 15 minutes. Form: mist and fume.
Recommended monitoring procedures	If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres – Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres – Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres – General requirements for the performance of procedures for the measurement of chemical agents). Reference to national guidance documents for methods for the determination of hazardous substances will also be required.
8.2 Exposure control Appropriate engineering controls	Mechanical ventilation and local exhaust will reduce exposure via the air. Use oil resistant material in construction of handling equipment. Store under recommended conditions and if heated, temperature control equipment should be used to avoid overheating.
Individual protection measures	
Hygiene measures	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Ensure that eyewash stations and safety showers are close to the workstation location. Wash contaminated clothing before reuse.
Eye / face protection	Recommended: Safety glasses with side shields.
Skin protection	
Hand protection	4 – 8 hours (breakthrough time): nitrile rubber.
Body protection	Wear protective clothing if there is a risk of skin contact. Change contaminated clothes at the end of working shift.
Other skin protection	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary.
Environmental exposure control	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.
Section 9: Physical and Chemical Properties	
A	Clear
Appearance	
Appearance Physical state	Smooth & Buttery
	Smooth & Buttery Amber
Physical state	
Physical state Colour	Amber
Physical state Colour Odor	Amber Petroleum odor
Physical state Colour Odor Odour threshold	Amber       Petroleum odor       Not available
Physical state Colour Odor Odour threshold Dropping point	Amber         Petroleum odor         Not available         >260°C (ASTM D-2265)
Physical state Colour Odor Odour threshold Dropping point Flash point Evaporation rate Flammability (solid, gas)	Amber         Petroleum odor         Not available         >260°C (ASTM D-2265)         > 230°C (MINERAL OIL)         Not available         Not available
Physical state Colour Odor Odour threshold Dropping point Flash point Evaporation rate Flammability (solid, gas) Flammability limits in air (lower), % by volume	AmberPetroleum odorNot available>260°C (ASTM D-2265)>230°C (MINERAL OIL)Not availableNot availableNot availableNot available
Physical state Colour Odor Odour threshold Dropping point Flash point Evaporation rate Flammability (solid, gas)	Amber         Petroleum odor         Not available         >260°C (ASTM D-2265)         > 230°C (MINERAL OIL)         Not available         Not available



Not volatile

0.88 - 0.95 Kg/L





Solubility (water)		Insoluble in wat	ter			
Partition coefficient (n-octanol/water)		Not available				
Decomposition temperature		No data				
Auto-ignition temperature		Not available				
Worked Penetration at 25°C		300 (ASTM D 217)				
Explosive properties		No data				
Oxidising properties		No data				
DMSO extractable compounds for	base oil substance(s)	Not available				
according to IP346		<3 %				
Section 10: Stability and Rea	ctivity					
10.1 Reactivity		No specific test	data related to reactivity availa	able for this product or its ingr	edients.	
10.2 Chemical stability		Stable under normal conditions				
10.3 Possibility of hazardous rea	ctions	Under normal c	onditions of storage and use, I	nazardous reactions will not o	ccur. Oxidising agent.	
10.4 Conditions to avoid		Keep away from	n extreme heat and oxidising a	gents.		
10.5 Incompatible materials		Incomplete con	nbustion is likely to give rise to	a complex mixture of airborn	e solid and liquid	
10.6 Hazardous decomposition	products	particulates, gases, including carbon monoxide, $H_2S$ , $SO_x$ (sulphur oxides) or sulphuric acid and unidentified organic and inorganic compounds.				
SECTION 11: Toxicological In	formation					
11.1 Information on toxicologica	al effects					
Acute toxicity						
Product / ingredient name	Result		Species	Dose	Exposure	
	LC 50 Inhalation due	sts and mists	Rat	>2.18mg/l	4 hours	
Distillate (Petroleum), hydro treated heavy paraffinic	LD 50 Dermal		Rabbit	> 5000 mg/kg	-	
treated neavy paraminic	LD 50 Oral		Rat	>15000 mg/kg	-	
Irritation / corrosion						
Skin						
Eye		No known signi	No known significant effects or critical hazards.			
Respiratory						
Sensation						
Skin		No known significant effects or critical hazards.				
Respiratory						
Mutagenicity		No data available to indicate product or any components present greater than 0.1 % are multigane or genetoxic				
Carcinogenicity		multigene or genotoxic. The base oil(s) in this product is based on an severely hydrotreated distillate.				
<u> </u>		The product should not be regarded as a carcinogen.				
Reproductive toxicity		Contains no ingredient listed as toxic to reproduction.				
Specific target organ toxicity – single exposure		Not classified				
Specific target organ toxicity – repeated exposure						
Aspiration hazard		Aspiration hazard – Category 1				
Information on likely routes of exposure		Not available				
Potential acute health effects		-				
Eye contact		Eye contact may cause redness and transient pain.				
Inhalation		Inhalation of oil mist or vapours at elevated temperatures may cause respiratory irritation.				
Skin contact		No known significant effects or critical hazards.				
Ingestion		May be fatal if swallowed and enters airways.				
Potential chronic health effects						
General		No known significant effects or critical hazards.				
Carcinogenicity		The base oil(s) in this product is based on an severely hydrotreated distillate. The product should not be regarded as a carcinogen.				





Mutagonicity						
Mutagenicity Teratogenicity						
Teratogenicity Product / ingradiant name		No known s	No known significant effects or critical hazards.			
Product / ingredient name Fertility effects						
Other information Specific hazard		Not availab	lo			
•		NOT availab				
Section 12: Ecological Information		Not over a st				
12.1 Toxicity		Not expected to be harmful to aquatic organisms.				
12.2 Persistence and degradability		Not inherently biodegradable.				
12.3 Bioaccumulative potential		Bioaccumulation is unlikely to be significant because of the low water solubility of this product.				
12.4 Mobility in soil		Not considered mobile.				
12.5 Results of PBT & vPvB assessment		Not applicable				
12.6 Other adverse effects		Insoluble in water. Spills may form a film on water surfaces causing physical damage to organisms. Oxygen transfer could also be impaired.				
Section 13: Disposal Consideration	ns					
The information in this section contains information provided in the Exposure So	generic advice and enario(s).	d guidance. T	he list of Identified Uses in Sect	ion 1 should be consulted for ar	ny available use-specific	
Product Methods of disposal		Where possible (e.g. in the absence of relevant contamination), recycling of used substance is feasible and recommended. This substance can be burned or incinerated, subject to national/local authorisations, relevant contamination limits, safety regulations and air quality legislation. Contaminated or waste substance (not directly recyclable): Disposal can be carried out directly, or by delivery to qualified waste handlers. National legislation may identify a specific organisation, and/or prescribe composition limits and methods for recovery or disposal				
Hazardous waste		Yes				
European waste catalogue (EWC) Waste	Code 13 03 07*	Waste designation.				
Packaging		Mineral-ba	sed non-chlorinated insulating	and heat transmission oils.		
Methods of disposal	1ethods of disposal		The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.			
Section 14: Transport Information						
International transport regulations						
	ADR / R	ID	ADN	IMO / IMDG Classification	ICAO / IATA Classification	
14.1 UN number	Not regulated		Not regulated	Not regulated	Not regulated	
14.2 UN proper shipping name	_		_	_	_	
14.3 Transport hazard class(es)	-		_	-	-	
14.4 Packing group	_		_	_	_	
14.5 Environmental hazards	No		No	No	No	
Additional Information	_		-	_	-	
14.6 Special precautions for user oils						
14.7 Transport in bulk according to An		73/78 and th	e IBC Code			
Section 15: Regulatory Informatio		Si i o anu th				
		dation energy	fic for the substance or misture	ELL Regulation (EC) No. 1007/		
15.1 Safety, health and environmental regulations / legis Annex XIV – List of substances subject to authorisation Annex XIV Substances of very high concern		slation specific for the substance or mixture EU Regulation (EC) No. 1907/2006 (REACH) None of the components are listed				
Annex XVII – Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles.		Not applicable				
International Lists National Inventory		Inventory name				
Australia		Australian Inventory of Chemical Substances (AICS) – Yes				
Canada		Domestic Substances List (DSL) – Yes Non-Domestic Substances List (NDSL) – No				
China						
China Inve			Inventory of Existing Chemical Substances in China (IECSC) – Yes			





Former	European Inventory of Existing Commercial Chemical Substances (EINECS) – Yes			
Europe	European List of Notified Chemical Substances (ELINCS) – No			
Japan	Inventory of Existing and New Chemical Substances (ENCS) – Yes			
Korea	Existing Chemicals List (ECL) – Yes			
New Zealand	New Zealand Inventory – Yes			
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS) – Yes			
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory – Yes			
	oly with the inventory requirements administered by the governing country(s) uct are not listed or exempt from listing on the inventory administered by the governing country(s).			
Section 16: Other Information				
Revision comments				
Legend to abbreviations				
ADR	European agreement concerning the international carriage of dangerous good by road.			
RID	Regulations agreement concerning the international carriage of dangerous good by rail.			
IMDG Code	International Maritime Dangerous Goods Code.			
ICAO	International Civil Aviation Organization.			
IATA	International Air Transport Association.			
GHS	Globally Harmonized System of Classification and Labeling of Chemicals.			
CLP	Classification, Labelling and Packaging Regulation [Regulation (EC) No.1272/2008].			
SCBA	Self-Contained Breathing Apparatus.			
REACH	Registration, Evaluation, Authorization and Restriction of Chemicals Regulation [Regulation (EC) No. 1907/2006].			
LC 50	Median lethal concentration.			
LD 50	Median lethal dose.			
РВТ	Persistent, Bio accumulative and Toxic.			

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Emergency / Info Phone No.	Phone: +91-22-40635600 • Fax: +91-22-40635601	
Email	info@gandharoil.com	





# **DIVYOL TRIBOROL SS 6802 GREASE**

Section 1: Identification of the Substance / Mix 1.1 Product identifier					
	Disual Triberel S	C ( 90 ) C ******			
Product name		Divyol Triborol SS 6802 Grease			
Product description		Stainless Steel Grease			
Product type		Grease			
MARPOL Annex-1	****				
1.2 Identified uses					
Distribution of substance	Automotive & Inc	Automotive & Industrial Grease			
Formulation & (re)packing of substance & mixtures	Automotive & Ind	Automotive & Industrial Grease			
Manufacture of substance	Automotive & Ind	Automotive & Industrial Grease			
Functional fluids	Automotive & Ind	dustrial Grease			
Section 2: Hazard Identification					
4-Extreme	Health		1		
3-High	Flammability		1		
2-Moderate	Reactivity		0		
	-				
1-Slight	Special		-		
Section 3: Compostion / Information on Ingred	ients				
Chemical Name / Ingredients	% by wt.	Hazardous	CAS No.		
Lithium Hydroxide	0.5 - 3	Yes	1310-66-3		
Mineral Oil	80 - 90	Yes	64742-52-5, 64741-88-4, 64742-54-7, 64742-01-4		
12 HSA	5 - 10	No	106-14-9		
HCO	2 - 5	No	8001-78-3		
Complexing Acid	1-3	No	Proprietary Mixture		
Additive Package	0 - 4	Yes	Proprietary Mixture		
Zincdialkyl Dithiophosphate	0 - 4	Yes	68457-79-4		
Butene, Homo Polymer	0 - 4	No	9003-27-4		
Product / Ingredient name	Lithium Complex	soaps from natu	iral fatty substances		
Section 4: First Aid Measures					
Inhalation exposure	Remove to fresh air & provide oxygen, if breathing is difficult. Contact physician				
Skin contact		Remove contaminated clothing. Flush skin with water. Wash skin thoroughly with mild soap & water. If irritation occurs, call a physician.			
Swallowing or other		Do not induce vomiting. In general no treatment is necessary unless large quantities are ingester Get medical advice.			
Eye contact	Rinse continuous	Rinse continuously with water for several minutes. Get medical attention, if irritation persists.			
Protection first-aiders		Disconnecting electrical supply. Ensure adequate ventilation and check that a safe and breathing area is available before entry into confined spaces.			
Section 5: Fire Fighting Measures					
5.1 Extinguishing media					
Unsuitable extinguishing media		Use dry powder, foam, carbon dioxide. Do not use direct water and wet chemicals, or water on the burning product. They may spread the fire. Use foam simultaneously on the surface.			
5.2 Special hazards arising from the substance or mix	cture				
Hazards from the substance or mixture		Flammable liquids in pressurised containers may rupture and when exposed to heat, creating a highly flammable vapour cloud.			
Hazardous thermal decomposition products	particulates, gase	Incomplete combustion is likely to give rise to a complex mixture of airborne solid and liquid particulates, gases, including carbon monoxide, H <sub>2</sub> S, SO <sub>x</sub> (sulphur oxides) or sulphuric acid and unidentified organic and inorganic compounds.			
5.3 Advice for firefighters					
Special precautions for firefighters		Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.			
Special protective equipment for firefighters	Firefighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face- piece operated in positive pressure mode. Clothing for firefighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.				





6.1 Personal precautions, protective equipment and emergency procedures				
For non-emergency personnel	Keep non-involved personnel away from the area of spillage. Alert emergency personnel. Except in case of small spillages, the feasibility of any actions should always be assessed and advised, if possible, by a trained, competent person in charge of managing the emergency. Stop leak if safe to do so. Avoid direct contact with the product. Stay upwind / keep distance from source. In case of large spillages, alert occupants in downwind areas. Eliminate all ignition sources if safe to do so. Spillages of limited amounts of product, especially in the open air when vapours will be usually quickly dispersed, are dynamic situations, which will presumably limit the exposure to dangerous concentrations. Note : Recommended measures are based on the most likely spillage scenarios for this material; however, local conditions (wind, air temperature, wave / current direction and speed) may significantly influence the choice of appropriate actions.			
For emergency responders	For this reason, local experts should be consulted when necessary. Local regulations may also prescribe or limit actions to be taken. Small spillages: Normal antistatic working clothes are usually adequate. Large spillages: Full body suit of chemically resistant and thermal resistant material should be used. Work gloves providing adequate chemical resistance, specifically to aromatic hydrocarbons. Note: Gloves made of PVA are not water-resistant, and are not suitable for emergency use. Safety helmet, antistatic non-skid safety shoes or boots. Goggles and / or face shield, if splashes or contact with eyes is possible or anticipated. Respiratory Protection : A half or full-face respirator with filter(s) for organic vapours (and when applicable for H <sub>2</sub> S) a Self Contained Breathing Apparatus (SCBA) can be used according to the extent of spill and predictable amount of exposure. If the situation cannot be completely assessed, or if an oxygen deficiency is possible, only SCBA's should be used.			
6.2 Environmental precautions	Prevent product from entering sewers, rivers or other bodies of water. If necessary dike the product with dry earth, sand or similar non-combustible materials. In case of soil contamination, remove contaminated soil and treat in accordance with local regulations. In case of small spillages in closed waters (i.e. ports), contain product with floating barriers or other equipment. Collect spilled product by absorbing with specific floating absorbents. If possible, large spillages in open waters should be contained with floating barriers or other mechanical means. If this is not possible, control the spreading of the spillage, and collect the product by skimming or other suitable mechanical means. The use of dispersants should be advised by an expert, and, if required, approved by local authorities.			
6.3 Methods and material for containment and cleaning	up			
Small spill	Stop leak if without risk. Absorb spilled product with suitable non-combustible materials.			
Large spill	Large spillages may be cautiously covered with foam, if available, to limit vapour cloud formation. Do not use water jet. When inside buildings or confined spaces, ensure adequate ventilation. Transfer collected product and other contaminated materials to suitable containers for recovery or safe disposal.			
6.4 Reference to other sections	See Section 1: For emergency contact information. See Section 8: For information on appropriate personal protective equipment. See Section 13: For additional waste treatment information.			
Section 7: Handling and Storage				
7.1 Advice on general information – hygiene, storage	Obtain special instructions before use. Keep away from heat / sparks / open flames/hot surfaces. No smoking. Use and store only outdoors or in a well-ventilated area. Hazard of slipping on spilt product. Avoid release to the environment.			
7.2 Conditions for safe storage including any incompatibilities	Storage area layout, tank design, equipment and operating procedures must comply with the relevant regional, national or local legislation. Storage installations should be designed with adequate bunds in case of leaks or spills. Cleaning, inspection and maintenance of internal structure of storage tanks must be done only by properly equipped and qualified personnel as defined by national, local or company regulations. Store separately from oxidising agents. Keep only in the original container or in a suitable container for this kind of product. Keep container tightly closed and sealed until ready for use. Do not store in unlabelled containers. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Empty containers may contain harmful, flammable / combustible or explosive residue or vapours. Do not cut, grind, drill, weld, reuse or dispose of containers unless adequate precautions are taken against these hazards. Protect from sunlight.			
7.3 Specific end use(s) – Recommendations	Not available			



Density Solubility (ies)



Section 8: Exposure Controls / Personal Prote	ction
The list of Identified Uses in Section 1 should be cons	ulted for any available use-specific information provided in the Exposure Scenario(s).
8.1 Control parameters	
Occupational exposure limits	
Product / Ingredient name	Distillates, mixture of hydrocarbons
Exposure limits values	AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m <sup>3</sup> 8 hours. Form: mist and fume STEL: 3 mg/m <sup>3</sup> 15 minutes. Form: mist and fume [Air contaminant]. AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m <sup>3</sup> 8 hours. Form: mist and fume STEL: 3 mg/m <sup>3</sup> 15 minutes. Form: mist and fume.
Recommended monitoring procedures	If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres – Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres – Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres – General requirements for the performance of procedures for the measurement of chemical agents). Reference to national guidance documents for methods for the determination of hazardous substances will also be required.
8.2 Exposure control Appropriate engineering controls	Mechanical ventilation and local exhaust will reduce exposure via the air. Use oil resistant material in construction of handling equipment. Store under recommended conditions and if heated, temperature control equipment should be used to avoid overheating.
Individual protection measures	
Hygiene measures	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Ensure that eyewash stations and safety showers are close to the workstation location. Wash contaminated clothing before reuse.
Eye / face protection	Recommended: Safety glasses with side shields.
Skin protection	
Hand protection	4 – 8 hours (breakthrough time): nitrile rubber.
Body protection	Wear protective clothing if there is a risk of skin contact. Change contaminated clothes at the end of working shift.
Other skin protection	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary.
Environmental exposure control	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.
Section 9: Physical and Chemical Properties	
Appearance	Clear
Physical state	Smooth & Buttery
Colour	Amber
Odor	Petroleum odor
Odour threshold	Not available
Dropping point	>260°C (ASTM D-2265)
Flash point	> 230°C (MINERAL OIL)
Evaporation rate	Not available
Flammability (solid, gas)	Not available
Flammability limits in air (lower), % by volume	Not available
Flammability limits in air (upper), % by volume	Not available
Vapour pressure	Not volatile



0.88 - 0.95 Kg/L





Solubility (water)		Insoluble in wat	ter		
		Not available			
Decomposition temperature		No data			
· · · · · · · · · · · · · · · · · · ·		Not available			
Worked Penetration at 25°C		300 (ASTM D 21	7)		
Explosive properties		No data	,		
Oxidising properties		No data			
DMSO extractable compounds for	r base oil substance(s)	Not available			
according to IP346		<3 %			
Section 10: Stability and Rea	ctivity				
10.1 Reactivity		No specific test	data related to reactivity availa	able for this product or its ingr	edients.
10.2 Chemical stability		Stable under no	ormal conditions		
10.3 Possibility of hazardous rea	ctions	Under normal c	onditions of storage and use, I	nazardous reactions will not o	ccur. Oxidising agent.
10.4 Conditions to avoid		Keep away from	n extreme heat and oxidising a	gents.	
10.5 Incompatible materials			nbustion is likely to give rise to ses, including carbon monoxic		
10.6 Hazardous decomposition	products		ganic and inorganic compound		
SECTION 11: Toxicological In	formation				
11.1 Information on toxicologica	al effects				
Acute toxicity					
Product / ingredient name	Result		Species	Dose	Exposure
	LC 50 Inhalation due	sts and mists	Rat	>2.18mg/l	4 hours
Distillate (Petroleum), hydro treated heavy paraffinic	LD 50 Derr	nal	Rabbit	> 5000 mg/kg	_
treated heavy paraminic	LD 50 Ora	al	Rat	>15000 mg/kg	-
Irritation / corrosion					
Skin					
Eye		No known significant effects or critical hazards.			
Respiratory					
Sensation					
Skin		No known significant effects or critical hazards.			
Respiratory					
Mutagenicity		No data available to indicate product or any components present greater than 0.1 % are multigene or genotoxic.			
Carcinogenicity			n this product is based on an s	everely hydrotreated distillate	
			•		
Reproductive toxicity		The product should not be regarded as a carcinogen. Contains no ingredient listed as toxic to reproduction.			
Specific target organ toxicity – sin		Not classified			
Specific target organ toxicity – rep	peated exposure				
Aspiration hazard		Aspiration hazard – Category 1			
Information on likely routes of exp	oosure	Not available			
Potential acute health effects					
Eye contact		Eye contact may cause redness and transient pain.			
Inhalation		Inhalation of oil mist or vapours at elevated temperatures may cause respiratory irritation.			
Skin contact			ficant effects or critical hazard	S.	
Ingestion		May be fatal if swallowed and enters airways.			
Potential chronic health effects					
General		No known signi	ficant effects or critical hazard	s.	
Carcinogenicity		The base oil(s) in this product is based on an severely hydrotreated distillate. The product should not be regarded as a carcinogen.			







Mutagenicity						
Teratogenicity						
Product / ingredient name		No known s	significant effects or critical haza	ards.		
Fertility effects						
Other information Specific hazard		Not availab	lo			
•		NOL availab				
Section 12: Ecological Information		Not over a st	ad ta ha hawaful ta awatia awa			
12.1 Toxicity			ed to be harmful to aquatic orga	anisms.		
12.2 Persistence and degradability			ntly biodegradable.		ubilita a fabia yaya aku at	
12.3 Bioaccumulative potential		Bioaccumulation is unlikely to be significant because of the low water solubility of this product. Not considered mobile.				
12.4 Mobility in soil 12.5 Results of PBT & vPvB assessment						
12.5 Results of PBT & VPVB assessment		Not applica	water. Spills may form a film or	a water surfaces causing physic	al damago to organisms	
12.6 Other adverse effects			nsfer could also be impaired.	Twater surfaces causing physics	al damage to organisms.	
Section 13: Disposal Consideration	ns					
The information in this section contains information provided in the Exposure Sc	generic advice and enario(s).	d guidance. T	he list of Identified Uses in Secti	ion 1 should be consulted for ar	ny available use-specific	
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Hazardous waste		Yes				
European waste catalogue (EWC) Waste Code 13 03 07*		Waste designation.				
Packaging		Mineral-ba	sed non-chlorinated insulating	and heat transmission oils.		
Methods of disposal		The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.				
Section 14: Transport Information		-				
International transport regulations						
				ICAO / IATA Classification		
14.1 UN number	Not regul	ated	Not regulated	Not regulated	Not regulated	
14.2 UN proper shipping name	-		_	_	_	
14.3 Transport hazard class(es)	-		-	-	-	
14.4 Packing group	-		_	_	_	
14.5 Environmental hazards	No		No	No	No	
Additional Information	_		_	_	-	
14.6 Special precautions for user oils						
14.7 Transport in bulk according to An		73/78 and th	e IBC Code			
Section 15: Regulatory Informatio		Si i o anu th				
		dation energy	fic for the substance or misture	ELL Regulation (EC) No. 1007/		
Annex XIV – List of substances subject to authorisation Annex XIV – Substances subject to authorisation Annex XIV Substances of very high concern		islation specific for the substance or mixture EU Regulation (EC) No. 1907/2006 (REACH) None of the components are listed				
Annex XVII – Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles.		Not applicable				
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China		Non-Domestic Substances List (NDSL) – No				
China	ina		Inventory of Existing Chemical Substances in China (IECSC) – Yes			





_	European Inventory of Existing Commercial Chemical Substances (EINECS) – Yes
Europe	European List of Notified Chemical Substances (ELINCS) – No
Japan	Inventory of Existing and New Chemical Substances (ENCS) – Yes
Korea	Existing Chemicals List (ECL) – Yes
New Zealand	New Zealand Inventory – Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS) – Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory – Yes
	oly with the inventory requirements administered by the governing country(s) uct are not listed or exempt from listing on the inventory administered by the governing country(s).
Section 16: Other Information	
Revision comments	
Legend to abbreviations	
ADR	European agreement concerning the international carriage of dangerous good by road.
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GHS	Globally Harmonized System of Classification and Labeling of Chemicals.
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SCBA	Self-Contained Breathing Apparatus.
REACH	Registration, Evaluation, Authorization and Restriction of Chemicals Regulation [Regulation (EC) No. 1907/2006].
LC 50	Median lethal concentration.
LD 50	Median lethal dose.
РВТ	Persistent, Bio accumulative and Toxic.

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Emergency / Info Phone No.	Phone: +91-22-40635600 • Fax: +91-22-40635601		
Email	info@gandharoil.com		





## **DIVYOL TRIBOROL RW 2 GREASE**

Section 1: Identification of the Substance / Mixt	ure			
1.1 Product identifier				
Product name	Divyol Triborol WR 2 Grease			
Product description		Water Resistant Grease		
Product type	Grease			
MARPOL Annex-1	****			
1.2 Identified uses				
Distribution of substance	Automotive & Inc	dustrial Grease		
Formulation & (re)packing of substance & mixtures	Automotive & Inc			
Manufacture of substance	Automotive & Inc			
Functional fluids	Automotive & Inc			
Section 2: Hazard Identification	Automotive & mo	uustilai Grease		
	1 La a bila			
4-Extreme	Health		1	
3-High	Flammability		1	
2-Moderate	Reactivity		0	
1-Slight	Special		-	
Section 3: Compostion / Information on Ingredie	ents			
Chemical Name / Ingredients	% by wt.	Hazardous	CAS No.	
Lithium Hydroxide	0.5 - 2	Yes	1310-66-3	
Mineral Oil	75 - 85	Yes	64742-52-5, 64741-88-4, 64742-01-4	
12 HSA	4 - 10	No	106-14-9	
HCO	2-6	No	8001-78-3	
Zincdialkyl Dithiophosphate Calcite	1 - 4 0.5 - 5	Yes No	68457-79-4	
Butene, Homopolymer	1 - 4	No	13397-26-7 9003-27-4	
Additives	0-2	Yes	Proprietary Mixture	
			· · ·	
Product / Ingredient name Section 4: First Aid Measures	Litnium- Calcium	soaps from hatu	ural fatty substances	
	Pomovo to froch	air & provide over	ran if brothing is difficult. Contact physician	
	halation exposure       Remove to fresh air & provide oxygen, if breathing is difficult. Contact physician         Remove contaminated clothing. Flush skin with water. Wash skin thoroughly with mild soap & water.			
Skin contact	If irritation occur	s, call a physician.	L	
Swallowing or other	Do not induce vo Get medical advi		al no treatment is necessary unless large quantities are ingested.	
Eye contact	Rinse continuous	sly with water for	several minutes. Get medical attention, if irritation persists.	
Protection first-aiders		lectrical supply. Er entry into confine	nsure adequate ventilation and check that a safe and breathing area is ed spaces.	
Section 5: Fire Fighting Measures				
5.1 Extinguishing media				
Unsuitable extinguishing media			ixide. Do not use direct water and wet chemicals, or water on the difference of the difference of the surface.	
5.2 Special hazards arising from the substance or mixt	5.	,, op. cuo		
Hazards from the substance or mixture	Flammable liquic flammable vapor		containers may rupture and when exposed to heat, creating a highly	
Hazardous thermal decomposition products	Incomplete combustion is likely to give rise to a complex mixture of airborne solid and liquid particulates, gases, including carbon monoxide, H <sub>2</sub> S, SO <sub>x</sub> (sulphur oxides) or sulphuric acid and unidentified organic and inorganic compounds.			
5.3 Advice for firefighters				
Special precautions for firefighters			noving all persons from the vicinity of the incident if there is a fire. No y personal risk or without suitable training.	
Special protective equipment for firefighters	<ul> <li>action shall be taken involving any personal risk or without suitable training.</li> <li>Firefighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face- piece operated in positive pressure mode. Clothing for firefighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.</li> </ul>			





6.1 Personal precautions, protective equipment and em	ergency procedures			
Keep non-involved personnel away from the area of spillage.				
For non-emergency personnel	Alert emergency personnel. Except in case of small spillage. Alert emergency personnel. Except in case of small spillages, the feasibility of any actions should always be assessed and advised, if possible, by a trained, competent person in charge of managing the emergency. Stop leak if safe to do so. Avoid direct contact with the product. Stay upwind / keep distance from source. In case of large spillages, alert occupants in downwind areas. Eliminate all ignition sources if safe to do so. Spillages of limited amounts of product, especially in the open air when vapours will be usually quickly dispersed, are dynamic situations, which will presumably limit the exposure to dangerous concentrations. Note : Recommended measures are based on the most likely spillage scenarios for this material; however, local conditions (wind, air temperature, wave / current direction and speed) may significantly influence the choice of appropriate actions.			
For emergency responders	For this reason, local experts should be consulted when necessary. Local regulations may also prescribe or limit actions to be taken. Small spillages: Normal antistatic working clothes are usually adequate. Large spillages: Full body suit of chemically resistant and thermal resistant material should be used. Work gloves providing adequate chemical resistance, specifically to aromatic hydrocarbons. Note: Gloves made of PVA are not water-resistant, and are not suitable for emergency use. Safety helmet, antistatic non-skid safety shoes or boots. Goggles and / or face shield, if splashes or contact with eyes is possible or anticipated. Respiratory Protection : A half or full-face respirator with filter(s) for organic vapours (and when applicable for H <sub>2</sub> S) a Self Contained Breathing Apparatus (SCBA) can be used according to the extent of spill and predictable amount of exposure. If the situation cannot be completely assessed, or if an oxygen deficiency is possible, only SCBA's should be used.			
6.2 Environmental precautions	Prevent product from entering sewers, rivers or other bodies of water. If necessary dike the product with dry earth, sand or similar non-combustible materials. In case of soil contamination, remove contaminated soil and treat in accordance with local regulations. In case of small spillages in closed waters (i.e. ports), contain product with floating barriers or other equipment. Collect spilled product by absorbing with specific floating absorbents. If possible, large spillages in open waters should be contained with floating barriers or other mechanical means. If this is not possible, control the spreading of the spillage, and collect the product by skimming or other suitable mechanical means. The use of dispersants should be advised by an expert, and, if required, approved by local authorities.			
6.3 Methods and material for containment and cleaning	up			
Small spill	Stop leak if without risk. Absorb spilled product with suitable non-combustible materials.			
Large spill	Large spillages may be cautiously covered with foam, if available, to limit vapour cloud formation. Do not use water jet. When inside buildings or confined spaces, ensure adequate ventilation. Transfer collected product and other contaminated materials to suitable containers for recovery or safe disposal.			
6.4 Reference to other sections	See Section 1: For emergency contact information. See Section 8: For information on appropriate personal protective equipment. See Section 13: For additional waste treatment information.			
Section 7: Handling and Storage				
7.1 Advice on general information – hygiene, storage	Obtain special instructions before use. Keep away from heat / sparks / open flames/hot surfaces. No smoking. Use and store only outdoors or in a well-ventilated area. Hazard of slipping on spilt product. Avoid release to the environment.			
7.2 Conditions for safe storage including any incompatibilities	Storage area layout, tank design, equipment and operating procedures must comply with the relevant regional, national or local legislation. Storage installations should be designed with adequate bunds in case of leaks or spills. Cleaning, inspection and maintenance of internal structure of storage tanks must be done only by properly equipped and qualified personnel as defined by national, local or company regulations. Store separately from oxidising agents. Keep only in the original container or in a suitable container for this kind of product. Keep container tightly closed and sealed until ready for use. Do not store in unlabelled containers. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Empty containers may contain harmful, flammable / combustible or explosive residue or vapours. Do not cut, grind, drill, weld, reuse or dispose of containers unless adequate precautions are taken against these hazards. Protect from sunlight.			
7.3 Specific end use(s) – Recommendations	Not available			



Vapour pressure Density Solubility (ies)



Section 8: Exposure Controls / Personal Protect	
The list of Identified Uses in Section 1 should be consu	Ited for any available use-specific information provided in the Exposure Scenario(s).
8.1 Control parameters	
Occupational exposure limits	
Product / Ingredient name	Distillates, mixture of hydrocarbons
Exposure limits values	AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m <sup>3</sup> 8 hours. Form: mist and fume STEL: 3 mg/m <sup>3</sup> 15 minutes. Form: mist and fume [Air contaminant]. AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m <sup>3</sup> 8 hours. Form: mist and fume STEL: 3 mg/m <sup>3</sup> 15 minutes. Form: mist and fume.
Recommended monitoring procedures	If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres – Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres – Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres – General requirements for the performance of procedures for the measurement of chemical agents). Reference to national guidance documents for methods for the determination of hazardous substances will also be required.
8.2 Exposure control Appropriate engineering controls	Mechanical ventilation and local exhaust will reduce exposure via the air. Use oil resistant material in construction of handling equipment. Store under recommended conditions and if heated, temperature control equipment should be used to avoid overheating.
Individual protection measures	
Hygiene measures	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Ensure that eyewash stations and safety showers are close to the workstation location. Wash contaminated clothing before reuse.
Eye / face protection	Recommended: Safety glasses with side shields.
Skin protection	
Hand protection	4 – 8 hours (breakthrough time): nitrile rubber.
Body protection	Wear protective clothing if there is a risk of skin contact. Change contaminated clothes at the end of working shift.
Other skin protection	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary.
Environmental exposure control	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.
Section 9: Physical and Chemical Properties	
Appearance	Clear
Physical state	Smooth, Homogenous & Tacky
Colour	Beige Brown
Odor	Petroleum odor
Odour threshold	Not available
Dropping point	>190°C (ASTM D-2265)
Flash point	> 210°C (MINERAL OIL)
Evaporation rate	Not available
Flammability (solid, gas)	Not available
Flammability limits in air (lower), % by volume	Not available
Flammability limits in air (upper), % by volume	Not available
	AL



Not volatile

0.88 - 0.95 Kg/L





Solubility (water)		Insoluble in wa	ter			
•			Not available			
, , ,		No data				
		Not available				
Worked Penetration at 25°C		265-295 (ASTM	D 217)			
Explosive properties		No data				
Oxidising properties		No data				
DMSO extractable compounds for	r base oil substance(s)	Not available				
according to IP346		<3 %				
Section 10: Stability and Rea	ctivity		1. I. I			
10.1 Reactivity			data related to reactivity avail	able for this product or its ingr	edients.	
10.2 Chemical stability			ormal conditions			
10.3 Possibility of hazardous rea	octions		conditions of storage and use,		ccur. Oxidising agent.	
10.4 Conditions to avoid			n extreme heat and oxidising a			
10.5 Incompatible materials		particulates, ga	nbustion is likely to give rise to ises, including carbon monoxic	de, H <sub>2</sub> S, SO <sub>x</sub> (sulphur oxides) or		
10.6 Hazardous decomposition	products	unidentified or	ganic and inorganic compound	ds.		
SECTION 11: Toxicological In	formation					
11.1 Information on toxicologica	al effects					
Acute toxicity						
Product / ingredient name	Result		Species	Dose	Exposure	
	LC 50 Inhalation due	sts and mists	Rat	>2.18mg/l	4 hours	
Distillate (Petroleum), hydro treated heavy paraffinic	LD 50 Derr	nal	Rabbit	> 5000 mg/kg	-	
treated neavy paraminic	LD 50 Ora	al	Rat	>15000 mg/kg	-	
Irritation / corrosion	<u>.</u>					
Skin						
Eye		No known significant effects or critical hazards.				
Respiratory						
Sensation						
Skin						
Respiratory		No known significant effects or critical hazards.				
Mutagenicity		No data available to indicate product or any components present greater than 0.1 % are				
		multigene or ge				
Carcinogenicity			in this product is based on an s		•	
Reproductive toxicity		The product should not be regarded as a carcinogen. Contains no ingredient listed as toxic to reproduction.				
Specific target organ toxicity – sin	igle exposure	Not classified				
Specific target organ toxicity – rep	peated exposure	. tot classified				
Aspiration hazard		Aspiration hazard – Category 1				
Information on likely routes of exp	posure	Not available				
Potential acute health effects						
Eye contact		Eye contact may cause redness and transient pain.				
Inhalation		Inhalation of oil mist or vapours at elevated temperatures may cause respiratory irritation.				
Skin contact		No known sign	ificant effects or critical hazard	s.		
Ingestion		May be fatal if s	swallowed and enters airways.			
Potential chronic health effects						
General		No known signi	ificant effects or critical hazard	s.		
Carcinogenicity		The base oil(s) in this product is based on an severely hydrotreated distillate. The product should not be regarded as a carcinogen.				
Information on likely routes of exp Potential acute health effects Eye contact Inhalation Skin contact Ingestion Potential chronic health effects	oosure	Not available Eye contact ma Inhalation of oi No known signi May be fatal if s	y cause redness and transient I mist or vapours at elevated te ificant effects or critical hazard swallowed and enters airways. ificant effects or critical hazard	emperatures may cause respira s. s.		







Mutagenicity						
Teratogenicity						
Product / ingredient name		No known s	significant effects or critical haza	ards.		
Fertility effects						
Other information Specific hazard		Not availab	lo			
•		NOT availab				
Section 12: Ecological Information		Not over a st	ad ta ha hawaful ta awatia awa			
12.1 Toxicity			ed to be harmful to aquatic orga	anisms.		
12.2 Persistence and degradability			ntly biodegradable.		ubilita a fabia yaya aku at	
12.3 Bioaccumulative potential		Bioaccumulation is unlikely to be significant because of the low water solubility of this product. Not considered mobile.				
12.4 Mobility in soil 12.5 Results of PBT & vPvB assessment						
12.5 Results of PBT & VPVB assessment		Not applica	water. Spills may form a film or	a water surfaces causing physic	al damago to organisms	
12.6 Other adverse effects			nsfer could also be impaired.	Twater surfaces causing physics	al damage to organisms.	
Section 13: Disposal Consideration	ns					
The information in this section contains information provided in the Exposure Sc	generic advice and enario(s).	d guidance. T	he list of Identified Uses in Secti	ion 1 should be consulted for ar	ny available use-specific	
Product Methods of disposal		feasible and authorisatio or waste su qualified w	Where possible (e.g. in the absence of relevant contamination), recycling of used substance is feasible and recommended. This substance can be burned or incinerated, subject to national/local authorisations, relevant contamination limits, safety regulations and air quality legislation. Contaminated or waste substance (not directly recyclable): Disposal can be carried out directly, or by delivery to qualified waste handlers. National legislation may identify a specific organisation, and/or prescribe composition limits and methods for recovery or disposal			
Hazardous waste		Yes				
European waste catalogue (EWC) Waste Code 13 03 07*		Waste designation.				
Packaging		Mineral-ba	sed non-chlorinated insulating	and heat transmission oils.		
Methods of disposal		The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.				
Section 14: Transport Information		-				
International transport regulations						
				ICAO / IATA Classification		
14.1 UN number	Not regul	ated	Not regulated	Not regulated	Not regulated	
14.2 UN proper shipping name	-		_	_	_	
14.3 Transport hazard class(es)	-		-	-	-	
14.4 Packing group	-		_	_	_	
14.5 Environmental hazards	No		No	No	No	
Additional Information	_		_	_	-	
14.6 Special precautions for user oils						
14.7 Transport in bulk according to An		73/78 and th	e IBC Code			
Section 15: Regulatory Informatio		Si i o anu th				
		dation energy	fic for the substance or misture	ELL Regulation (EC) No. 1007/		
Annex XIV – List of substances subject to authorisation Annex XIV – Substances subject to authorisation Annex XIV Substances of very high concern		islation specific for the substance or mixture EU Regulation (EC) No. 1907/2006 (REACH) None of the components are listed				
Annex XVII – Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles.		Not applicable				
International Lists National Inventory		Inventory name				
Australia		Australian Inventory of Chemical Substances (AICS) – Yes				
Canada		Domestic Substances List (DSL) – Yes				
China		Non-Domestic Substances List (NDSL) – No				
China	ina		Inventory of Existing Chemical Substances in China (IECSC) – Yes			





	European Inventory of Existing Commercial Chemical Substances (EINECS) – Yes			
Europe	European List of Notified Chemical Substances (ELINCS) – No			
Japan	Inventory of Existing and New Chemical Substances (ENCS) – Yes			
Korea	Existing Chemicals List (ECL) – Yes			
New Zealand	New Zealand Inventory – Yes			
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS) – Yes			
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory – Yes			
	oly with the inventory requirements administered by the governing country(s) uct are not listed or exempt from listing on the inventory administered by the governing country(s).			
Section 16: Other Information				
Revision comments				
Legend to abbreviations				
ADR	European agreement concerning the international carriage of dangerous good by road.			
RID	Regulations agreement concerning the international carriage of dangerous good by rail.			
IMDG Code	International Maritime Dangerous Goods Code.			
ICAO	International Civil Aviation Organization.			
IATA	International Air Transport Association.			
GHS	Globally Harmonized System of Classification and Labeling of Chemicals.			
CLP	Classification, Labelling and Packaging Regulation [Regulation (EC) No.1272/2008].			
SCBA	Self-Contained Breathing Apparatus.			
REACH	Registration, Evaluation, Authorization and Restriction of Chemicals Regulation [Regulation (EC) No. 1907/2006].			
LC 50	Median lethal concentration.			
LD 50	Median lethal dose.			
РВТ	Persistent, Bio accumulative and Toxic.			

GANDHAR OIL REFINERY (INDIA) LTD.			
Taloja Plant	Plot No.10, MIDC, Main Road, Taloja, Taluka Panvel, District - Raigad 410208, India.		
Silvassa Plant	ot No. 2, Survey No. 678/1/3, Village Naroli, Near Naroli Check Post, Silvassa, Dadra & Nagar Haveli, Union Territory 396230, India.		
Emergency / Info Phone No.	Phone: +91-22-40635600 • Fax: +91-22-40635601		
Email	info@gandharoil.com		





## **DIVYOL TRIBOROL RW 3 GREASE**

Section 1: Identification of the Substance / Mixt	ure						
1.1 Product identifier							
Product name	Divyol Triborol WR 3 Grease						
Product description		Water Resistant Grease					
Product type	Grease						
MARPOL Annex-1	****						
1.2 Identified uses							
Distribution of substance	Automotive & Inc	dustrial Grease					
Formulation & (re)packing of substance & mixtures	Automotive & Inc						
Manufacture of substance	Automotive & Inc						
Functional fluids	Automotive & Inc						
Section 2: Hazard Identification	Automotive & mo	uustilai Grease					
	Lissith		1				
4-Extreme	Health		1				
3-High	Flammability		1				
2-Moderate	Reactivity		0				
1-Slight	Special		-				
Section 3: Compostion / Information on Ingredie	ents						
Chemical Name / Ingredients	% by wt.	Hazardous	CAS No.				
Lithium Hydroxide	0.5 - 2	Yes	1310-66-3				
Mineral Oil	75 - 85	Yes	64742-52-5, 64741-88-4, 64742-01-4				
12 HSA	4 - 10	No	106-14-9				
HCO	2-6	No	8001-78-3				
Zincdialkyl Dithiophosphate Calcite	1 - 4 0.5 - 5	Yes No	68457-79-4				
Butene, Homopolymer	1 - 4	No	13397-26-7 9003-27-4				
Additives	0 - 2	Yes	Proprietary Mixture				
Section 4: First Aid Measures	Product / Ingredient name Lithium- Calcium soaps from natural fatty substances						
Skin contact	If irritation occur	Remove contaminated clothing. Flush skin with water. Wash skin thoroughly with mild soap & water. If irritation occurs, call a physician.					
Swallowing or other		Do not induce vomiting. In general no treatment is necessary unless large quantities are ingested. Get medical advice.					
Eye contact	Rinse continuous	Rinse continuously with water for several minutes. Get medical attention, if irritation persists.					
Protection first-aiders		Disconnecting electrical supply. Ensure adequate ventilation and check that a safe and breathing area is available before entry into confined spaces.					
Section 5: Fire Fighting Measures							
5.1 Extinguishing media							
Unsuitable extinguishing media			xide. Do not use direct water and wet chemicals, or water on the d the fire. Use foam simultaneously on the surface.				
5.2 Special hazards arising from the substance or mixt	5.	,, op. cuo					
Hazards from the substance or mixture	Flammable liquic flammable vapor		containers may rupture and when exposed to heat, creating a highly				
Hazardous thermal decomposition products	Incomplete com particulates, gase	Incomplete combustion is likely to give rise to a complex mixture of airborne solid and liquid particulates, gases, including carbon monoxide, H <sub>2</sub> S, SO <sub>x</sub> (sulphur oxides) or sulphuric acid and unidentified organic and inorganic compounds.					
5.3 Advice for firefighters							
Special precautions for firefighters			noving all persons from the vicinity of the incident if there is a fire. No y personal risk or without suitable training.				
Special protective equipment for firefighters	Firefighters shou (SCBA) with a full helmets, protecti	action shall be taken involving any personal risk or without suitable training. Firefighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face- piece operated in positive pressure mode. Clothing for firefighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.					





6.1 Personal precautions, protective equipment and emergency procedures					
Keep non-involved personnel away from the area of spillage.					
For non-emergency personnel	Alert emergency personnel. Except in case of small spillages, the feasibility of any actions should always be assessed and advised, if possible, by a trained, competent person in charge of managing the emergency. Stop leak if safe to do so. Avoid direct contact with the product. Stay upwind / keep distance from source. In case of large spillages, alert occupants in downwind areas. Eliminate all ignition sources if safe to do so. Spillages of limited amounts of product, especially in the open air when vapours will be usually quickly dispersed, are dynamic situations, which will presumably limit the exposure to dangerous concentrations. Note : Recommended measures are based on the most likely spillage scenarios for this material; however, local conditions (wind, air temperature, wave / current direction and speed) may significantly influence the choice of appropriate actions.				
For emergency responders	For this reason, local experts should be consulted when necessary. Local regulations may also prescribe or limit actions to be taken. Small spillages: Normal antistatic working clothes are usually adequate. Large spillages: Full body suit of chemically resistant and thermal resistant material should be used. Work gloves providing adequate chemical resistance, specifically to aromatic hydrocarbons. Note: Gloves made of PVA are not water-resistant, and are not suitable for emergency use. Safety helmet, antistatic non-skid safety shoes or boots. Goggles and / or face shield, if splashes or contact with eyes is possible or anticipated. Respiratory Protection : A half or full-face respirator with filter(s) for organic vapours (and when applicable for H <sub>2</sub> S) a Self Contained Breathing Apparatus (SCBA) can be used according to the extent of spill and predictable amount of exposure. If the situation cannot be completely assessed, or if an oxygen deficiency is possible, only SCBA's should be used.				
6.2 Environmental precautions	Prevent product from entering sewers, rivers or other bodies of water. If necessary dike the product with dry earth, sand or similar non-combustible materials. In case of soil contamination, remove contaminated soil and treat in accordance with local regulations. In case of small spillages in closed waters (i.e. ports), contain product with floating barriers or other equipment. Collect spilled product by absorbing with specific floating absorbents. If possible, large spillages in open waters should be contained with floating barriers or other mechanical means. If this is not possible, control the spreading of the spillage, and collect the product by skimming or other suitable mechanical means. The use of dispersants should be advised by an expert, and, if required, approved by local authorities.				
6.3 Methods and material for containment and cleaning	up				
Small spill	Stop leak if without risk. Absorb spilled product with suitable non-combustible materials.				
Large spill	Large spillages may be cautiously covered with foam, if available, to limit vapour cloud formation. Do not use water jet. When inside buildings or confined spaces, ensure adequate ventilation. Transfer collected product and other contaminated materials to suitable containers for recovery or safe disposal.				
6.4 Reference to other sections	See Section 1: For emergency contact information. See Section 8: For information on appropriate personal protective equipment. See Section 13: For additional waste treatment information.				
Section 7: Handling and Storage					
7.1 Advice on general information – hygiene, storage	Obtain special instructions before use. Keep away from heat / sparks / open flames/hot surfaces. No smoking. Use and store only outdoors or in a well-ventilated area. Hazard of slipping on spilt product. Avoid release to the environment.				
7.2 Conditions for safe storage including any incompatibilities	Storage area layout, tank design, equipment and operating procedures must comply with the relevant regional, national or local legislation. Storage installations should be designed with adequate bunds in case of leaks or spills. Cleaning, inspection and maintenance of internal structure of storage tanks must be done only by properly equipped and qualified personnel as defined by national, local or company regulations. Store separately from oxidising agents. Keep only in the original container or in a suitable container for this kind of product. Keep container tightly closed and sealed until ready for use. Do not store in unlabelled containers. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Empty containers may contain harmful, flammable / combustible or explosive residue or vapours. Do not cut, grind, drill, weld, reuse or dispose of containers unless adequate precautions are taken against these hazards. Protect from sunlight.				
7.3 Specific end use(s) – Recommendations	Not available				



Vapour pressure

Density Solubility (ies)



Section 8: Exposure Controls / Personal Protection	on
-	ed for any available use-specific information provided in the Exposure Scenario(s).
8.1 Control parameters	
Occupational exposure limits	
Product / Ingredient name	Distillates, mixture of hydrocarbons
Exposure limits values	AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m <sup>3</sup> 8 hours. Form: mist and fume STEL: 3 mg/m <sup>3</sup> 15 minutes. Form: mist and fume [Air contaminant]. AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m <sup>3</sup> 8 hours. Form: mist and fume STEL: 3 mg/m <sup>3</sup> 15 minutes. Form: mist and fume.
Recommended monitoring procedures	If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres – Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres – Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres – General requirements for the performance of procedures for the measurement of chemical agents). Reference to national guidance documents for methods for the determination of hazardous substances will also be required.
8.2 Exposure control Appropriate engineering controls	Mechanical ventilation and local exhaust will reduce exposure via the air. Use oil resistant material in construction of handling equipment. Store under recommended conditions and if heated, temperature control equipment should be used to avoid overheating.
Individual protection measures	
Hygiene measures	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Ensure that eyewash stations and safety showers are close to the workstation location. Wash contaminated clothing before reuse.
Eye / face protection	Recommended: Safety glasses with side shields.
Skin protection	
Hand protection	4 – 8 hours (breakthrough time): nitrile rubber.
Body protection	Wear protective clothing if there is a risk of skin contact. Change contaminated clothes at the end of
	working shift.
Other skin protection	working shift.Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling
Other skin protection	<ul> <li>Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.</li> <li>Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. Use a properly fitted, particulate filter respirator</li> </ul>
Other skin protection Respiratory protection	<ul> <li>Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.</li> <li>Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary.</li> <li>Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable</li> </ul>
Other skin protection Respiratory protection Environmental exposure control	<ul> <li>Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.</li> <li>Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary.</li> <li>Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable</li> </ul>
Other skin protection         Respiratory protection         Environmental exposure control         Section 9: Physical and Chemical Properties	<ul> <li>Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.</li> <li>Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary.</li> <li>Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.</li> </ul>
Other skin protection         Respiratory protection         Environmental exposure control         Section 9: Physical and Chemical Properties         Appearance	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.         Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary.         Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.         Clear
Other skin protection         Respiratory protection         Environmental exposure control         Section 9: Physical and Chemical Properties         Appearance         Physical state	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.         Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary.         Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.         Clear       Smooth, Homogenous & Tacky
Other skin protection         Respiratory protection         Environmental exposure control         Section 9: Physical and Chemical Properties         Appearance         Physical state         Colour	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.         Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary.         Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.         Clear       Smooth, Homogenous & Tacky         Beige Brown       Smooth, Homogenous & Tacky
Other skin protection         Respiratory protection         Environmental exposure control         Section 9: Physical and Chemical Properties         Appearance         Physical state         Colour         Odor	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.         Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary.         Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.         Clear       Smooth, Homogenous & Tacky         Beige Brown       Petroleum odor
Other skin protection         Respiratory protection         Environmental exposure control         Section 9: Physical and Chemical Properties         Appearance         Physical state         Colour         Odor         Odour threshold	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.         Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary.         Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.         Clear       Smooth, Homogenous & Tacky         Beige Brown       Petroleum odor         Not available       Not available
Other skin protection         Respiratory protection         Environmental exposure control         Section 9: Physical and Chemical Properties         Appearance         Physical state         Colour         Odor         Odour threshold         Dropping point	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.         Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary.         Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.         Clear       Smooth, Homogenous & Tacky         Beige Brown       Petroleum odor         Not available       >190°C (ASTM D-2265)
Other skin protection         Respiratory protection         Environmental exposure control         Section 9: Physical and Chemical Properties         Appearance         Physical state         Colour         Odor         Odour threshold         Dropping point         Flash point	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.         Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary.         Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.         Clear       Smooth, Homogenous & Tacky         Beige Brown       Petroleum odor         Not available       >190°C (ASTM D-2265)         > 210°C (MINERAL OIL)       \$210°C (MINERAL OIL)
Other skin protection         Respiratory protection         Environmental exposure control         Section 9: Physical and Chemical Properties         Appearance         Physical state         Colour         Odor         Odour threshold         Dropping point         Flash point         Evaporation rate	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.         Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary.         Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.         Clear       Smooth, Homogenous & Tacky         Beige Brown       Petroleum odor         Not available       >190°C (ASTM D-2265)         > 210°C (MINERAL OIL)       Not available



Not volatile

0.88 - 0.95 Kg/L





Solubility (water)		Insoluble in wat	ter			
		Not available				
Decomposition temperature No data		No data				
Auto-ignition temperature Not availa						
Worked Penetration at 25°C 220-250			D 217)			
Explosive properties No data						
Oxidising properties		No data				
DMSO extractable compounds for	r base oil substance(s)	Not available				
according to IP346 Section 10: Stability and Rea	ctivity	<3 %				
10.1 Reactivity		No specific test data related to reactivity available for this product or its ingredients.				
10.2 Chemical stability			ormal conditions	usic for this product of its high	calcino.	
10.3 Possibility of hazardous rea	octions		conditions of storage and use, I	hazardous reactions will not o	cur Oxidising agent	
10.4 Conditions to avoid			n extreme heat and oxidising a		ceui. Oxidising agent.	
10.5 Incompatible materials		Incomplete con	nbustion is likely to give rise to	a complex mixture of airborn	e solid and liquid	
10.6 Hazardous decomposition	products		ses, including carbon monoxic ganic and inorganic compound		sulphuric acid and	
SECTION 11: Toxicological In	formation					
11.1 Information on toxicologica	al effects					
Acute toxicity						
Product / ingredient name	Result		Species	Dose	Exposure	
	LC 50 Inhalation due	sts and mists	Rat	>2.18mg/l	4 hours	
Distillate (Petroleum), hydro treated heavy paraffinic	LD 50 Derr	nal	Rabbit	> 5000 mg/kg	_	
treated neavy paraminic	LD 50 Ora	al	Rat	>15000 mg/kg	-	
Irritation / corrosion						
Skin						
Eye		No known significant effects or critical hazards.				
Respiratory						
Sensation						
Skin						
Respiratory		No known significant effects or critical hazards.				
Mutagenicity		No data available to indicate product or any components present greater than 0.1 % are				
Carcinogenicity		multigene or genotoxic. The base oil(s) in this product is based on an severely hydrotreated distillate.				
Reproductive toxicity		The product she	ould not be regarded as a carc	inogen.		
Specific target organ toxicity – sin		Contains no ing	redient listed as toxic to repro	auction.		
Specific target organ toxicity – sin		Not classified				
Aspiration hazard	scated exposure	Aspiration haza	Achiestion hazard - Category 1			
	oosure	Aspiration hazard – Category 1 Not available				
Information on likely routes of exposure Not available Potential acute health effects						
Eye contact		Eve contact may	y cause redness and transient	nain		
Inhalation			I mist or vapours at elevated te		tory irritation	
Skin contact			ificant effects or critical hazard			
				э.		
Ingestion						
Potential chronic health effects		Noknowsta	ficant offorts or critical barrow	c		
General			ificant effects or critical hazard		The product chevel and the	
Carcinogenicity The base oil(s) in this product is based on an severely hydrotreated distillate. The product should no regarded as a carcinogen.				. The product should not be		







Mutagenicity						
Teratogenicity						
Product / ingredient name		No known s	significant effects or critical haza	ards.		
Fertility effects						
Other information Specific hazard		Not available				
•						
ection 12: Ecological Information						
12.1 Toxicity		Not expected to be harmful to aquatic organisms.				
12.2 Persistence and degradability			ntly biodegradable.		ubilita a fabia yaya aku at	
12.3 Bioaccumulative potential		Bioaccumulation is unlikely to be significant because of the low water solubility of this product. Not considered mobile.				
12.4 Mobility in soil 12.5 Results of PBT & vPvB assessment						
12.5 Results of PBT & VPVB assessment		Not applica	water. Spills may form a film or	a water surfaces causing physic	al damago to organisms	
12.6 Other adverse effects			nsfer could also be impaired.	Twater surfaces causing physics	al damage to organisms.	
Section 13: Disposal Consideration	ns					
The information in this section contains information provided in the Exposure Sc	generic advice and enario(s).	d guidance. T	he list of Identified Uses in Secti	ion 1 should be consulted for ar	ny available use-specific	
Product Methods of disposal		Where possible (e.g. in the absence of relevant contamination), recycling of used substance is feasible and recommended. This substance can be burned or incinerated, subject to national/local authorisations, relevant contamination limits, safety regulations and air quality legislation. Contaminated or waste substance (not directly recyclable): Disposal can be carried out directly, or by delivery to qualified waste handlers. National legislation may identify a specific organisation, and/or prescribe composition limits and methods for recovery or disposal				
Hazardous waste		Yes				
European waste catalogue (EWC) Waste Code 13 03 07* Waste designation.						
Packaging		Mineral-ba	sed non-chlorinated insulating	and heat transmission oils.		
Methods of disposal			tion of waste should be avoided cineration or landfill should onl	•		
Section 14: Transport Information		-				
International transport regulations	•					
	ADR / R	ID	ADN	IMO / IMDG Classification	ICAO / IATA Classification	
14.1 UN number	Not regul	ated	Not regulated	Not regulated	Not regulated	
14.2 UN proper shipping name	-		_	_	_	
14.3 Transport hazard class(es)	-		-	-	-	
14.4 Packing group	-		_	_	_	
14.5 Environmental hazards	No		No	No	No	
Additional Information	_		_	_	-	
14.6 Special precautions for user oils						
14.7 Transport in bulk according to An		73/78 and th	e IBC Code			
Section 15: Regulatory Informatio		Si i o anu th				
		dation energy	fic for the substance or misture	ELL Regulation (EC) No. 1007/		
Annex XIV – List of substances subject to Annex XIV Substances of very high concern	islation specific for the substance or mixture EU Regulation (EC) No. 1907/2006 (REACH) None of the components are listed					
Annex XVII – Restrictions on the manufa on the market and use of certain danger mixtures and articles.	Not applicable					
International Lists National Inventory		Inventory name				
Australia		Australian I	nventory of Chemical Substanc	es (AICS) – Yes		
Canada			ubstances List (DSL) – Yes stic Substances List (NDSL) – No			
Non-Domestic Substances List (NDSL) – No						
nina Inventory of Existing Chemical Substances in China (IECSC) – Yes						







_	European Inventory of Existing Commercial Chemical Substances (EINECS) – Yes			
Europe	European List of Notified Chemical Substances (ELINCS) – No			
Japan	Inventory of Existing and New Chemical Substances (ENCS) – Yes			
Korea	Existing Chemicals List (ECL) – Yes			
New Zealand	New Zealand Inventory – Yes			
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS) – Yes			
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory – Yes			
	oly with the inventory requirements administered by the governing country(s) uct are not listed or exempt from listing on the inventory administered by the governing country(s).			
Section 16: Other Information				
Revision comments				
Legend to abbreviations				
ADR	European agreement concerning the international carriage of dangerous good by road.			
RID	Regulations agreement concerning the international carriage of dangerous good by rail.			
IMDG Code	International Maritime Dangerous Goods Code.			
ICAO	International Civil Aviation Organization.			
IATA	International Air Transport Association.			
GHS	Globally Harmonized System of Classification and Labeling of Chemicals.			
CLP	Classification, Labelling and Packaging Regulation [Regulation (EC) No.1272/2008].			
SCBA	Self-Contained Breathing Apparatus.			
REACH	Registration, Evaluation, Authorization and Restriction of Chemicals Regulation [Regulation (EC) No. 1907/2006].			
LC 50	Median lethal concentration.			
LD 50	Median lethal dose.			
РВТ	Persistent, Bio accumulative and Toxic.			

GANDHAR OIL REFINERY (INDIA) LTD.				
Taloja Plant	Plot No.10, MIDC, Main Road, Taloja, Taluka Panvel, District - Raigad 410208, India.			
Silvassa Plant	Plot No. 2, Survey No. 678/1/3, Village Naroli, Near Naroli Check Post, Silvassa, Dadra & Nagar Haveli, Union Territory 396230, India.			
Emergency / Info Phone No.	Phone: +91-22-40635600 • Fax: +91-22-40635601			
Email	info@gandharoil.com			





## **DIVYOL TRIBOROL RW 0 GREASE**

Section 1: Identification of the Substance / Mixt	ture						
1.1 Product identifier							
Product name	Divyol Triborol RW 0 Grease						
Product description	Wire Rope Grease						
Product type	Grease						
MARPOL Annex-1	****						
1.2 Identified uses							
	Automotive 0 to doubtiel Course						
Distribution of substance	Automotive & Industrial Grease						
Formulation & (re)packing of substance & mixtures		Automotive & Industrial Grease					
Manufacture of substance	Automotive & Industrial Grease						
Functional fluids	Automotive & Industrial Grease						
Section 2: Hazard Identification							
4-Extreme	Health	1					
3-High	Flammability	1					
2-Moderate	Reactivity	0					
1-Slight	Special	-					
Section 3: Compostion / Information on Ingred	•						
Chemical Name / Ingredients	% by wt.	Hazardous	CAS No.				
Bentonite	2-6	No	68953-58-2				
Propylene Carbonate	0.5 - 2	Yes	108-32-7				
Mineral Oil Molybdenum Disulfide	85 - 95 0 - 4	Yes Yes	64742-01-4, 64741-88-4				
Mix Additives	2.5 - 6	Yes	1317-33-5 Proprietary Mixture				
WS2	0-3	Yes	12138-09-9				
Graphite	0-3	Yes	7782-42-5				
Product / Ingredient name	Clay soaps from natural fatty sub	ostances					
Section 4: First Aid Measures							
Inhalation exposure	Remove to fresh air & provide oxygen, if breathing is difficult. Contact physician						
Skin contact	Remove contaminated clothing. I If irritation occurs, call a physiciar	Flush skin with water. Wash skin tho 1.	proughly with mild soap & water.				
Swallowing or other	Do not induce vomiting. In gener Get medical advice.	Do not induce vomiting. In general no treatment is necessary unless large quantities are ingested. Get medical advice.					
Eye contact	Rinse continuously with water for	r several minutes. Get medical atter	ntion, if irritation persists.				
Protection first-aiders	5 11 7	Disconnecting electrical supply. Ensure adequate ventilation and check that a safe and breathing area is available before entry into confined spaces.					
Section 5: Fire Fighting Measures							
5.1 Extinguishing media							
Unsuitable extinguishing media		oxide. Do not use direct water and v Ind the fire. Use foam simultaneously					
5.2 Special hazards arising from the substance or mix	51 7 71						
Hazards from the substance or mixture		containers may rupture and when	exposed to heat, creating a highly				
Hazardous thermal decomposition products	Incomplete combustion is likely to give rise to a complex mixture of airborne solid and liquid particulates, gases, including carbon monoxide, H <sub>2</sub> S, SO <sub>x</sub> (sulphur oxides) or sulphuric acid and unidentified organic and inorganic compounds.						
5.3 Advice for firefighters							
Special precautions for firefighters		noving all persons from the vicinity by personal risk or without suitable					
Special protective equipment for firefighters	Firefighters should wear appropri (SCBA) with a full face- piece ope	iate protective equipment and self- rated in positive pressure mode. Clo pves) conforming to European stand	contained breathing apparatus				





6.1 Personal precautions, protective equipment and emergency procedures					
For non-emergency personnel	Keep non-involved personnel away from the area of spillage. Alert emergency personnel. Except in case of small spillages, the feasibility of any actions should always be assessed and advised, if possible, by a trained, competent person in charge of managing the emergency. Stop leak if safe to do so. Avoid direct contact with the product. Stay upwind / keep distance from source. In case of large spillages, alert occupants in downwind areas. Eliminate all ignition sources if safe to do so. Spillages of limited amounts of product, especially in the open air when vapours will be usually quickly dispersed, are dynamic situations, which will presumably limit the exposure to dangerous concentrations. Note : Recommended measures are based on the most likely spillage scenarios for this material; however, local conditions (wind, air temperature, wave / current direction and speed) may significantly influence the choice of appropriate actions.				
For emergency responders	For this reason, local experts should be consulted when necessary. Local regulations may also prescribe or limit actions to be taken. Small spillages: Normal antistatic working clothes are usually adequate. Large spillages: Full body suit of chemically resistant and thermal resistant material should be used. Work gloves providing adequate chemical resistance, specifically to aromatic hydrocarbons. Note: Gloves made of PVA are not water-resistant, and are not suitable for emergency use. Safety helmet, antistatic non-skid safety shoes or boots. Goggles and / or face shield, if splashes or contact with eyes is possible or anticipated. Respiratory Protection : A half or full-face respirator with filter(s) for organic vapours (and when applicable for H <sub>2</sub> S) a Self Contained Breathing Apparatus (SCBA) can be used according to the extent of spill and predictable amount of exposure. If the situation cannot be completely assessed, or if an oxygen deficiency is possible, only SCBA's should be used.				
6.2 Environmental precautions	Prevent product from entering sewers, rivers or other bodies of water. If necessary dike the product with dry earth, sand or similar non-combustible materials. In case of soil contamination, remove contaminated soil and treat in accordance with local regulations. In case of small spillages in closed waters (i.e. ports), contain product with floating barriers or other equipment. Collect spilled product by absorbing with specific floating absorbents. If possible, large spillages in open waters should be contained with floating barriers or other mechanical means. If this is not possible, control the spreading of the spillage, and collect the product by skimming or other suitable mechanical means. The use of dispersants should be advised by an expert, and, if required, approved by local authorities.				
6.3 Methods and material for containment and cleaning	up				
Small spill	Stop leak if without risk. Absorb spilled product with suitable non-combustible materials.				
Large spill	Large spillages may be cautiously covered with foam, if available, to limit vapour cloud formation. Do not use water jet. When inside buildings or confined spaces, ensure adequate ventilation. Transfer collected product and other contaminated materials to suitable containers for recovery or safe disposal.				
6.4 Reference to other sections	See Section 1: For emergency contact information. See Section 8: For information on appropriate personal protective equipment. See Section 13: For additional waste treatment information.				
Section 7: Handling and Storage					
7.1 Advice on general information – hygiene, storage	Obtain special instructions before use. Keep away from heat / sparks / open flames/hot surfaces. No smoking. Use and store only outdoors or in a well-ventilated area. Hazard of slipping on spilt product. Avoid release to the environment.				
7.2 Conditions for safe storage including any incompatibilities	Storage area layout, tank design, equipment and operating procedures must comply with the relevant regional, national or local legislation. Storage installations should be designed with adequate bunds in case of leaks or spills. Cleaning, inspection and maintenance of internal structure of storage tanks must be done only by properly equipped and qualified personnel as defined by national, local or company regulations. Store separately from oxidising agents. Keep only in the original container or in a suitable container for this kind of product. Keep container tightly closed and sealed until ready for use. Do not store in unlabelled containers. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Empty containers may contain harmful, flammable / combustible or explosive residue or vapours. Do not cut, grind, drill, weld, reuse or dispose of containers unless adequate precautions are taken against these hazards. Protect from sunlight.				
7.3 Specific end use(s) – Recommendations	Not available				



Density Solubility (ies)



Section 8: Exposure Controls / Personal Protect	tion
The list of Identified Uses in Section 1 should be consu	Ited for any available use-specific information provided in the Exposure Scenario(s).
8.1 Control parameters	
Occupational exposure limits	
Product / Ingredient name	Distillates, mixture of hydrocarbons
Exposure limits values	AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m <sup>3</sup> 8 hours. Form: mist and fume STEL: 3 mg/m <sup>3</sup> 15 minutes. Form: mist and fume [Air contaminant]. AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m <sup>3</sup> 8 hours. Form: mist and fume STEL: 3 mg/m <sup>3</sup> 15 minutes. Form: mist and fume.
Recommended monitoring procedures	If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres – Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres – Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres – General requirements for the performance of procedures for the measurement of chemical agents). Reference to national guidance documents for methods for the determination of hazardous substances will also be required.
8.2 Exposure control Appropriate engineering controls	Mechanical ventilation and local exhaust will reduce exposure via the air. Use oil resistant material in construction of handling equipment. Store under recommended conditions and if heated, temperature control equipment should be used to avoid overheating.
Individual protection measures	
Hygiene measures	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Ensure that eyewash stations and safety showers are close to the workstation location. Wash contaminated clothing before reuse.
Eye / face protection	Recommended: Safety glasses with side shields.
Skin protection	
Hand protection	4 – 8 hours (breakthrough time): nitrile rubber.
Body protection	Wear protective clothing if there is a risk of skin contact. Change contaminated clothes at the end of working shift.
Other skin protection	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary.
Environmental exposure control	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.
Section 9: Physical and Chemical Properties	
Appearance	Clear
Physical state	Smooth
Colour	Greyish Black
Odor	Petroleum odor
Odour threshold	Not available
Dropping point	> 250°C (ASTM D566)
Flash point	> 240°C (MINERAL OIL)
Evaporation rate	Not available
Flammability (solid, gas)	Not available
Flammability limits in air (lower), % by volume	Not available
Flammability limits in air (upper), % by volume	Not available
Vapour pressure	Not volatile



0.89 - 0.92 Kg/L





Solubility (water)		Insoluble in wat	ter			
Partition coefficient (n-octanol/water) Not availab						
Decomposition temperature No data						
Auto-ignition temperature		Not available				
			D 217)			
			0217)			
Explosive properties		No data No data				
Oxidising properties DMSO extractable compounds for	r baca ail substanca(s)					
according to IP346		Not available <3 %				
Section 10: Stability and Rea	ctivity					
10.1 Reactivity		No specific test	data related to reactivity avail	able for this product or its ingr	edients.	
10.2 Chemical stability			ormal conditions			
10.3 Possibility of hazardous rea	octions	Under normal c	conditions of storage and use, I	hazardous reactions will not o	ccur. Oxidising agent.	
10.4 Conditions to avoid		Keep away from	n extreme heat and oxidising a	igents.		
10.5 Incompatible materials		Incomplete con particulates, ga	nbustion is likely to give rise to ses, including carbon monoxic	a complex mixture of airborn de, H <sub>2</sub> S, SO, (sulphur oxides) or	e solid and liquid sulphuric acid and	
10.6 Hazardous decomposition	products		ganic and inorganic compound			
SECTION 11: Toxicological In	formation					
11.1 Information on toxicologica	al effects					
Acute toxicity						
Product / ingredient name	Result		Species	Dose	Exposure	
	LC 50 Inhalation due	sts and mists	Rat	>2.18mg/l	4 hours	
Distillate (Petroleum), hydro	LD 50 Dermal		Rabbit	> 5000 mg/kg	-	
treated heavy paraffinic	LD 50 Ora	al	Rat	>15000 mg/kg	_	
Irritation / corrosion						
Skin						
Eye		No known significant affects or critical bazards				
•		No known significant effects or critical hazards.				
Respiratory Sensation						
Skin						
		No known significant effects or critical hazards.				
Respiratory						
Mutagenicity		No data available to indicate product or any components present greater than 0.1 % are multigene or genotoxic.				
Carcinogenicity			n this product is based on an s		•	
Reproductive toxicity			hould not be regarded as a carcinogen. Igredient listed as toxic to reproduction.			
Specific target organ toxicity – sin	gle exposure	Not do 10				
Specific target organ toxicity – rep		Not classified				
Aspiration hazard		Aspiration hazard – Category 1				
Information on likely routes of exp	oosure	Not available				
Potential acute health effects						
Eye contact		Eye contact may cause redness and transient pain.				
Inhalation			I mist or vapours at elevated te	•	atory irritation.	
Skin contact			ificant effects or critical hazard			
Ingestion		May be fatal if swallowed and enters airways.				
Potential chronic health effects			in a chier and chier an ways.			
General		No known signi	ificant effects or critical hazard	ς		
					The product should not be	
Carcinogenicity The base oil(s) in this product is based on an severely hydrotreated distillate. The product should not regarded as a carcinogen.				a me product should hot be		







Mutagenicity Teratogenicity Product / ingredient name Fertility effects Other information Specific hazard Section 12: Ecological Information 12.1 Toxicity		No known s						
Product / ingredient name Fertility effects Other information Specific hazard Section 12: Ecological Information		No known s						
Fertility effects Other information Specific hazard Section 12: Ecological Information			significant effects or critical haz	ards.				
Other information Specific hazard Section 12: Ecological Information								
Section 12: Ecological Information		Not available						
		Not expect	ed to be harmful to aquatic org	anisms				
12.2. Develotonce and degradability			dilisiiis.					
12.2 Persistence and degradability 12.3 Bioaccumulative potential		Not inherently biodegradable. Bioaccumulation is unlikely to be significant because of the low water solubility of this product.						
12.4 Mobility in soil				The because of the low water solu	ibility of this product.			
12.5 Results of PBT & vPvB assessment		Not considered mobile. Not applicable						
12.6 Other adverse effects		Insoluble in		n water surfaces causing physica	al damage to organisms.			
Section 13: Disposal Considerations		Oxygentia	nsiel could also be impaired.					
The information in this section contains ger information provided in the Exposure Scena		l guidance. T	he list of Identified Uses in Sect	ion 1 should be consulted for ar	ny available use-specific			
Product Methods of disposal		Where possible (e.g. in the absence of relevant contamination), recycling of used substance is feasible and recommended. This substance can be burned or incinerated, subject to national/local authorisations, relevant contamination limits, safety regulations and air quality legislation. Contaminated or waste substance (not directly recyclable): Disposal can be carried out directly, or by delivery to qualified waste handlers. National legislation may identify a specific organisation, and/or prescribe composition limits and methods for recovery or disposal						
Hazardous waste		Yes						
European waste catalogue (EWC) Waste Coo	opean waste catalogue (EWC) Waste Code 13 03 07* Waste designation.							
Packaging		Mineral-based non-chlorinated insulating and heat transmission oils.						
Methods of disposal		The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.						
Section 14: Transport Information								
International transport regulations								
	ADR / R	ID	ADN	IMO / IMDG Classification	ICAO / IATA Classification			
14.1 UN number	Not regula	ated	Not regulated	Not regulated	Not regulated			
14.2 UN proper shipping name	-		_	-	_			
14.3 Transport hazard class(es)	-		-	-	_			
14.4 Packing group	-		-	-	_			
14.5 Environmental hazards	No		No	No	No			
Additional Information	_		_	-	_			
14.6 Special precautions for user oils								
14.7 Transport in bulk according to Annex	of MARPOL 7	/3/78 and th	e IBC Code					
Section 15: Regulatory Information								
15.1 Safety, health and environmental reg	ulations / legis	slation speci	fic for the substance or mixtur	e EU Regulation (EC) No. 1907/	2006 (REACH)			
Annex XIV – List of substances subject to au Annex XIV Substances of very high concern	None of the components are listed							
Annex XVII – Restrictions on the manufactu on the market and use of certain dangerous mixtures and articles.	Not applicable							
International Lists National Inventory		Inventory name						
Australia		Australian Inventory of Chemical Substances (AICS) – Yes						
Canada				Domestic Substances List (DSL) – Yes Non-Domestic Substances List (NDSL) – No				
China	Inventory of Existing Chemical Substances in China (IECSC) – Yes							







_	European Inventory of Existing Commercial Chemical Substances (EINECS) – Yes	
Europe	European List of Notified Chemical Substances (ELINCS) – No	
Japan	Inventory of Existing and New Chemical Substances (ENCS) – Yes	
Korea	Existing Chemicals List (ECL) – Yes	
New Zealand	New Zealand Inventory – Yes	
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS) – Yes	
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory – Yes	
	oly with the inventory requirements administered by the governing country(s) uct are not listed or exempt from listing on the inventory administered by the governing country(s).	
Section 16: Other Information		
Revision comments		
Legend to abbreviations		
ADR	European agreement concerning the international carriage of dangerous good by road.	
RID	Regulations agreement concerning the international carriage of dangerous good by rail.	
IMDG Code	International Maritime Dangerous Goods Code.	
ICAO	International Civil Aviation Organization.	
IATA	International Air Transport Association.	
GHS	Globally Harmonized System of Classification and Labeling of Chemicals.	
CLP	Classification, Labelling and Packaging Regulation [Regulation (EC) No.1272/2008].	
SCBA	Self-Contained Breathing Apparatus.	
REACH	Registration, Evaluation, Authorization and Restriction of Chemicals Regulation [Regulation (EC) No. 1907/2006].	
LC 50	Median lethal concentration.	
LD 50	Median lethal dose.	
РВТ	Persistent, Bio accumulative and Toxic.	

GANDHAR OIL REFINERY (INDIA) LTD.		
Taloja Plant	Plot No.10, MIDC, Main Road, Taloja, Taluka Panvel, District - Raigad 410208, India.	
Silvassa Plant	Plot No. 2, Survey No. 678/1/3, Village Naroli, Near Naroli Check Post, Silvassa, Dadra & Nagar Haveli, Union Territory 396230, India.	
Emergency / Info Phone No. Phone: +91-22-40635600 • Fax: +91-22-40635601		
Email info@gandharoil.com		





# **DIVYOL TRIBOROL RW 00 GREASE**

Section 1: Identification of the Substance / Mix	ture			
1.1 Product identifier				
Product name	Divyol Triborol RW 00 Grease			
Product description	Wire Rope Grease			
Product type	Grease			
MARPOL Annex-1	****			
1.2 Identified uses				
Distribution of substance	Automotive & Industrial Grease			
Formulation & (re)packing of substance & mixtures	Automotive & Industrial Grease			
Manufacture of substance	Automotive & Industrial Grease			
Functional fluids	Automotive & Industrial Grease			
Section 2: Hazard Identification				
4-Extreme	Health	1		
3-High	Flammability	1		
2-Moderate	Reactivity	0		
1-Slight	Special	-		
Section 3: Compostion / Information on Ingred	ients			
Chemical Name / Ingredients	% by wt.	Hazardous	CAS No.	
Bentonite	2-6	No	68953-58-2	
Propylene Carbonate	0.5 - 2	Yes	108-32-7	
Mineral Oil	85 - 95	Yes	64742-01-4, 64741-88-4	
Molybdenum Disulfide	0 - 4	Yes	1317-33-5	
Mix Additives	2.5 - 6	Yes	Proprietary Mixture	
WS2	0-3	Yes	12138-09-9	
Graphite	0 - 3	Yes	7782-42-5	
Product / Ingredient name	Clay soaps from natural fatty sub	ostances		
Section 4: First Aid Measures				
Inhalation exposure	Remove to fresh air & provide oxy	ygen, if breathing is difficult. Conta	ct physician	
Skin contact		Remove contaminated clothing. Flush skin with water. Wash skin thoroughly with mild soap & water. If irritation occurs, call a physician.		
Swallowing or other	Do not induce vomiting. In gener Get medical advice.	Do not induce vomiting. In general no treatment is necessary unless large quantities are ingested. Get medical advice.		
Eye contact	Rinse continuously with water for	r several minutes. Get medical atter	ntion, if irritation persists.	
Protection first-aiders	Disconnecting electrical supply. I available before entry into confin		eck that a safe and breathing area is	
Section 5: Fire Fighting Measures				
5.1 Extinguishing media				
Unsuitable extinguishing media		Use dry powder, foam, carbon dioxide. Do not use direct water and wet chemicals, or water on the burning product. They may spread the fire. Use foam simultaneously on the surface.		
5.2 Special hazards arising from the substance or mix	ture			
Hazards from the substance or mixture	Flammable liquids in pressurised flammable vapour cloud.	Flammable liquids in pressurised containers may rupture and when exposed to heat, creating a highly		
Hazardous thermal decomposition products	Incomplete combustion is likely to give rise to a complex mixture of airborne solid and liquid particulates, gases, including carbon monoxide, H <sub>2</sub> S, SO <sub>x</sub> (sulphur oxides) or sulphuric acid and unidentified organic and inorganic compounds.			
5.3 Advice for firefighters				
Special precautions for firefighters		Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.		
Special protective equipment for firefighters	Firefighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face- piece operated in positive pressure mode. Clothing for firefighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.			





6.1 Personal precautions, protective equipment and emergency procedures		
	Keep non-involved personnel away from the area of spillage.	
For non-emergency personnel	Alert emergency personnel. Except in case of small spillages, the feasibility of any actions should always be assessed and advised, if possible, by a trained, competent person in charge of managing the emergency. Stop leak if safe to do so. Avoid direct contact with the product. Stay upwind / keep distance from source. In case of large spillages, alert occupants in downwind areas. Eliminate all ignition sources if safe to do so. Spillages of limited amounts of product, especially in the open air when vapours will be usually quickly dispersed, are dynamic situations, which will presumably limit the exposure to dangerous concentrations. Note : Recommended measures are based on the most likely spillage scenarios for this material; however, local conditions (wind, air temperature, wave / current direction and speed) may significantly influence the choice of appropriate actions.	
For emergency responders	For this reason, local experts should be consulted when necessary. Local regulations may also prescribe or limit actions to be taken. Small spillages: Normal antistatic working clothes are usually adequate. Large spillages: Full body suit of chemically resistant and thermal resistant material should be used. Work gloves providing adequate chemical resistance, specifically to aromatic hydrocarbons. Note: Gloves made of PVA are not water-resistant, and are not suitable for emergency use. Safety helmet, antistatic non-skid safety shoes or boots. Goggles and / or face shield, if splashes or contact with eyes is possible or anticipated. Respiratory Protection : A half or full-face respirator with filter(s) for organic vapours (and when applicable for H <sub>2</sub> S) a Self Contained Breathing Apparatus (SCBA) can be used according to the extent of spill and predictable amount of exposure. If the situation cannot be completely assessed, or if an oxygen deficiency is possible, only SCBA's should be used.	
6.2 Environmental precautions	Prevent product from entering sewers, rivers or other bodies of water. If necessary dike the product with dry earth, sand or similar non-combustible materials. In case of soil contamination, remove contaminated soil and treat in accordance with local regulations. In case of small spillages in closed waters (i.e. ports), contain product with floating barriers or other equipment. Collect spilled product by absorbing with specific floating absorbents. If possible, large spillages in open waters should be contained with floating barriers or other mechanical means. If this is not possible, control the spreading of the spillage, and collect the product by skimming or other suitable mechanical means. The use of dispersants should be advised by an expert, and, if required, approved by local authorities.	
6.3 Methods and material for containment and cleaning up		
Small spill	Stop leak if without risk. Absorb spilled product with suitable non-combustible materials.	
Large spill	Large spillages may be cautiously covered with foam, if available, to limit vapour cloud formation. Do not use water jet. When inside buildings or confined spaces, ensure adequate ventilation. Transfer collected product and other contaminated materials to suitable containers for recovery or safe disposal.	
6.4 Reference to other sections	See Section 1: For emergency contact information. See Section 8: For information on appropriate personal protective equipment. See Section 13: For additional waste treatment information.	
Section 7: Handling and Storage		
7.1 Advice on general information – hygiene, storage	Obtain special instructions before use. Keep away from heat / sparks / open flames/hot surfaces. No smoking. Use and store only outdoors or in a well-ventilated area. Hazard of slipping on spilt product. Avoid release to the environment.	
7.2 Conditions for safe storage including any incompatibilities	Storage area layout, tank design, equipment and operating procedures must comply with the relevant regional, national or local legislation. Storage installations should be designed with adequate bunds in case of leaks or spills. Cleaning, inspection and maintenance of internal structure of storage tanks must be done only by properly equipped and qualified personnel as defined by national, local or company regulations. Store separately from oxidising agents. Keep only in the original container or in a suitable container for this kind of product. Keep container tightly closed and sealed until ready for use. Do not store in unlabelled containers. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Empty containers may contain harmful, flammable / combustible or explosive residue or vapours. Do not cut, grind, drill, weld, reuse or dispose of containers unless adequate precautions are taken against these hazards. Protect from sunlight.	
7.3 Specific end use(s) – Recommendations	Not available	



Density Solubility (ies)



Section 8: Exposure Controls / Personal Protect	tion
The list of Identified Uses in Section 1 should be consu	Ited for any available use-specific information provided in the Exposure Scenario(s).
8.1 Control parameters	
Occupational exposure limits	
Product / Ingredient name	Distillates, mixture of hydrocarbons
Exposure limits values	AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m <sup>3</sup> 8 hours. Form: mist and fume STEL: 3 mg/m <sup>3</sup> 15 minutes. Form: mist and fume [Air contaminant]. AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m <sup>3</sup> 8 hours. Form: mist and fume STEL: 3 mg/m <sup>3</sup> 15 minutes. Form: mist and fume.
Recommended monitoring procedures	If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres – Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres – Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres – General requirements for the performance of procedures for the measurement of chemical agents). Reference to national guidance documents for methods for the determination of hazardous substances will also be required.
8.2 Exposure control Appropriate engineering controls	Mechanical ventilation and local exhaust will reduce exposure via the air. Use oil resistant material in construction of handling equipment. Store under recommended conditions and if heated, temperature control equipment should be used to avoid overheating.
Individual protection measures	
Hygiene measures	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Ensure that eyewash stations and safety showers are close to the workstation location. Wash contaminated clothing before reuse.
Eye / face protection	Recommended: Safety glasses with side shields.
Skin protection	
Hand protection	4 – 8 hours (breakthrough time): nitrile rubber.
Body protection	Wear protective clothing if there is a risk of skin contact. Change contaminated clothes at the end of working shift.
Other skin protection	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary.
Environmental exposure control	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.
Section 9: Physical and Chemical Properties	
Appearance	Clear
Physical state	Smooth
Colour	Greyish Black
Odor	Petroleum odor
Odour threshold	Not available
Dropping point	> 250°C (ASTM D566)
Flash point	> 240°C (MINERAL OIL)
Evaporation rate	Not available
Flammability (solid, gas)	Not available
Flammability limits in air (lower), % by volume	Not available
Flammability limits in air (upper), % by volume	Not available
Vapour pressure	Not volatile



0.89 - 0.92 Kg/L





Solubility (water)     Insoluble in water       Partition coefficient (n-octanol/water)     Not available				
raitition coencient (n-octanoi/ water) Not available	Insoluble in water Not available			
Decomposition temperature No data				
Auto-ignition temperature     Not available				
Worked Penetration at 25°C 400-430 (ASTM D 217)				
Explosive properties No data				
Oxidising properties No data				
DMSO extractable compounds for base oil substance(s) Not available				
according to IP346 <3 %				
Section 10: Stability and Reactivity				
10.1 Reactivity No specific test data related to reactivity available for this product or its ingredients				
10.2 Chemical stability     Stable under normal conditions				
10.3 Possibility of hazardous reactions Under normal conditions of storage and use, hazardous reactions will not occur. Ox	idising agent.			
<b>10.4 Conditions to avoid</b> Keep away from extreme heat and oxidising agents.				
<b>10.5</b> Incompatible materials Incomplete combustion is likely to give rise to a complex mixture of airborne solid a particulates, gases, including carbon monoxide, H <sub>2</sub> S, SO <sub>x</sub> (sulphur oxides) or sulphur	ind liquid ric acid and			
10.6 Hazardous decomposition products unidentified organic and inorganic compounds.				
SECTION 11: Toxicological Information				
11.1 Information on toxicological effects				
Acute toxicity				
Product / ingredient name Result Species Dose	Exposure			
LC 50 Inhalation dusts and mists Rat >2.18mg/l	4 hours			
Distillate (Petroleum), hydro LD 50 Dermal Rabbit > 5000 mg/kg	_			
treated heavy paraffinic LD 50 Dermain Rabbit > 5000 mg/kg	_			
Irritation / corrosion				
Skin				
	No known significant offects or critical bazards			
	No known significant effects or critical hazards.			
Respiratory Sensation				
Skin				
Respiratory No known significant effects or critical hazards.	No known significant effects or critical hazards.			
No data available to indicate product or any components present greater than 0.1.9	hare			
multigene or genotoxic.				
Carcinogenicity The base oil(s) in this product is based on an severely hydrotreated distillate.				
Reproductive toxicityThe product should not be regarded as a carcinogen. Contains no ingredient listed as toxic to reproduction.	The product should not be regarded as a carcinogen. Contains no ingredient listed as toxic to reproduction.			
Specific target organ toxicity – single exposure				
Specific target organ toxicity – repeated exposure	Not classified			
Aspiration hazard Aspiration hazard - Category 1	Aspiration hazard – Category 1			
Information on likely routes of exposure Not available	Not available			
Potential acute health effects				
Eye contact Bye contact may cause redness and transient pain.	Eye contact may cause redness and transient pain.			
Inhalation Inhalation of oil mist or vapours at elevated temperatures may cause respiratory irri	Inhalation of oil mist or vapours at elevated temperatures may cause respiratory irritation.			
Skin contact No known significant effects or critical hazards.	No known significant effects or critical hazards.			
Ingestion May be fatal if swallowed and enters airways.	May be fatal if swallowed and enters airways.			
Potential chronic health effects				
	No known significant effects or critical hazards.			
General No known significant effects or critical hazards.				







<form>          Tendsgenighing         Network significant effects or critical hazards.           Product / ingredient name         Network significant effects or critical hazards.           Tenting effects         Network significant effects or critical hazards.           Other information Specific hazard         Net valuale           Table information Specific hazard         Net valuale           12.1 Prosider of Specific hazard         Net valuale           12.3 Bioaccumulation is unlikely to be significant because of the low water solubility of this product.         Net considered mobile.           12.3 Bioaccumulation is unlikely to be significant decause of the low water solubility of this product.         Net considered mobile.           12.4 Bottion GPT &amp; VeP assess         Net considered mobile.         Net considered mobile.           12.5 Bottion GPT &amp; VeP assess         Net considered mobile.         Net applicable.           12.6 Control GPT &amp; VeP asses         Vent applicable in value. Specific hazards.         Net applicable.           Section 13: Disposal Considerations:         Vent applicable in value. Specific hazards.         Net applicable.           Section 13: Disposal Considerations:         Went applicable in value. Specific hazards.         Net applicable.           Section 13: Disposal Considerations:         Went applicable in the formation inverside specific hazards.         Net applicable.           Section 14: Disposal Considerations:<th>Mutagenicity</th><th></th><th></th><th></th><th></th><th></th></form>	Mutagenicity																																																																																																																								
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<form>          Internation Specific hazard         Net available           Other information Specific hazard         Not available           12.1 Toxicity         Not expected to be harmful to aquatic organisms.           12.2 Presistence and degradability in all         Not inherently biologengradability.           12.3 Bioaccumulative potential         Bioaccumulation is unikely to be significant because of the low water solubility of this product.           12.5 Reutis OFPE a/Vba assessment         Not applicable           12.6 Toxicity OFPE a/Vba assessment         Wore possible (on in the abnerso of relevant containition), expecting or evaluable use specific torganisms.           Product Methods of disposal         Wore possible (on in the abnerso of relevant containition), expecting or evaluable use specific organisms.           Product Methods of disposal         Were possible (on in the abnerso of relevant containition), expecting or evaluable use specific organisms.           Notardiplicable         Notar evaluable         Notar evaluable or evaluable.           Reading Methods of disposal         Were possible (on in the abnerso of relevant containition), expecting assessment or unatificable and recommended. This substance on the unrend or information organities and recomaninated particity aspectific organisation organid eva</form>	5 7		No known s	No known significant effects or critical hazards.																																																																																																																					
Other Information Specific hazard         Net available           Section 12: Ecological Information         Not expected to be harmful to aquatic organisms.           12: Parsistence and degradability         Not expected to be harmful to aquatic organisms.           12: A Mobility in soil         Not considered mobile.           12: A Mobility in soil         Not considered mobile. </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>																																																																																																																									
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12.1 privation     Not expected to be harmful to aquatic organisms.       12.2 Prestance and legand bill.     Not anotal-construction is unlikely to be significant to be assue of the low water sub-likely of this product.       12.4 Obtaining the point of the sub-sub-sub-sub-sub-sub-sub-sub-sub-sub-	•	1																																																																																																																							
12.2 Persistence and degradability       Not inherently biodegradable.         12.3 Bioaccumulative potential       Bioaccumulation is unlikely to be significant because of the low water solubility of this product.         12.4 Mobility is and       Not considered mobile.         12.5 Results of PBT & vPvB assessment       Not applicable         Insoluble in water. Spills may form a film on water surfaces causing physical damage to organisms. Oxygen transfer could also be impaired.         Section 13: Disposal Considerations       Where possible (eg. in the absence of relevant contamination) recycling of used substance is feasible and recommended. This substance can be burned or indirected, subject to national/local authorisation, relevant contamination limits, stering contamination, and/or prescribe composition limits and methods for recovery or disposal         Product Methods of disposal       Where possible (eg. in the absence of relevant contamination) intrescriber qualified vases burned or indirectly cryptelible (biposal can be carried out directly, or ty delivery to requalified vases bandles n. National legislation may lightly legislation. Contaminated or waste substance incort directly ercyclable in basice or indirectly applicable.         Hazardous waste       Yes         European waste catalogue (EWC) Waste Code 13 03 07*       Waste designation.         Reside disposal       The generation of waste should be avoided or minimised wherever possible.         Section 14: Transport formation       DADR /RID       MO / IMDG Classification         14.1 UN number       ADR /RID       <			Not expect	ed to be harmful to aquatic org	anisms.																																																																																																																				
12.3 Bracum Jative potential       Not considered mobile.         12.4 Mobility in soil of PT 4 vVP assesmet       Not applicable         12.6 Guites of PT 4 vVP assesmet.       Not applicable.         12.6 Guites of PT 4 vVP assesmet.       Not applicable.         2.6 Guites of PT 4 vVP assesmet.       Not applicable.         2.6 Guites of PT 4 vVP assesmet.       Not applicable.         3.6 Guites adverse effects.       Not applicable.         3.7 Guites adverse effects.       VP recorded also be impaired.         3.7 Guites adverse effects.       VP averse visite (e.g. in the absence of relevant containtation, recycling of used subtance is feasible and commended. This subtance (and incinerated subject to notanillog) adverse subtance is differentiable. National legislation may identify a space and ar quality legislation. Containtated or avaitable is ubined or indinerated subject to notanillog prescribe subtance in direct recycling.         Product Methods of disposal       Verse received is adverse in order direct visition of adverse to duite.         Readaging       Verse interverse in order direct visition order direct is adverse in order direct visition or indirect visi	· · · · · · · · · · · · · · · · · · ·		•																																																																																																																						
12.4 Mobility in soil       Not considered mobile.         12.5 Results of PRT & VPR assessment       Not applicable         12.6 Other adverse effects       Unsoluble in water. Spills may form a film on water surfaces causing physical damage to organisms. Oxygen transfer could also be impaired.         Section 13: Disposal Considerations       The information in this section contains generic advice and guidance. The list of identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).         Product Methods of disposal       Where possible (e.g. in the absence of relevant contamination limits, adjett regulations, and ang inquality (edjaticn, contamination), recycling of used substance is trassible and recommended. This substance can be bured on indinerated. Subject to national/local authorisation, relevant contamination limits, adjett regulations and ang inquality (edjaticn, contamination)         Hazardous waste       Yes         European waste catalogue (EWC) Waste Code 13 03 07*       Waste disgination.         Packaging       Mineral-based non -chlorinated insulting and heat transmission ells.         The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or indinities during a specific organisation, and/or prescribe composition or andihil should only be considered when recycling is not faesible.         Section 13: Transport Information       The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration regulated       Not regulated				, ,	nt because of the low water solu	Ibility of this product.																																																																																																																			
12.6 Other adverse effects     Nonludie in water. Splits may form a fitm on water surfaces causing physical damage to organisms. Nongen transfer could also be impaired.       Section 13: Disposal Considerations:       Section 13: Disposal Considerations:       Section 13: Disposal Considerations:       The information in this section contains generic advices undividual and be impaired.       Section 13: Disposal Considerations:       The information in this section contains generic advices on tabulation of relevant contamination intervices. Job et or tabulations and arguality legislation.       Note the providual disposal on the commendo of this substance contations and arguality legislation.       Product Methods of disposal       Yes       European waste catalogue (KPC) Waste Code 13 03 07*       Waste designation.       Recident on transport insubstance contains disposal on the recyclic prograsilion on any identify a specific organisation, and/or prescribe composition limits and methods for recovery or disposal       Master dost disposal       Note generation of waste should be avoided or minimised wherever possible Waste packaging should be recyclic prescribe insulating and heat transmission oils.       Note generation of waste should be avoided or minimised wherever possible Waste packaging should be recyclic prescribe.       Note generation of waste should be avoided or minimised wherevere possible (Maste packaging should be recyclic prescribe.																																																																																																																									
Application adverse energy       Oxygen transfer could also be impaired.         Section 13: Disposal Considerations       Oxygen transfer could also be impaired.         Section 13: Disposal Considerations       Oxygen transfer could also be impaired.         Section 13: Disposal Considerations       Oxygen transfer could also be impaired.         The information in this section contains generic advice and year optimized in the Exposure Scenario(s).       Where possible (e.g. in the absence of relevant contamination finits, sefery regulations and ar quality explaisation. Contamination finits, sefery regulations and ar quality explaisation. Contamination finits, sefery regulations and ar quality explaisation. Contaminated the finits, sefery regulations and ar quality explaisation. Contaminated the finits, sefery regulations and ar quality explaisation. Contaminated the finits, sefery regulations and ar quality explaisation. The quarter of the explashes on orchorinated insulating and heat transmission and ar quality explaisation. The quarter operation of vaste existion may identify a specific organisation, and/or prescribe composition limits and methods for recovery or disposal         Macadous waste       Yes       The generation of vaste existion or shating and heat transmission oils.         Methods of disposal       Mineral-based non-chlorinated insulating and heat transmission oils.       The generation of vaste existion or the existing explaisation.         Methods of disposal       ADR / RD       ADN       IMO / IMDG Classification       ICAO / IATA Classification         14.1 UN number       ADR / RD       ADN       IMO / IMDG C	12.5 Results of PBT & vPvB assessment	:	Not applica	ble																																																																																																																					
The information in this section contains generic advice and substance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario().       Where possible (e.g. in the absence of relevant contamination intervated, subject to national/local authorisation, relevant contamination limits, safety regulations and air quality legislation. Contaminated in this, safety regulations and air quality legislation. Contaminated or qualified wase handlens. National legislation may identify a specific organisation, and/or preservice or waste substance (not directly recyclable): Disposal can be carried out directly, or by delivery to qualified waste handlens. National legislation may identify a specific organisation, and/or preservice or waste substance for directly recyclable): Disposal can be carried out directly or by delivery to qualified waste handlens. National legislation may identify a specific organisation, and/or preservice composition limits and methods for recovery or disposal         Nate designation       Yes       Implementation of waste should be avoided or minimission oils.       Nate recyclable: Disposal organisation, and/or preservice         Rethods of disposal       The generation of waste should be avoided or minimission when recyclable.       Nate packaging should be exoleded or minimission (Mater Specific Organisation).         14.1 UN number       ADR / IND       ADN       IMO / IMDG classification       ICAO / IATA Classification         14.2 UW proper shipping pame       -       -       -       -       -         14.3 Transport hazard class(es)       -       -       -       -       -	12.6 Other adverse effects				n water surfaces causing physica	al damage to organisms.																																																																																																																			
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	China		Inventory of Existing Chemical Substances in China (IECSC) – Yes																																																																																																																						







_	European Inventory of Existing Commercial Chemical Substances (EINECS) – Yes	
Europe	European List of Notified Chemical Substances (ELINCS) – No	
Japan	Inventory of Existing and New Chemical Substances (ENCS) – Yes	
Korea	Existing Chemicals List (ECL) – Yes	
New Zealand	New Zealand Inventory – Yes	
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS) – Yes	
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory – Yes	
	oly with the inventory requirements administered by the governing country(s) uct are not listed or exempt from listing on the inventory administered by the governing country(s).	
Section 16: Other Information		
Revision comments		
Legend to abbreviations		
ADR	European agreement concerning the international carriage of dangerous good by road.	
RID	Regulations agreement concerning the international carriage of dangerous good by rail.	
IMDG Code	International Maritime Dangerous Goods Code.	
ICAO	International Civil Aviation Organization.	
IATA	International Air Transport Association.	
GHS	Globally Harmonized System of Classification and Labeling of Chemicals.	
CLP	Classification, Labelling and Packaging Regulation [Regulation (EC) No.1272/2008].	
SCBA	Self-Contained Breathing Apparatus.	
REACH	Registration, Evaluation, Authorization and Restriction of Chemicals Regulation [Regulation (EC) No. 1907/2006].	
LC 50	Median lethal concentration.	
LD 50	Median lethal dose.	
PBT	Persistent, Bio accumulative and Toxic.	

GANDHAR OIL REFINERY (INDIA) LTD.		
Taloja Plant	Plot No.10, MIDC, Main Road, Taloja, Taluka Panvel, District - Raigad 410208, India.	
Silvassa Plant	Plot No. 2, Survey No. 678/1/3, Village Naroli, Near Naroli Check Post, Silvassa, Dadra & Nagar Haveli, Union Territory 396230, India.	
Emergency / Info Phone No. Phone: +91-22-40635600 • Fax: +91-22-40635601		
Email info@gandharoil.com		





### **DIVYOL WBX GREASE**

Section 1: Identification of the Substance / Mixture				
1.1 Product identifier				
Product name	Divyol WBX Grease			
Product description	Wheel Bearing Grease			
Product type	Grease			
MARPOL Annex-1	****			
1.2 Identified uses				
Distribution of substance	Automotive & Ind	dustrial Grease		
Formulation & (re)packing of substance & mixtures	Automotive & Inc	dustrial Grease		
Manufacture of substance	Automotive & Inc	dustrial Grease		
Functional fluids	Automotive & Inc	dustrial Grease		
Section 2: Hazard Identification				
4-Extreme	Health		1	
3-High	Flammability		1	
2-Moderate	Reactivity		0	
1-Slight	Special		-	
Section 3: Composition / Information on Ingredi				
Chemical Name / Ingredients Mix Fatty Acid	<mark>% by wt.</mark> 10 - 15	Hazardous No	CAS No.	
Sodium Hydroxide	1-3	Yes	Proprietary Mixture 1310-73-2	
Mineral Oil	80 - 90	Yes	64742-52-5, 64741-88-4, 68990-65-8, Proprietary Mixture	
Bitumen	1 - 3	No	8052-42-4	
PIB	0 - 2	No	9003-27-4	
Additives	0 - 2	Yes	Proprietary Mixture	
Product / Ingredient name	Sodium soaps fro	om natural fatty su	ibstances	
Section 4: First Aid Measures				
Inhalation exposure	Remove to fresh	air & provide oxyg	en, if breathing is difficult. Contact physician	
Skin contact		nated clothing. Fl s, call a physician.	ush skin with water. Wash skin thoroughly with mild soap & water.	
Swallowing or other	Do not induce vo Get medical advi		I no treatment is necessary unless large quantities are ingested.	
Eye contact	Rinse continuous	sly with water for s	several minutes. Get medical attention, if irritation persists.	
Protection first-aiders		ectrical supply. En entry into confine	isure adequate ventilation and check that a safe and breathing area is d spaces.	
Section 5: Fire Fighting Measures				
5.1 Extinguishing media				
Unsuitable extinguishing media	Use dry powder foam carbon dioxide. Do not use direct water and wet chemicals or water on the			
5.2 Special hazards arising from the substance or mix	5.2 Special hazards arising from the substance or mixture			
Hazards from the substance or mixture		Flammable liquids in pressurised containers may rupture and when exposed to heat, creating a highly flammable vapour cloud.		
Hazardous thermal decomposition products	Incomplete combustion is likely to give rise to a complex mixture of airborne solid and liquid particulates, gases, including carbon monoxide, $H_2S$ , $SO_x$ (sulphur oxides) or sulphuric acid and unidentified organic and inorganic compounds.			
5.3 Advice for firefighters				
Special precautions for firefighters		Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.		
Special protective equipment for firefighters	(SCBA) with a ful helmets, protect	Firefighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face- piece operated in positive pressure mode. Clothing for firefighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.		





6.1 Personal precautions, protective equipment and emergency procedures			
Keep non-involved personnel away from the area of spillage.			
For non-emergency personnel	Alert emergency personnel. Except in case of small spillage. Alert emergency personnel. Except in case of small spillages, the feasibility of any actions should always be assessed and advised, if possible, by a trained, competent person in charge of managing the emergency. Stop leak if safe to do so. Avoid direct contact with the product. Stay upwind / keep distance from source. In case of large spillages, alert occupants in downwind areas. Eliminate all ignition sources if safe to do so. Spillages of limited amounts of product, especially in the open air when vapours will be usually quickly dispersed, are dynamic situations, which will presumably limit the exposure to dangerous concentrations. Note : Recommended measures are based on the most likely spillage scenarios for this material; however, local conditions (wind, air temperature, wave / current direction and speed) may significantly influence the choice of appropriate actions.		
For emergency responders	For this reason, local experts should be consulted when necessary. Local regulations may also prescribe or limit actions to be taken. Small spillages: Normal antistatic working clothes are usually adequate. Large spillages: Full body suit of chemically resistant and thermal resistant material should be used. Work gloves providing adequate chemical resistance, specifically to aromatic hydrocarbons. Note: Gloves made of PVA are not water-resistant, and are not suitable for emergency use. Safety helmet, antistatic non-skid safety shoes or boots. Goggles and / or face shield, if splashes or contact with eyes is possible or anticipated. Respiratory Protection : A half or full-face respirator with filter(s) for organic vapours (and when applicable for H <sub>2</sub> S) a Self Contained Breathing Apparatus (SCBA) can be used according to the extent of spill and predictable amount of exposure. If the situation cannot be completely assessed, or if an oxygen deficiency is possible, only SCBA's should be used.		
6.2 Environmental precautions	Prevent product from entering sewers, rivers or other bodies of water. If necessary dike the product with dry earth, sand or similar non-combustible materials. In case of soil contamination, remove contaminated soil and treat in accordance with local regulations. In case of small spillages in closed waters (i.e. ports), contain product with floating barriers or other equipment. Collect spilled product by absorbing with specific floating absorbents. If possible, large spillages in open waters should be contained with floating barriers or other mechanical means. If this is not possible, control the spreading of the spillage, and collect the product by skimming or other suitable mechanical means. The use of dispersants should be advised by an expert, and, if required, approved by local authorities.		
6.3 Methods and material for containment and cleaning	up		
Small spill	Stop leak if without risk. Absorb spilled product with suitable non-combustible materials.		
Large spill	Large spillages may be cautiously covered with foam, if available, to limit vapour cloud formation. Do not use water jet. When inside buildings or confined spaces, ensure adequate ventilation. Transfer collected product and other contaminated materials to suitable containers for recovery or safe disposal.		
6.4 Reference to other sections	See Section 1: For emergency contact information. See Section 8: For information on appropriate personal protective equipment. See Section 13: For additional waste treatment information.		
Section 7: Handling and Storage			
7.1 Advice on general information – hygiene, storage	Obtain special instructions before use. Keep away from heat / sparks / open flames/hot surfaces. No smoking. Use and store only outdoors or in a well-ventilated area. Hazard of slipping on spilt product. Avoid release to the environment.		
7.2 Conditions for safe storage including any incompatibilities	Storage area layout, tank design, equipment and operating procedures must comply with the relevant regional, national or local legislation. Storage installations should be designed with adequate bunds in case of leaks or spills. Cleaning, inspection and maintenance of internal structure of storage tanks must be done only by properly equipped and qualified personnel as defined by national, local or company regulations. Store separately from oxidising agents. Keep only in the original container or in a suitable container for this kind of product. Keep container tightly closed and sealed until ready for use. Do not store in unlabelled containers. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Empty containers may contain harmful, flammable / combustible or explosive residue or vapours. Do not cut, grind, drill, weld, reuse or dispose of containers unless adequate precautions are taken against these hazards. Protect from sunlight.		
7.3 Specific end use(s) – Recommendations	Not available		



Vapour pressure Density Solubility (ies)



Section 8: Exposure Controls / Personal Protect	
The list of Identified Uses in Section 1 should be consu	Ited for any available use-specific information provided in the Exposure Scenario(s).
8.1 Control parameters	
Occupational exposure limits	
Product / Ingredient name	Distillates, mixture of hydrocarbons
Exposure limits values	AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m <sup>3</sup> 8 hours. Form: mist and fume STEL: 3 mg/m <sup>3</sup> 15 minutes. Form: mist and fume [Air contaminant]. AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m <sup>3</sup> 8 hours. Form: mist and fume STEL: 3 mg/m <sup>3</sup> 15 minutes. Form: mist and fume.
Recommended monitoring procedures	If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres – Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres – Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres – General requirements for the performance of procedures for the measurement of chemical agents). Reference to national guidance documents for methods for the determination of hazardous substances will also be required.
8.2 Exposure control Appropriate engineering controls	Mechanical ventilation and local exhaust will reduce exposure via the air. Use oil resistant material in construction of handling equipment. Store under recommended conditions and if heated, temperature control equipment should be used to avoid overheating.
Individual protection measures	
Hygiene measures	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Ensure that eyewash stations and safety showers are close to the workstation location. Wash contaminated clothing before reuse.
Eye / face protection	Recommended: Safety glasses with side shields.
Skin protection	
Hand protection	4 – 8 hours (breakthrough time): nitrile rubber.
Body protection	Wear protective clothing if there is a risk of skin contact. Change contaminated clothes at the end of working shift.
Other skin protection	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary.
Environmental exposure control	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.
Section 9: Physical and Chemical Properties	
Appearance	Clear
Physical state	Fibrous & Tacky
Colour	Dark Greenish Brown
Odor	Petroleum odor
Odour threshold	Not available
Dropping point	> 185°C (ASTM D-2265)
Flash point	> 185°C (MINERAL OIL)
Evaporation rate	Not available
Flammability (solid, gas)	Not available
Flammability limits in air (lower), % by volume	Not available
Flammability limits in air (upper), % by volume	Not available
Vapour pressure	Not volatile



0.88 - 0.95 Kg/L





Solubility (water)		Insoluble in wat	er				
Solubility (water) Partition coefficient (n-octanol/water)							
		Not available					
Decomposition temperature Auto-ignition temperature		No data					
Worked Penetration at 25°C		Not available					
		240-260 (ASTM D 217) No data					
Explosive properties		No data					
Oxidising properties DMSO extractable compounds for base oil substance(s)		Not available					
according to IP346		<3 %					
Section 10: Stability and Rea	ctivity	1					
10.1 Reactivity				able for this product or its ingr	edients.		
10.2 Chemical stability		Stable under normal conditions					
10.3 Possibility of hazardous reactions		Under normal c	onditions of storage and use, I	hazardous reactions will not or	cur. Oxidising agent.		
10.4 Conditions to avoid		Keep away from	n extreme heat and oxidising a	gents.			
10.5 Incompatible materials				a complex mixture of airborn de, H <sub>2</sub> S, SO <sub>2</sub> (sulphur oxides) or			
10.6 Hazardous decomposition	products		ganic and inorganic compound				
SECTION 11: Toxicological In	formation						
11.1 Information on toxicologica	al effects						
Acute toxicity							
Product / ingredient name	Result		Species	Dose	Exposure		
	LC 50 Inhalation dus	sts and mists	Rat	>2.18mg/l	4 hours		
Distillate (Petroleum), hydro	LD 50 Dern		Rabbit	> 5000 mg/kg	_		
treated heavy paraffinic	LD 50 Oral		Rat	>15000 mg/kg	_		
Irritation / corrosion				5 5			
Skin		No ka sun siensi					
Eye		NO KHOWH SIGHI	ficant effects or critical hazard	5.			
Respiratory							
Sensation							
Skin				lo known significant effects or critical hazards.			
		No known signi	ficant effects or critical hazard	S.			
Respiratory							
			le to indicate product or any c	s. omponents present greater th	an 0.1 % are		
Respiratory		No data availab multigene or ge	le to indicate product or any c enotoxic.				
Respiratory Mutagenicity		No data availab multigene or ge The base oil(s) in The product sho	le to indicate product or any c enotoxic.	omponents present greater th everely hydrotreated distillate inogen.			
Respiratory Mutagenicity Carcinogenicity	gle exposure	No data availab multigene or ge The base oil(s) i The product sho Contains no ing	le to indicate product or any c enotoxic. n this product is based on an s puld not be regarded as a carci	omponents present greater th everely hydrotreated distillate inogen.			
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Respiratory Mutagenicity Carcinogenicity Carcinogenicity Carcinogenicity Reproductive toxicity Specific target organ toxicity – sin Specific target organ toxic	peated exposure	No data availab multigene or ge The base oil(s) it The product she Contains no ing Not classified Aspiration haza Not available Eye contact may Inhalation of oil	le to indicate product or any cenotoxic. n this product is based on an sould not be regarded as a carci redient listed as toxic to repro rd – Category 1 y cause redness and transient print or vapours at elevated te	omponents present greater th everely hydrotreated distillate inogen. duction. pain. emperatures may cause respira			
Respiratory         Mutagenicity         Carcinogenicity         Carcinogenicity         Reproductive toxicity         Specific target organ toxicity – sin         Information on likely routes of exp         Eye contact         Inhalation         Skin contact	peated exposure	No data availab multigene or ge The base oil(s) i The product she Contains no ing Not classified Aspiration haza Not available Eye contact may Inhalation of oil No known signi	le to indicate product or any contoxic. In this product is based on an sould not be regarded as a carci redient listed as toxic to repro rd – Category 1 y cause redness and transient prist or vapours at elevated te ficant effects or critical hazard	omponents present greater th everely hydrotreated distillate inogen. duction. pain. emperatures may cause respira			
Respiratory         Mutagenicity         Carcinogenicity         Carcinogenicity         Reproductive toxicity         Specific target organ toxicity – sin         Aspiration hazard         Information on likely routes of exp         Potential acute health effects         Eye contact         Inhalation         Skin contact         Ingestion	peated exposure	No data availab multigene or ge The base oil(s) i The product she Contains no ing Not classified Aspiration haza Not available Eye contact may Inhalation of oil No known signi	le to indicate product or any cenotoxic. n this product is based on an sould not be regarded as a carci redient listed as toxic to repro rd – Category 1 y cause redness and transient print or vapours at elevated te	omponents present greater th everely hydrotreated distillate inogen. duction. pain. emperatures may cause respira			
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Mutagenicity						
Teratogenicity		No known s	significant effects or critical haz	ards.		
Product / ingredient name						
Fertility effects		NI	1			
Other information Specific hazard		Not availab	le			
Section 12: Ecological Information	1					
12.1 Toxicity			ed to be harmful to aquatic org	anisms.		
12.2 Persistence and degradability		Not inherently biodegradable.				
12.3 Bioaccumulative potential				nt because of the low water solu	ibility of this product.	
12.4 Mobility in soil		Not considered mobile.				
12.5 Results of PBT & vPvB assessment		Not applica				
12.6 Other adverse effects			n water. Spills may form a film of nsfer could also be impaired.	n water surfaces causing physica	al damage to organisms.	
Section 13: Disposal Consideration						
The information in this section contains information provided in the Exposure So	generic advice and cenario(s).	d guidance. T	he list of Identified Uses in Sect	ion 1 should be consulted for ar	ny available use-specific	
Product Methods of disposal		Where possible (e.g. in the absence of relevant contamination), recycling of used substance is feasible and recommended. This substance can be burned or incinerated, subject to national/local authorisations, relevant contamination limits, safety regulations and air quality legislation. Contaminated or waste substance (not directly recyclable): Disposal can be carried out directly, or by delivery to qualified waste handlers. National legislation may identify a specific organisation, and/or prescribe composition limits and methods for recovery or disposal				
Hazardous waste		Yes				
European waste catalogue (EWC) Waste	Code 13 03 07*	Waste designation.				
Packaging		Mineral-ba	sed non-chlorinated insulating	and heat transmission oils.		
Methods of disposal			The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.			
Section 14: Transport Information						
International transport regulations						
	ADR / R	ID	ADN	IMO / IMDG Classification	ICAO / IATA Classification	
14.1 UN number	Not regulated		Not regulated	Not regulated	Not regulated	
14.2 UN proper shipping name	_		_	_	_	
14.3 Transport hazard class(es)	_		-	_	_	
14.4 Packing group	-		-	_	_	
14.5 Environmental hazards	No		No	No	No	
Additional Information	_		-	-	-	
14.6 Special precautions for user oils						
14.7 Transport in bulk according to An	nex   of MARPOL	73/78 and th	e IBC Code			
Section 15: Regulatory Informatio						
15.1 Safety, health and environmental		slation speci	fic for the substance or mixture	e EU Regulation (EC) No. 1907/	2006 (REACH)	
Annex XIV – List of substances subject to authorisation Annex XIV Substances of very high concern		None of the components are listed				
Annex XVII – Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles.		Not applicable				
International Lists National Inventory		Inventory name				
Australia	Au		Australian Inventory of Chemical Substances (AICS) – Yes			
Canada		Domestic Substances List (DSL) – Yes Non-Domestic Substances List (NDSL) – No				
China		Inventory of Existing Chemical Substances in China (IECSC) – Yes				
			Chernical Substances			





Europe	European Inventory of Existing Commercial Chemical Substances (EINECS) – Yes	
	European List of Notified Chemical Substances (ELINCS) – No	
Japan	Inventory of Existing and New Chemical Substances (ENCS) – Yes	
Korea	Existing Chemicals List (ECL) – Yes	
New Zealand	New Zealand Inventory – Yes	
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS) – Yes	
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory – Yes	
	oly with the inventory requirements administered by the governing country(s) uct are not listed or exempt from listing on the inventory administered by the governing country(s).	
Section 16: Other Information		
Revision comments		
Legend to abbreviations		
ADR	European agreement concerning the international carriage of dangerous good by road.	
RID	Regulations agreement concerning the international carriage of dangerous good by rail.	
IMDG Code	International Maritime Dangerous Goods Code.	
ICAO	International Civil Aviation Organization.	
IATA	International Air Transport Association.	
GHS	Globally Harmonized System of Classification and Labeling of Chemicals.	
CLP	Classification, Labelling and Packaging Regulation [Regulation (EC) No.1272/2008].	
SCBA	Self-Contained Breathing Apparatus.	
REACH	Registration, Evaluation, Authorization and Restriction of Chemicals Regulation [Regulation (EC) No. 1907/2006].	
LC 50	Median lethal concentration.	
LD 50	Median lethal dose.	
РВТ	Persistent, Bio accumulative and Toxic.	

GANDHAR OIL REFINERY (INDIA) LTD.		
Taloja Plant	Plot No.10, MIDC, Main Road, Taloja, Taluka Panvel, District - Raigad 410208, India.	
Silvassa Plant	Plot No. 2, Survey No. 678/1/3, Village Naroli, Near Naroli Check Post, Silvassa, Dadra & Nagar Haveli, Union Territory 396230, India.	
Emergency / Info Phone No.	Phone: +91-22-40635600 • Fax: +91-22-40635601	
Email	info@gandharoil.com	





## **DIVYOL X CRUSH GREASE**

	Section 1: Identification of the Substance / Mixture				
1.1 Product identifier	(ture				
Product name	Divard V Cruch C	Divyol X Crush Grease			
· · · · · · · · · · · · · · · · · · ·					
Product description	X Crush Grease				
Product type		Grease			
MARPOL Annex-1	****				
1.2 Identified uses					
Distribution of substance	Automotive & Inc	dustrial Grease			
Formulation & (re)packing of substance & mixtures	Automotive & Inc	Automotive & Industrial Grease			
Manufacture of substance	Automotive & Inc	Automotive & Industrial Grease			
Functional fluids	Automotive & Inc	dustrial Grease			
Section 2: Hazard Identification					
4-Extreme	Health		1		
3-High	Flammability		1		
2-Moderate	Reactivity		0		
1-Slight	Special		-		
Section 3: Composition / Information on Ingred					
Chemical Name / Ingredients	% by wt.	Hazardous	CAS No.		
Lithium Hydroxide	0.5 -2	Yes Yes	1310-66-3		
Mineral Oil 12 HSA	82 - 90 4 - 10	No	64741-88-4, 64742-01-4, Proprietary Mixture, 64742-52-5 106-14-9		
НСО	2-6	No	8001-78-3		
Zinc dialkyldithiophosphate	0-2	Yes	68457-79-4		
Additives	0-2	Yes	Proprietary Mixture		
Sulphurised Oil	0 - 4	No	72102-30-8		
Bitumen	0 - 2	No	8052-42-4		
Product / Ingredient name	Lithium soaps fro	om natural fatty su	Ibstances		
Section 4: First Aid Measures		,			
Inhalation exposure	Remove to fresh	Remove to fresh air & provide oxygen, if breathing is difficult. Contact physician			
		Remove contaminated clothing. Flush skin with water. Wash skin thoroughly with mild soap & wate			
Skin contact		If irritation occurs, call a physician.			
Swallowing or other		Do not induce vomiting. In general no treatment is necessary unless large quantities are ingested. Get medical advice.			
Eye contact	Rinse continuous	Rinse continuously with water for several minutes. Get medical attention, if irritation persists.			
Protection first-aiders		Disconnecting electrical supply. Ensure adequate ventilation and check that a safe and breathing area is available before entry into confined spaces.			
Section 5: Fire Fighting Measures					
5.1 Extinguishing media					
Unsuitable extinguishing media		Use dry powder, foam, carbon dioxide. Do not use direct water and wet chemicals, or water on the burning product. They may spread the fire. Use foam simultaneously on the surface.			
5.2 Special hazards arising from the substance or mi	xture				
Hazards from the substance or mixture		Flammable liquids in pressurised containers may rupture and when exposed to heat, creating a highly flammable vapour cloud.			
Hazardous thermal decomposition products	particulates, gase	Incomplete combustion is likely to give rise to a complex mixture of airborne solid and liquid particulates, gases, including carbon monoxide, H <sub>2</sub> S, SO <sub>x</sub> (sulphur oxides) or sulphuric acid and unidentified organic and inorganic compounds.			
5.3 Advice for firefighters					
Special precautions for firefighters		Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.			
Special protective equipment for firefighters	(SCBA) with a ful helmets, protect	Firefighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face- piece operated in positive pressure mode. Clothing for firefighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.			





6.1 Personal precautions, protective equipment and emergency procedures				
For non-emergency personnel	Keep non-involved personnel away from the area of spillage. Alert emergency personnel. Except in case of small spillages, the feasibility of any actions should always be assessed and advised, if possible, by a trained, competent person in charge of managing the emergency. Stop leak if safe to do so. Avoid direct contact with the product. Stay upwind / keep distance from source. In case of large spillages, alert occupants in downwind areas. Eliminate all ignition sources if safe to do so. Spillages of limited amounts of product, especially in the open air when vapours will be usually quickly dispersed, are dynamic situations, which will presumably limit the exposure to dangerous concentrations. Note : Recommended measures are based on the most likely spillage scenarios for this material; however, local conditions (wind, air temperature, wave / current direction and speed) may significantly influence the choice of appropriate actions.			
For emergency responders	For this reason, local experts should be consulted when necessary. Local regulations may also prescribe or limit actions to be taken. Small spillages: Normal antistatic working clothes are usually adequate. Large spillages: Full body suit of chemically resistant and thermal resistant material should be used. Work gloves providing adequate chemical resistance, specifically to aromatic hydrocarbons. Note: Gloves made of PVA are not water-resistant, and are not suitable for emergency use. Safety helmet, antistatic non-skid safety shoes or boots. Goggles and / or face shield, if splashes or contact with eyes is possible or anticipated. Respiratory Protection : A half or full-face respirator with filter(s) for organic vapours (and when applicable for H <sub>2</sub> S) a Self Contained Breathing Apparatus (SCBA) can be used according to the extent of spill and predictable amount of exposure. If the situation cannot be completely assessed, or if an oxygen deficiency is possible, only SCBA's should be used.			
6.2 Environmental precautions	Prevent product from entering sewers, rivers or other bodies of water. If necessary dike the product with dry earth, sand or similar non-combustible materials. In case of soil contamination, remove contaminated soil and treat in accordance with local regulations. In case of small spillages in closed waters (i.e. ports), contain product with floating barriers or other equipment. Collect spilled product by absorbing with specific floating absorbents. If possible, large spillages in open waters should be contained with floating barriers or other mechanical means. If this is not possible, control the spreading of the spillage, and collect the product by skimming or other suitable mechanical means. The use of dispersants should be advised by an expert, and, if required, approved by local authorities.			
6.3 Methods and material for containment and cleaning	up			
Small spill	Stop leak if without risk. Absorb spilled product with suitable non-combustible materials.			
Large spill	Large spillages may be cautiously covered with foam, if available, to limit vapour cloud formation. Do not use water jet. When inside buildings or confined spaces, ensure adequate ventilation. Transfer collected product and other contaminated materials to suitable containers for recovery or safe disposal.			
6.4 Reference to other sections	See Section 1: For emergency contact information. See Section 8: For information on appropriate personal protective equipment. See Section 13: For additional waste treatment information.			
Section 7: Handling and Storage				
7.1 Advice on general information – hygiene, storage	Obtain special instructions before use. Keep away from heat / sparks / open flames/hot surfaces. No smoking. Use and store only outdoors or in a well-ventilated area. Hazard of slipping on spilt product. Avoid release to the environment.			
7.2 Conditions for safe storage including any incompatibilities	Storage area layout, tank design, equipment and operating procedures must comply with the relevant regional, national or local legislation. Storage installations should be designed with adequate bunds in case of leaks or spills. Cleaning, inspection and maintenance of internal structure of storage tanks must be done only by properly equipped and qualified personnel as defined by national, local or company regulations. Store separately from oxidising agents. Keep only in the original container or in a suitable container for this kind of product. Keep container tightly closed and sealed until ready for use. Do not store in unlabelled containers. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Empty containers may contain harmful, flammable / combustible or explosive residue or vapours. Do not cut, grind, drill, weld, reuse or dispose of containers unless adequate precautions are taken against these hazards. Protect from sunlight.			
7.3 Specific end use(s) – Recommendations	Not available			



Vapour pressure

Density Solubility (ies)



Section 8: Exposure Controls / Personal Protect	tion
-	Ited for any available use-specific information provided in the Exposure Scenario(s).
8.1 Control parameters	
Occupational exposure limits	
Product / Ingredient name	Distillates, mixture of hydrocarbons
Exposure limits values	AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m <sup>3</sup> 8 hours. Form: mist and fume STEL: 3 mg/m <sup>3</sup> 15 minutes. Form: mist and fume [Air contaminant]. AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m <sup>3</sup> 8 hours. Form: mist and fume STEL: 3 mg/m <sup>3</sup> 15 minutes. Form: mist and fume.
Recommended monitoring procedures	If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres – Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres – Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres – General requirements for the performance of procedures for the measurement of chemical agents). Reference to national guidance documents for methods for the determination of hazardous substances will also be required.
8.2 Exposure control Appropriate engineering controls	Mechanical ventilation and local exhaust will reduce exposure via the air. Use oil resistant material in construction of handling equipment. Store under recommended conditions and if heated, temperature control equipment should be used to avoid overheating.
Individual protection measures	
Hygiene measures	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Ensure that eyewash stations and safety showers are close to the workstation location. Wash contaminated clothing before reuse.
Eye / face protection	Recommended: Safety glasses with side shields.
Skin protection	
Hand protection	4 – 8 hours (breakthrough time): nitrile rubber.
Body protection	Wear protective clothing if there is a risk of skin contact. Change contaminated clothes at the end of working shift.
Other skin protection	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary.
Environmental exposure control	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptabl levels.
Section 9: Physical and Chemical Properties	
Appearance	Clear
Physical state	Smooth, Homogenous & Tacky
Colour	Brownish Black
Odor	Petroleum odor
Odour threshold	Not available
Dropping point	> 195°C (ASTM D-2265)
Flash point	> 210°C (MINERAL OIL)
Evaporation rate	Not available
Flammability (solid, gas)	Not available
Flammability limits in air (lower), % by volume	Not available
Flammability limits in air (upper), % by volume	Not available
Vapour prossuro	Notvolatila

Not volatile

0.88 - 0.95 Kg/L





Solubility (water)		Insoluble in wat	ter		
		Not available			
		No data			
Auto-ignition temperature		Not available			
Worked Penetration at 25°C		235 (ASTM D 2	17)		
Explosive properties		No data	(7)		
		No data			
Oxidising properties DMSO extractable compounds for	r baca ail substanca(s)	Not available			
according to IP346		<3 %			
Section 10: Stability and Rea	ctivity	1			
10.1 Reactivity		No specific test	data related to reactivity avail	able for this product or its ingr	edients.
10.2 Chemical stability		Stable under no	ormal conditions		
10.3 Possibility of hazardous rea	ctions	Under normal c	onditions of storage and use,	hazardous reactions will not o	ccur. Oxidising agent.
10.4 Conditions to avoid		Keep away from	n extreme heat and oxidising a	agents.	
10.5 Incompatible materials				a complex mixture of airborn de, H <sub>2</sub> S, SO <sub>2</sub> (sulphur oxides) or	
10.6 Hazardous decomposition	•		ganic and inorganic compound		
SECTION 11: Toxicological In					
11.1 Information on toxicologica	al effects				
Acute toxicity					
Product / ingredient name	Result		Species	Dose	Exposure
	LC 50 Inhalation due	sts and mists	Rat	>2.18mg/l	4 hours
Distillate (Petroleum), hydro treated heavy paraffinic	LD 50 Derr	nal	Rabbit	> 5000 mg/kg	-
treated neavy paraminic	LD 50 Or	al	Rat	>15000 mg/kg	-
Irritation / corrosion					
Skin					
Eye		No known significant effects or critical hazards.			
Respiratory					
Sensation					
Skin					
Respiratory		No known significant effects or critical hazards.			
Respiratory		No data available to indicate product or any components present system than 0.1 % are			
Mutagenicity		No data available to indicate product or any components present greater than 0.1 % are multigene or genotoxic.			
Carcinogenicity		The base oil(s) i	n this product is based on an s	severely hydrotreated distillate	•
Reproductive toxicity		The product should not be regarded as a carcinogen. Contains no ingredient listed as toxic to reproduction.			
Specific target organ toxicity – sin	gle exposure				
Specific target organ toxicity – rep	peated exposure	Not classified			
Aspiration hazard		Aspiration hazard – Category 1			
Information on likely routes of exposure		Not available			
Potential acute health effects					
Potential acute health effects		Eye contact ma	y cause redness and transient	pain.	
				•	itory irritation.
Potential acute health effects Eye contact Inhalation		Inhalation of oil	mist or vapours at elevated te	emperatures may cause respira	tory irritation.
Potential acute health effects Eye contact Inhalation Skin contact		Inhalation of oil	hist or vapours at elevated te ficant effects or critical hazard	emperatures may cause respira	itory irritation.
Potential acute health effects Eye contact Inhalation Skin contact Ingestion		Inhalation of oil	mist or vapours at elevated te	emperatures may cause respira	itory irritation.
Potential acute health effects Eye contact Inhalation Skin contact Ingestion Potential chronic health effects		Inhalation of oil No known signi May be fatal if s	mist or vapours at elevated te ficant effects or critical hazard wallowed and enters airways.	emperatures may cause respira ls.	tory irritation.
Potential acute health effects Eye contact Inhalation Skin contact Ingestion		Inhalation of oil No known signi May be fatal if s No known signi	i mist or vapours at elevated te ficant effects or critical hazard wallowed and enters airways. ficant effects or critical hazard	emperatures may cause respira ls.	







Intratagenicity increase of the second seco	Mutagenicity						
<form>          Product, rignedient name         Not available           fertility effects         Not available           Other information Specific hazards         Not available           Section 12: Ecological Information         Not available           12.1 Toxicity         Not expected to be harmful to aquatic organisms.           12.2 Fersitence and degradability         Not inherently biodegradable.           12.3 Bioaccumulative potential         Not aplicable           12.4 Mobility in soil         Not considered mobile.           12.5 Eaclust of PBT &amp; VP&amp; assessmet         Not aplicable           12.6 Other adverse effects         Not aplicable           Toxing the considered mobile.         Not applicable           12.6 Section 13: Disposit Considered and softward and guidance. The list of fertified Ubes in Section 13: should be consulted or any available use specific information provided in the Exposure Section 13: should be consulted or any available use specific information provided in the Exposure Section 13: should be consulted or any available use specific or available in any distributions, relevant contamination, recycling or available in any distributions, relevant contamination, recycling or available in any distributions and alread available information.           Product Methods of disposal         Vest         Vest evant to the available information or increated any delivery to available use specific or anisation and and adatation recycling diverse yo available use specific or available information increated any delivery to available information increcycling</form>	,						
<form>          Internation Specific hazard         Net available           Other information Specific hazard         Not available           12.1 Toxicity         Not expected to be harmful to aquatic organisms.           12.2 Presistence and degradability in all         Not inherently biologengradability.           12.3 Bioaccumulative potential         Bioaccumulation is unikely to be significant because of the low water solubility of this product.           12.5 Reutis OFPE a/Vba assessment         Not applicable           12.6 Toxicity OFPE a/Vba assessment         Wore possible (on in the abnerso of relevant containition), expecting or evaluable use specific torganisms.           Product Methods of disposal         Wore possible (on in the abnerso of relevant containition), expecting or evaluable use specific organisms.           Product Methods of disposal         Were possible (on in the abnerso of relevant containition), expecting or evaluable use specific organisms.           Notardiplicable         Notar evaluable         Notar evaluable or evaluable.           Reading Methods of disposal         Were possible (on in the abnerso of relevant containition), expecting assessment or unatificable and recommended. This substance on the unrend or information organities and recomaninated particity aspectific organisation organid eva</form>			No known significant effects or critical hazards.				
Other Information Specific hazard         Net available           Section 12: Ecological Information         Not expected to be harmful to aquatic organisms.           12: Parsistence and degradability         Not expected to be harmful to aquatic organisms.           12: A Mobility in soil         Not considered mobile.           12: A Mobility in soil         Not considered mobile. </td <td>¥</td> <td></td> <td></td> <td></td> <td></td> <td></td>	¥						
Section 12: Ecological Information         Not expected to be harmful ta aquatic organisms.           12.1 Toxidity         Not expected to be harmful ta aquatic organisms.           12.3 Brostneer and degradability         Not expected to be harmful ta aquatic organisms.           12.4 Mobility notel         Not considered mobile.           12.4 Mobility notel         Not considered mobile.           12.5 Results of PBT & VP& assessment         Not applicable           12.6 Other adverse effects         Not applicable           Section 13: Disposal Considerations         The information in this section or talnes generic adverse and guidance. The list of identified Uses in Section 1 should be consulted for any available use specific information provided in the Exposure Scenario(s).           Product Methods of disposal         Where possible leg, in the absence of relevant contamination, recycling of used substance is freasible and recommended. This substance can be burned or innormated autification used substance is composition limits, and recommended. This substance can be burned or innormated autification and used substance is composition limits and methods for recovery or disposal           Hazardous waste         Vos           European waste catalogue (EWC) Wiste Code 13 03 07°         Woste designation.           Not interaction or landifit involution guided waste dusted where very disposal         Incomention involution guided waste should be avoided or minimised where very called.           14.1 UN number         Not /// NO Classification         ICA			Not availab	le			
12.1 privation     Not expected to be harmful to aquatic organisms.       12.2 Prestance and legand bill.     Not anotal-construction is unlikely to be significant to be assue of the low water sub-likely of this product.       12.4 Obtaining the point of the sub-sub-sub-sub-sub-sub-sub-sub-sub-sub-	•	1					
12.2 Persistence and degradability       Not inherently biodegradable.         12.3 Bioaccumulative potential       Bioaccumulation is unlikely to be significant because of the low water solubility of this product.         12.4 Mobility is and       Not considered mobile.         12.5 Results of PBT & vPvB assessment       Not applicable         Insoluble in water. Spills may form a film on water surfaces causing physical damage to organisms. Oxygen transfer could also be impaired.         Section 13: Disposal Considerations       Where possible (eg. in the absence of relevant contamination) recycling of used substance is feasible and recommended. This substance can be burned or indirected, subject to national/local authorisation, relevant contamination limits, stering contamination, and/or prescribe composition limits and methods for recovery or disposal         Product Methods of disposal       Where possible (eg. in the absence of relevant contamination) intrescriber qualified vases burned or indirectly cryptelible (biposal can be carried out directly, or ty delivery to requalified vases bandles n. National legislation may lightly legislation. Contaminated or waste substance incort directly ercyclable in basice or indirectly applicable.         Hazardous waste       Yes         European waste catalogue (EWC) Waste Code 13 03 07*       Waste designation.         Rethods of disposal       De MO / IMDC Classification       ICAO / IATA Classification         Not regulated       Not regulated       Not regulated       Not regulated         Section 14: Transport Information <t< td=""><td></td><td></td><td>Not expect</td><td>ed to be harmful to aquatic org</td><td>anisms.</td><td></td></t<>			Not expect	ed to be harmful to aquatic org	anisms.		
12.3 Bracum Jative potential       Not considered mobile.         12.4 Mobility in soil of PT 4 vVP assesmet       Not applicable         12.6 Guites of PT 4 vVP assesmet.       Not applicable.         12.6 Guites of PT 4 vVP assesmet.       Not applicable.         2.6 Guites of PT 4 vVP assesmet.       Not applicable.         2.6 Guites of PT 4 vVP assesmet.       Not applicable.         3.6 Guites adverse effects.       Not applicable.         3.7 Guites adverse effects.       VP recorded also be impaired.         3.7 Guites adverse effects.       VP averse visite (e.g. in the absence of relevant containtation, recycling of used subtance is feasible and commended. This subtance (and incluses, subtance) is feasible and commended. This subtance (and incluses, subtance) is feasible and commended. This subtance (and incluses, subtance) is detailed vasite handless. National legislation may identify a special can be carried out diversely.         Product Methods of disposal       VP recycling.       VP recycling.       VP recycling.       VP recycling.         Readaging       VP       VP recycling.       VP recycling.       VP recycling.       VP recycling.         Readaging       Product.       Not regulated.       Not regulated.       Not regulated.         Readaging       ADP /// PO       ADN /// MDG Classification.       Not regulated.         Readaging       Product.       Not regulated.       Produ<	12.2 Persistence and degradability		•				
12.4 Mobility in soil       Not considered mobile.         12.5 Results of PRT & VPR assessment       Not applicable         12.6 Other adverse effects       Unsoluble in water. Spills may form a film on water surfaces causing physical damage to organisms. Oxygen transfer could also be impaired.         Section 13: Disposal Considerations       The information in this section contains generic advice and guidance. The list of identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).         Product Methods of disposal       Where possible (e.g. in the absence of relevant contamination limits, adjett regulations, and ang inquality (edjatic). Contaminatolo in guidance. The dist handles. Nationary local disposal authorisation. Intervational legislation may identify a specific organisation. Contaminator in limits, adjett hengiles. National legislation may identify a specific organisation. Contaminator limits. adjett hengiles. National legislation may identify a specific organisation. Contaminator limits and methods for recovery or disposal         Hazardous waste       Yes         European waste catalogue (EWC) Waste Code 13 03 07*       Waste disignation.         Rescaging       Mineral-based non-chlorinated insulting and heat transmission ells.         The generation of waste shalld be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landiti should only be considered when recycling is not faesible.         Section 13: Transport Information       -       -         14.1 UN number       ADR /R I/D       ADN				, ,	nt because of the low water solu	Ibility of this product.	
12.6 Other adverse effects     Nonludie in water. Splits may form a fitm on water surfaces causing physical damage to organisms. Nongen transfer could also be impaired.       Section 13: Disposal Considerations:       Section 13: Disposal Considerations:       Section 13: Disposal Considerations:       The information in this section contains generic advices undividual and be impaired.       Section 13: Disposal Considerations:       The information in this section contains generic advices on tabulation of relevant contamination intervices. Job et or tabulations and arguality legislation.       Note the providual disposal on the commendo of this substance contations and arguality legislation.       Product Methods of disposal       Yes       European waste catalogue (KPC) Waste Code 13 03 07*       Waste designation.       Recidention of waste should be avoided or minimised wherever possible. Waste packaging should be recided when recycling in feasible.       Recidention tabuscent colspan="4">Colspan="4"       Colspan= 4							
Application adverse energy       Oxygen transfer could also be impaired.         Section 13: Disposal Considerations       Oxygen transfer could also be impaired.         Section 13: Disposal Considerations       Oxygen transfer could also be impaired.         Section 13: Disposal Considerations       Oxygen transfer could also be impaired.         The information in this section contains generic advice and year optimized in the Exposure Scenario(s).       Where possible (e.g. in the absence of relevant contamination finits, sefery regulations and ar quality explaisation. Contamination finits, sefery regulations and ar quality explaisation. Contamination finits, sefery regulations and ar quality explaisation. Contaminated the finits, sefery regulations and ar quality explaisation. Contaminated the finits, sefery regulations and ar quality explaisation. Contaminated the finits, sefery regulations and ar quality explaisation. The quarter of the explashes on orchorinated insulating and heat transmission and ar quality explaisation. The quarter operation of vaste existion may identify a specific organisation, and/or prescribe composition limits and methods for recovery or disposal         Macadous waste       Yes       The generation of vaste existion or shating and heat transmission oils.         Methods of disposal       Mineral-based non-chlorinated insulating and heat transmission oils.       The generation of vaste existion or the existing explaisation.         Methods of disposal       ADR / RD       ADN       IMO / IMDG Classification       ICAO / IATA Classification         14.1 UN number       ADR / RD       ADN       IMO / IMDG C	12.5 Results of PBT & vPvB assessment	:	Not applica	ble			
The information in this section contains generic advice and substance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario().       Where possible (e.g. in the absence of relevant contamination intervated, subject to national/local authorisation, relevant contamination limits, safety regulations and air quality legislation. Contaminated in this, safety regulations and air quality legislation. Contaminated or qualified wase handlens. National legislation may identify a specific organisation, and/or preservice or wase substance (not directly recyclable): Disposal can be carried out directly, or by delivery to qualified wase handlens. National legislation may identify a specific organisation, and/or preservice or wases catalogue (EWC) Wase Code 13 03 07       Yes         European wase catalogue (EWC) Wase Code 13 03 07       Waste designation.       Mineral-based non-chlorinated insulating and heat transmission oils.         Nethods of disposal       Yes       The generation of waste should be avoided or minimission where repossible. Waste packaging should be considered when recyclable.         Nethods of disposal       ADR / IND       ADN       IMO / IMDG Classification       ICAO / IATA Classification         14.1 UN number       ADR / IND       ADN       IMO / IMDG Classification       ICAO / IATA Classification         14.2 UW proper shipping name       -       -       -       -         14.3 Transport hazard class(es)       -       -       -       -         14.3 Faving regulation for user U MARPOLT/* arother program in bu	12.6 Other adverse effects				n water surfaces causing physica	al damage to organisms.	
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	Canada				)		
	China						







	European Inventory of Existing Commercial Chemical Substances (EINECS) – Yes
Europe	European List of Notified Chemical Substances (ELINCS) – No
Japan	Inventory of Existing and New Chemical Substances (ENCS) – Yes
Korea	Existing Chemicals List (ECL) – Yes
New Zealand	New Zealand Inventory – Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS) – Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory – Yes
	oly with the inventory requirements administered by the governing country(s) uct are not listed or exempt from listing on the inventory administered by the governing country(s).
Section 16: Other Information	
Revision comments	
Legend to abbreviations	
ADR	European agreement concerning the international carriage of dangerous good by road.
RID	Regulations agreement concerning the international carriage of dangerous good by rail.
IMDG Code	International Maritime Dangerous Goods Code.
ICAO	International Civil Aviation Organization.
IATA	International Air Transport Association.
GHS	Globally Harmonized System of Classification and Labeling of Chemicals.
CLP	Classification, Labelling and Packaging Regulation [Regulation (EC) No.1272/2008].
SCBA	Self-Contained Breathing Apparatus.
REACH	Registration, Evaluation, Authorization and Restriction of Chemicals Regulation [Regulation (EC) No. 1907/2006].
LC 50	Median lethal concentration.
LD 50	Median lethal dose.
РВТ	Persistent, Bio accumulative and Toxic.

Regulation (EC) no 1907/2006, Annex II as Amended by Commission Regulation (EU) 2015/830

Disclaimer: Information contained in this material data sheet is believed to be reliable, but no representation, guarantee or warranties of any kind made as to its accuracy, suitability for a particular application or results to be obtained from them. It is up to the manufacturer / seller to ensure that the information content in the material data sheet is relevant to the product manufactured / handled or sold by, as the case may be. GANDHAR makes no warranties expressed or implied in respect of the adequacy of this document for any particular purpose.

GANDHAR OIL REFINERY (INDIA) LTD.				
Taloja Plant	Plot No.10, MIDC, Main Road, Taloja, Taluka Panvel, District - Raigad 410208, India.			
Silvassa Plant	Plot No. 2, Survey No. 678/1/3, Village Naroli, Near Naroli Check Post, Silvassa, Dadra & Nagar Haveli, Union Territory 396230, India.			
Emergency / Info Phone No.	Phone: +91-22-40635600 • Fax: +91-22-40635601			
Email	info@gandharoil.com			





## **DIVYOL X RED GREASE**

Section 1: Identification of the Substance / Mixt	ure				
1.1 Product identifier					
Product name	Juct name Divyol X Red Grease				
Product description	X Red Gel Grease	·			
Product type	Grease	·			
MARPOL Annex-1	****				
1.2 Identified uses					
Distribution of substance	Automotive & Inc				
Formulation & (re)packing of substance & mixtures	Automotive & Inc	dustrial Grease			
Manufacture of substance	Automotive & Inc	dustrial Grease			
Functional fluids	Automotive & Inc	dustrial Grease			
Section 2: Hazard Identification					
4-Extreme	Health		1		
3-High	Flammability		1		
2-Moderate	Reactivity		0		
1-Slight	Special		_		
Section 3: Compostion / Information on Ingredi					
Chemical Name / Ingredients	% by wt.	Hazardous		CAS No.	
Lithium Hydroxide Mineral Oil	0.5 -2	Yes Yes		1310-66-3	
12 HSA	82 - 94 4 - 10	No		64742-52-5, 64741-88-4, 64742-54-7, 64742-01-4 106-14-9	
НСО	2-6	No		8001-78-3	
Mix Additives	0-3	Yes		Proprietary Mixture	
Zinc dialkyldithiophosphate	0 - 25	Yes		68457-79-4	
Polyisobutylene	0 - 2	No		9003-27-4	
Product / Ingredient name	Lithium soaps fro	om natural fatty su	ubsta	nces	
Section 4: First Aid Measures					
Inhalation exposure	Remove to fresh	air & provide oxyo	nen it	f breathing is difficult. Contact physician	
· · · ·				skin with water. Wash skin thoroughly with mild soap & water.	
Skin contact	If irritation occurs	s, call a physician.			
Swallowing or other	Do not induce vo Get medical advi		l no t	treatment is necessary unless large quantities are ingested.	
Eye contact	Rinse continuous	sly with water for	sever	al minutes. Get medical attention, if irritation persists.	
Protection first-aiders		ectrical supply. Er entry into confine		adequate ventilation and check that a safe and breathing area is aces.	
Section 5: Fire Fighting Measures					
5.1 Extinguishing media					
Unsuitable extinguishing media				Do not use direct water and wet chemicals, or water on the fire. Use foam simultaneously on the surface.	
5.2 Special hazards arising from the substance or mix		, , , ,			
Hazards from the substance or mixture			ontai	iners may rupture and when exposed to heat, creating a highly	
Hazardous thermal decomposition products	Incomplete com particulates, gase	Incomplete combustion is likely to give rise to a complex mixture of airborne solid and liquid particulates, gases, including carbon monoxide, H <sub>2</sub> S, SO <sub>x</sub> (sulphur oxides) or sulphuric acid and unidentified organic and inorganic compounds.			
5.3 Advice for firefighters					
Special precautions for firefighters				g all persons from the vicinity of the incident if there is a fire. No sonal risk or without suitable training.	
Special protective equipment for firefighters	Firefighters shou (SCBA) with a full helmets, protecti	ld wear appropria l face- piece opera	ate pr ated i ves) c	rotective equipment and self-contained breathing apparatus in positive pressure mode. Clothing for firefighters (including conforming to European standard EN 469 will provide a basic level	





## Section 6: Accidental Release Measures

6.1 Personal precautions, protective equipment and em	ergency procedures
processie equipment and em	Keep non-involved personnel away from the area of spillage.
For non-emergency personnel	Alert emergency personnel. Except in case of small spillages, the feasibility of any actions should always be assessed and advised, if possible, by a trained, competent person in charge of managing the emergency. Stop leak if safe to do so. Avoid direct contact with the product. Stay upwind / keep distance from source. In case of large spillages, alert occupants in downwind areas. Eliminate all ignition sources if safe to do so. Spillages of limited amounts of product, especially in the open air when vapours will be usually quickly dispersed, are dynamic situations, which will presumably limit the exposure to dangerous concentrations. Note : Recommended measures are based on the most likely spillage scenarios for this material; however, local conditions (wind, air temperature, wave / current direction and speed) may significantly influence the choice of appropriate actions.
For emergency responders	For this reason, local experts should be consulted when necessary. Local regulations may also prescribe or limit actions to be taken. Small spillages: Normal antistatic working clothes are usually adequate. Large spillages: Full body suit of chemically resistant and thermal resistant material should be used. Work gloves providing adequate chemical resistance, specifically to aromatic hydrocarbons. Note: Gloves made of PVA are not water-resistant, and are not suitable for emergency use. Safety helmet, antistatic non-skid safety shoes or boots. Goggles and / or face shield, if splashes or contact with eyes is possible or anticipated. Respiratory Protection : A half or full-face respirator with filter(s) for organic vapours (and when applicable for H <sub>2</sub> S) a Self Contained Breathing Apparatus (SCBA) can be used according to the extent of spill and predictable amount of exposure. If the situation cannot be completely assessed, or if an oxygen deficiency is possible, only SCBA's should be used.
6.2 Environmental precautions	Prevent product from entering sewers, rivers or other bodies of water. If necessary dike the product with dry earth, sand or similar non-combustible materials. In case of soil contamination, remove contaminated soil and treat in accordance with local regulations. In case of small spillages in closed waters (i.e. ports), contain product with floating barriers or other equipment. Collect spilled product by absorbing with specific floating absorbents. If possible, large spillages in open waters should be contained with floating barriers or other mechanical means. If this is not possible, control the spreading of the spillage, and collect the product by skimming or other suitable mechanical means. The use of dispersants should be advised by an expert, and, if required, approved by local authorities.
6.3 Methods and material for containment and cleaning	up
Small spill	Stop leak if without risk. Absorb spilled product with suitable non-combustible materials.
Large spill	Large spillages may be cautiously covered with foam, if available, to limit vapour cloud formation. Do not use water jet. When inside buildings or confined spaces, ensure adequate ventilation. Transfer collected product and other contaminated materials to suitable containers for recovery or safe disposal.
6.4 Reference to other sections	See Section 1: For emergency contact information. See Section 8: For information on appropriate personal protective equipment. See Section 13: For additional waste treatment information.
Section 7: Handling and Storage	
7.1 Advice on general information – hygiene, storage	Obtain special instructions before use. Keep away from heat / sparks / open flames/hot surfaces. No smoking. Use and store only outdoors or in a well-ventilated area. Hazard of slipping on spilt product. Avoid release to the environment.
7.2 Conditions for safe storage including any incompatibilities	Storage area layout, tank design, equipment and operating procedures must comply with the relevant regional, national or local legislation. Storage installations should be designed with adequate bunds in case of leaks or spills. Cleaning, inspection and maintenance of internal structure of storage tanks must be done only by properly equipped and qualified personnel as defined by national, local or company regulations. Store separately from oxidising agents. Keep only in the original container or in a suitable container for this kind of product. Keep container tightly closed and sealed until ready for use. Do not store in unlabelled containers. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Empty containers may contain harmful, flammable / combustible or explosive residue or vapours. Do not cut, grind, drill, weld, reuse or dispose of containers unless adequate precautions are taken against these hazards. Protect from sunlight.
7.3 Specific end use(s) – Recommendations	Not available



Vapour pressure

Density Solubility (ies)



Section 8: Exposure Controls / Personal Protec	tion
The list of Identified Uses in Section 1 should be consu	Ited for any available use-specific information provided in the Exposure Scenario(s).
8.1 Control parameters	
Occupational exposure limits	
Product / Ingredient name	Distillates, mixture of hydrocarbons
Exposure limits values	AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m <sup>3</sup> 8 hours. Form: mist and fume STEL: 3 mg/m <sup>3</sup> 15 minutes. Form: mist and fume [Air contaminant]. AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m <sup>3</sup> 8 hours. Form: mist and fume STEL: 3 mg/m <sup>3</sup> 15 minutes. Form: mist and fume.
Recommended monitoring procedures	If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres – Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres – Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres – General requirements for the performance of procedures for the measurement of chemical agents). Reference to national guidance documents for methods for the determination of hazardous substances will also be required.
8.2 Exposure control Appropriate engineering controls	Mechanical ventilation and local exhaust will reduce exposure via the air. Use oil resistant material in construction of handling equipment. Store under recommended conditions and if heated, temperature control equipment should be used to avoid overheating.
Individual protection measures	
Hygiene measures	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Ensure that eyewash stations and safety showers are close to the workstation location. Wash contaminated clothing before reuse.
Eye / face protection	Recommended: Safety glasses with side shields.
Skin protection	
Hand protection	4 – 8 hours (breakthrough time): nitrile rubber.
Body protection	Wear protective clothing if there is a risk of skin contact. Change contaminated clothes at the end of working shift.
Other skin protection	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary.
Environmental exposure control	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.
Section 9: Physical and Chemical Properties	
Appearance	Clear
Physical state	Smooth, Homogenous, Mild Tacky
Colour	Red
Odor	Petroleum odor
Odour threshold	Not available
Dropping point	> 200°C (ASTM D-2265)
Flash point	> 205°C (MINERAL OIL)
Evaporation rate	Not available
Flammability (solid, gas)	Not available
Flammability limits in air (lower), % by volume	Not available
Flammability limits in air (upper), % by volume	Not available
Vanour prossure	Netvolatile



Not volatile

0.88 - 0.95 Kg/L





Solubility (water)		Insoluble in wat	ter		
		Not available			
		No data			
Auto-ignition temperature		Not available			
Worked Penetration at 25°C		235 (ASTM D 2	17)		
Explosive properties		No data	(7)		
		No data			
Oxidising properties DMSO extractable compounds for	r baca ail substanca(s)	Not available			
according to IP346		<3 %			
Section 10: Stability and Rea	ctivity	1			
10.1 Reactivity		No specific test	data related to reactivity avail	able for this product or its ingr	edients.
10.2 Chemical stability		Stable under no	ormal conditions		
10.3 Possibility of hazardous rea	ctions	Under normal c	onditions of storage and use,	hazardous reactions will not o	ccur. Oxidising agent.
10.4 Conditions to avoid		Keep away from	n extreme heat and oxidising a	agents.	
10.5 Incompatible materials				a complex mixture of airborn de, H <sub>2</sub> S, SO <sub>2</sub> (sulphur oxides) or	
10.6 Hazardous decomposition	•		ganic and inorganic compound		
SECTION 11: Toxicological In					
11.1 Information on toxicologica	al effects				
Acute toxicity					
Product / ingredient name	Result		Species	Dose	Exposure
	LC 50 Inhalation due	sts and mists	Rat	>2.18mg/l	4 hours
Distillate (Petroleum), hydro treated heavy paraffinic	LD 50 Derr	nal	Rabbit	> 5000 mg/kg	-
treated neavy paraminic	LD 50 Or	al	Rat	>15000 mg/kg	-
Irritation / corrosion					
Skin					
Eye		No known significant effects or critical hazards.			
Respiratory					
Sensation					
Skin					
Respiratory		No known significant effects or critical hazards.			
Respiratory		No data available to indicate product or any components present system than 0.1 % are			
Mutagenicity		No data available to indicate product or any components present greater than 0.1 % are multigene or genotoxic.			
Carcinogenicity		The base oil(s) i	n this product is based on an s	severely hydrotreated distillate	•
Reproductive toxicity		The product should not be regarded as a carcinogen. Contains no ingredient listed as toxic to reproduction.			
Specific target organ toxicity – sin	gle exposure				
Specific target organ toxicity – rep	peated exposure	Not classified			
Aspiration hazard		Aspiration hazard – Category 1			
Information on likely routes of exposure		Not available			
Potential acute health effects					
Potential acute health effects		Eye contact ma	y cause redness and transient	pain.	
				•	itory irritation.
Potential acute health effects Eye contact Inhalation		Inhalation of oil	mist or vapours at elevated te	emperatures may cause respira	tory irritation.
Potential acute health effects Eye contact Inhalation Skin contact		Inhalation of oil	hist or vapours at elevated te ficant effects or critical hazard	emperatures may cause respira	itory irritation.
Potential acute health effects Eye contact Inhalation Skin contact Ingestion		Inhalation of oil	mist or vapours at elevated te	emperatures may cause respira	itory irritation.
Potential acute health effects Eye contact Inhalation Skin contact Ingestion Potential chronic health effects		Inhalation of oil No known signi May be fatal if s	mist or vapours at elevated te ficant effects or critical hazard wallowed and enters airways.	emperatures may cause respira ls.	tory irritation.
Potential acute health effects Eye contact Inhalation Skin contact Ingestion		Inhalation of oil No known signi May be fatal if s No known signi	i mist or vapours at elevated te ficant effects or critical hazard wallowed and enters airways. ficant effects or critical hazard	emperatures may cause respira ls.	







Mutagenicity						
Teratogenicity		No known s	significant effects or critical haz	ards.		
Product / ingredient name						
Fertility effects		Not such the la	1-			
Other information Specific hazard		Not availab	le			
Section 12: Ecological Information						
12.1 Toxicity			ed to be harmful to aquatic org	anisms.		
12.2 Persistence and degradability			ntly biodegradable.			
12.3 Bioaccumulative potential				nt because of the low water solu	bility of this product.	
12.4 Mobility in soil			Not considered mobile.			
12.5 Results of PBT & vPvB assessment	:	Not applica				
12.6 Other adverse effects			n water. Spills may form a film of nsfer could also be impaired.	n water surfaces causing physica	al damage to organisms.	
Section 13: Disposal Consideration						
The information in this section contains information provided in the Exposure So	generic advice and enario(s).	d guidance. T	he list of Identified Uses in Sect	ion 1 should be consulted for ar	ny available use-specific	
Product Methods of disposal	feasible and authorisatio or waste su qualified w	Where possible (e.g. in the absence of relevant contamination), recycling of used substance is feasible and recommended. This substance can be burned or incinerated, subject to national/local authorisations, relevant contamination limits, safety regulations and air quality legislation. Contaminated or waste substance (not directly recyclable): Disposal can be carried out directly, or by delivery to qualified waste handlers. National legislation may identify a specific organisation, and/or prescribe composition limits and methods for recovery or disposal				
Hazardous waste		Yes				
European waste catalogue (EWC) Waste Code 13 03 07*		Waste designation.				
Packaging		Mineral-based non-chlorinated insulating and heat transmission oils.				
Methods of disposal		The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.				
Section 14: Transport Information						
International transport regulations						
	ADR / RID ADN IMO / IMDG Classification ICAO / IATA Classificati			ICAO / IATA Classification		
14.1 UN number	Not regul	ated	Not regulated	Not regulated	Not regulated	
14.2 UN proper shipping name	_		_	_	_	
14.3 Transport hazard class(es)	_		-	_	_	
14.4 Packing group	_		-	_	_	
14.5 Environmental hazards	No		No	No	No	
Additional Information	_		-	-	-	
14.6 Special precautions for user oils						
14.7 Transport in bulk according to An	nex   of MARPOL	73/78 and th	e IBC Code			
Section 15: Regulatory Informatio						
15.1 Safety, health and environmental		slation speci	fic for the substance or mixture	e EU Regulation (EC) No. 1907/	2006 (REACH)	
Annex XIV – List of substances subject to Annex XIV Substances of very high concern		None of the components are listed				
Annex XVII – Restrictions on the manufa on the market and use of certain danger mixtures and articles.		Not applicable				
International Lists National Inventory		Inventory r	name			
Australia		Australian I	nventory of Chemical Substanc	es (AICS) – Yes		
Canada			ubstances List (DSL) – Yes stic Substances List (NDSL) – Nc	)		
China			f Existing Chemical Substances			
		inventory o	. Easting chemical substances			





	European Inventory of Existing Commercial Chemical Substances (EINECS) – Yes
Europe	European List of Notified Chemical Substances (ELINCS) – No
Japan	Inventory of Existing and New Chemical Substances (ENCS) – Yes
Korea	Existing Chemicals List (ECL) – Yes
New Zealand	New Zealand Inventory – Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS) – Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory – Yes
	oly with the inventory requirements administered by the governing country(s) uct are not listed or exempt from listing on the inventory administered by the governing country(s).
Section 16: Other Information	
Revision comments	
Legend to abbreviations	
ADR	European agreement concerning the international carriage of dangerous good by road.
RID	Regulations agreement concerning the international carriage of dangerous good by rail.
IMDG Code	International Maritime Dangerous Goods Code.
ICAO	International Civil Aviation Organization.
IATA	International Air Transport Association.
GHS	Globally Harmonized System of Classification and Labeling of Chemicals.
CLP	Classification, Labelling and Packaging Regulation [Regulation (EC) No.1272/2008].
SCBA	Self-Contained Breathing Apparatus.
REACH	Registration, Evaluation, Authorization and Restriction of Chemicals Regulation [Regulation (EC) No. 1907/2006].
LC 50	Median lethal concentration.
LD 50	Median lethal dose.
РВТ	Persistent, Bio accumulative and Toxic.

Regulation (EC) no 1907/2006, Annex II as Amended by Commission Regulation (EU) 2015/830

Disclaimer: Information contained in this material data sheet is believed to be reliable, but no representation, guarantee or warranties of any kind made as to its accuracy, suitability for a particular application or results to be obtained from them. It is up to the manufacturer / seller to ensure that the information content in the material data sheet is relevant to the product manufactured / handled or sold by, as the case may be. GANDHAR makes no warranties expressed or implied in respect of the adequacy of this document for any particular purpose.

GANDHAR OIL REFINERY (INDIA) LTD.				
Taloja Plant	Plot No.10, MIDC, Main Road, Taloja, Taluka Panvel, District - Raigad 410208, India.			
Silvassa Plant	Plot No. 2, Survey No. 678/1/3, Village Naroli, Near Naroli Check Post, Silvassa, Dadra & Nagar Haveli, Union Territory 396230, India.			
Emergency / Info Phone No.	Phone: +91-22-40635600 • Fax: +91-22-40635601			
Email	info@gandharoil.com			





# **DIVYOL XL BLUE GREASE**

Section 1: Identification of the Substance / Mixt	ure			
1.1 Product identifier				
Product name	Divyol XI Blue Gr	ease		
Product description	XI Blue Grease			
Product type	Grease			
MARPOL Annex-1	****			
1.2 Identified uses				
Distribution of substance	Automotive & Industrial Grease			
Formulation & (re)packing of substance & mixtures		Automotive & Industrial Grease		
Manufacture of substance	Automotive & Industrial Grease Automotive & Industrial Grease			
Functional fluids	Automotive & Industrial Grease Automotive & Industrial Grease			
Section 2: Hazard Identification	Automotive & Inc	dustrial Grease		
4-Extreme	Health		1	
3-High	Flammability		1	
2-Moderate	Reactivity		0	
1-Slight	Special		-	
Section 3: Compostion / Information on Ingredi	ents			
Chemical Name / Ingredients	% by wt.	Hazardous	CAS No.	
Lithium Hydroxide	0.5 -3	Yes	1310-66-3	
Mineral Oil	80 - 90	Yes	64742-52-5, 64741-88-4, 64742-54-7, 64742-01-4	
12 HSA	5 - 10	No	106-14-9	
HCO	2 - 5	No	8001-78-3	
Complexing Add Additive Package	1 - 3 0 - 4	No Yes	Proprietary Mixture Proprietary Mixture	
Zinc dialkyldithiophosphate	0-4	Yes	68457-79-4	
Butene, Homo Polymer	0 - 4	No	9003-27-4	
Product / Ingredient name	Lithium soons fro	m natural fatty s	substances	
Product / Ingredient name     Lithium soaps from natural fatty substances       Section 4: First Aid Measures				
Inhalation exposure	Pomovo to frosh	air & provide ovv	ygen, if breathing is difficult. Contact physician	
Skin contact	If irritation occur	Remove contaminated clothing. Flush skin with water. Wash skin thoroughly with mild soap & water. If irritation occurs, call a physician.		
Swallowing or other		Do not induce vomiting. In general no treatment is necessary unless large quantities are ingested. Get medical advice.		
Eye contact	Rinse continuous	Rinse continuously with water for several minutes. Get medical attention, if irritation persists.		
Protection first-aiders		Disconnecting electrical supply. Ensure adequate ventilation and check that a safe and breathing area is available before entry into confined spaces.		
Section 5: Fire Fighting Measures			•	
5.1 Extinguishing media				
Unsuitable extinguishing media	Use dry powder, foam, carbon dioxide. Do not use direct water and wet chemicals, or water on the burning product. They may spread the fire. Use foam simultaneously on the surface.			
5.2 Special hazards arising from the substance or mix	51		a de lie de ser our sindlancousy on the surdee.	
Hazards from the substance or mixture	Flammable liquid	re Flammable liquids in pressurised containers may rupture and when exposed to heat, creating a highly flammable vapour cloud.		
Hazardous thermal decomposition products	Incomplete com particulates, gase	Incomplete combustion is likely to give rise to a complex mixture of airborne solid and liquid particulates, gases, including carbon monoxide, H <sub>2</sub> S, SO <sub>x</sub> (sulphur oxides) or sulphuric acid and unidentified organic and inorganic compounds.		
5.3 Advice for firefighters		-		
Special precautions for firefighters			noving all persons from the vicinity of the incident if there is a fire. N ny personal risk or without suitable training.	٩o
Special protective equipment for firefighters	Firefighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face- piece operated in positive pressure mode. Clothing for firefighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.			





## Section 6: Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures				
Keep non-involved personnel away from the area of spillage.				
For non-emergency personnel	Alert emergency personnel. Except in case of small spillages, the feasibility of any actions should always be assessed and advised, if possible, by a trained, competent person in charge of managing the emergency. Stop leak if safe to do so. Avoid direct contact with the product. Stay upwind / keep distance from source. In case of large spillages, alert occupants in downwind areas. Eliminate all ignition sources if safe to do so. Spillages of limited amounts of product, especially in the open air when vapours will be usually quickly dispersed, are dynamic situations, which will presumably limit the exposure to dangerous concentrations. Note : Recommended measures are based on the most likely spillage scenarios for this material; however, local conditions (wind, air temperature, wave / current direction and speed) may significantly influence the choice of appropriate actions.			
For emergency responders	For this reason, local experts should be consulted when necessary. Local regulations may also prescribe or limit actions to be taken. Small spillages: Normal antistatic working clothes are usually adequate. Large spillages: Full body suit of chemically resistant and thermal resistant material should be used. Work gloves providing adequate chemical resistance, specifically to aromatic hydrocarbons. Note: Gloves made of PVA are not water-resistant, and are not suitable for emergency use. Safety helmet, antistatic non-skid safety shoes or boots. Goggles and / or face shield, if splashes or contact with eyes is possible or anticipated. Respiratory Protection : A half or full-face respirator with filter(s) for organic vapours (and when applicable for H <sub>2</sub> S) a Self Contained Breathing Apparatus (SCBA) can be used according to the extent of spill and predictable amount of exposure. If the situation cannot be completely assessed, or if an oxygen deficiency is possible, only SCBA's should be used.			
6.2 Environmental precautions	Prevent product from entering sewers, rivers or other bodies of water. If necessary dike the product with dry earth, sand or similar non-combustible materials. In case of soil contamination, remove contaminated soil and treat in accordance with local regulations. In case of small spillages in closed waters (i.e. ports), contain product with floating barriers or other equipment. Collect spilled product by absorbing with specific floating absorbents. If possible, large spillages in open waters should be contained with floating barriers or other mechanical means. If this is not possible, control the spreading of the spillage, and collect the product by skimming or other suitable mechanical means. The use of dispersants should be advised by an expert, and, if required, approved by local authorities.			
6.3 Methods and material for containment and cleaning up				
Small spill	Stop leak if without risk. Absorb spilled product with suitable non-combustible materials.			
Large spill	Large spillages may be cautiously covered with foam, if available, to limit vapour cloud formation. Do not use water jet. When inside buildings or confined spaces, ensure adequate ventilation. Transfer collected product and other contaminated materials to suitable containers for recovery or safe disposal.			
6.4 Reference to other sections	See Section 1: For emergency contact information. See Section 8: For information on appropriate personal protective equipment. See Section 13: For additional waste treatment information.			
Section 7: Handling and Storage				
7.1 Advice on general information – hygiene, storage	Obtain special instructions before use. Keep away from heat / sparks / open flames/hot surfaces. No smoking. Use and store only outdoors or in a well-ventilated area. Hazard of slipping on spilt product. Avoid release to the environment.			
7.2 Conditions for safe storage including any incompatibilities	Storage area layout, tank design, equipment and operating procedures must comply with the relevant regional, national or local legislation. Storage installations should be designed with adequate bunds in case of leaks or spills. Cleaning, inspection and maintenance of internal structure of storage tanks must be done only by properly equipped and qualified personnel as defined by national, local or company regulations. Store separately from oxidising agents. Keep only in the original container or in a suitable container for this kind of product. Keep container tightly closed and sealed until ready for use. Do not store in unlabelled containers. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Empty containers may contain harmful, flammable / combustible or explosive residue or vapours. Do not cut, grind, drill, weld, reuse or dispose of containers unless adequate precautions are taken against these hazards. Protect from sunlight.			
7.3 Specific end use(s) – Recommendations	Not available			



Vapour pressure

Density Solubility (ies)



Section 8: Exposure Controls / Personal Protect	ion		
	ted for any available use-specific information provided in the Exposure Scenario(s).		
8.1 Control parameters			
Occupational exposure limits			
Product / Ingredient name	Distillates, mixture of hydrocarbons		
Exposure limits values	AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m <sup>3</sup> 8 hours. Form: mist and fume STEL: 3 mg/m <sup>3</sup> 15 minutes. Form: mist and fume [Air contaminant]. AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m <sup>3</sup> 8 hours. Form: mist and fume STEL: 3 mg/m <sup>3</sup> 15 minutes. Form: mist and fume.		
Recommended monitoring procedures	If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres – Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres – Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres – General requirements for the performance of procedures for the measurement of chemical agents). Reference to national guidance documents for methods for the determination of hazardous substances will also be required.		
8.2 Exposure control Appropriate engineering controls	Mechanical ventilation and local exhaust will reduce exposure via the air. Use oil resistant material in construction of handling equipment. Store under recommended conditions and if heated, temperature control equipment should be used to avoid overheating.		
Individual protection measures			
Hygiene measures	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Ensure that eyewash stations and safety showers are close to the workstation location. Wash contaminated clothing before reuse.		
Eye / face protection	Recommended: Safety glasses with side shields.		
Skin protection			
Hand protection	4 – 8 hours (breakthrough time): nitrile rubber.		
Body protection	Wear protective clothing if there is a risk of skin contact. Change contaminated clothes at the end of working shift.		
Other skin protection	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.		
Respiratory protection	Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary.		
Environmental exposure control	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.		
Section 9: Physical and Chemical Properties			
Appearance	Clear		
Physical state	Smooth, Homogenous, Tacky		
Colour	Blue		
Odor	Petroleum odor		
Odour threshold	Not available		
Dropping point	> 270°C (ASTM D-2265)		
Flash point	> 230°C (MINERAL OIL)		
	Not available		
Evaporation rate	Not available		
	Not available		
Evaporation rate			
Evaporation rate Flammability (solid, gas)	Not available		



Not volatile

0.88 - 0.95 Kg/L





Solubility (water)		Insoluble in wat	er		
Partition coefficient (n-octanol/water)		Not available			
Decomposition temperature		No data			
Auto-ignition temperature		Not available			
Worked Penetration at 25°C		240-260 (ASTM D 217)			
Explosive properties		No data			
Oxidising properties		No data			
DMSO extractable compounds for base oil substance(s)		Not available			
according to IP346		<3 %			
Section 10: Stability and Reactivity					
10.1 Reactivity				able for this product or its ingr	redients.
10.2 Chemical stability			ormal conditions		
10.3 Possibility of hazardous rea	ctions		-	hazardous reactions will not or	ccur. Oxidising agent.
10.4 Conditions to avoid		Keep away from	n extreme heat and oxidising a	igents.	
10.5 Incompatible materials				a complex mixture of airborn de, H <sub>2</sub> S, SO <sub>x</sub> (sulphur oxides) or	
10.6 Hazardous decomposition p	products	unidentified or	ganic and inorganic compound	ds.	
SECTION 11: Toxicological Inf	formation				
11.1 Information on toxicologica	ll effects				
Acute toxicity					
Product / ingredient name	Result		Species	Dose	Exposure
	LC 50 Inhalation due	sts and mists	Rat	>2.18mg/l	4 hours
Distillate (Petroleum), hydro	LD 50 Derr	nal	Rabbit	> 5000 mg/kg	_
treated heavy paraffinic	LD 50 Ora	al	Rat	>15000 mg/kg	-
Irritation / corrosion					
Skin					
		No known signi	ficant officets or critical bazard	c	
Eye		No known signi	ficant effects or critical hazard	s.	
Eye Respiratory		No known signi	ficant effects or critical hazard	ls.	
Eye Respiratory Sensation		No known signi	ficant effects or critical hazard	l5.	
Eye Respiratory Sensation Skin			ficant effects or critical hazard		
Eye Respiratory Sensation		No known signi	ficant effects or critical hazard	S.	
Eye Respiratory Sensation Skin		No known signi	ficant effects or critical hazard le to indicate product or any c		an 0.1 % are
Eye Respiratory Sensation Skin Respiratory		No known signi No data availab multigene or ge	ficant effects or critical hazard le to indicate product or any c enotoxic.	S.	
Eye Respiratory Sensation Skin Respiratory Mutagenicity		No known signi No data availab multigene or ge The base oil(s) i The product sho	ficant effects or critical hazard le to indicate product or any c enotoxic.	s. omponents present greater th severely hydrotreated distillate inogen.	
Eye Respiratory Sensation Skin Respiratory Mutagenicity Carcinogenicity Reproductive toxicity	gle exposure	No known signi No data availab multigene or ge The base oil(s) i The product she Contains no ing	ficant effects or critical hazard le to indicate product or any c motoxic. n this product is based on an s puld not be regarded as a carc	s. omponents present greater th severely hydrotreated distillate inogen.	
Eye Respiratory Sensation Skin Respiratory Mutagenicity Carcinogenicity Reproductive toxicity – sin		No known signi No data availab multigene or ge The base oil(s) i The product sho	ficant effects or critical hazard le to indicate product or any c motoxic. n this product is based on an s puld not be regarded as a carc	s. omponents present greater th severely hydrotreated distillate inogen.	
Eye Respiratory Sensation Skin Respiratory Mutagenicity Carcinogenicity Reproductive toxicity		No known signi No data availab multigene or ge The base oil(s) i The product she Contains no ing Not classified	ficant effects or critical hazard le to indicate product or any c enotoxic. n this product is based on an s puld not be regarded as a carc redient listed as toxic to repro	s. omponents present greater th severely hydrotreated distillate inogen.	
EyeRespiratorySensationSkinRespiratoryMutagenicityCarcinogenicityReproductive toxicitySpecific target organ toxicity - sin Specific target organ toxicity - rep Aspiration hazard	eated exposure	No known signi No data availab multigene or ge The base oil(s) i The product she Contains no ing	ficant effects or critical hazard le to indicate product or any c enotoxic. n this product is based on an s puld not be regarded as a carc redient listed as toxic to repro	s. omponents present greater th severely hydrotreated distillate inogen.	
Eye Eye Respiratory Sensation Skin Respiratory Mutagenicity Carcinogenicity Reproductive toxicity Specific target organ toxicity – sin Specific target organ toxicity – rep	eated exposure	No known signi No data availab multigene or ge The base oil(s) i The product she Contains no ing Not classified Aspiration haza	ficant effects or critical hazard le to indicate product or any c enotoxic. n this product is based on an s puld not be regarded as a carc redient listed as toxic to repro	s. omponents present greater th severely hydrotreated distillate inogen.	
Eye         Respiratory         Sensation         Skin         Respiratory         Mutagenicity         Carcinogenicity         Reproductive toxicity         Specific target organ toxicity – sine         Specific target organ toxicity – sine         Specific target organ toxicity – sine         Aspiration hazard         Information on likely routes of exp         Potential acute health effects	eated exposure	No known signi No data availab multigene or ge The base oil(s) i The product she Contains no ing Not classified Aspiration haza Not available	ficant effects or critical hazard le to indicate product or any c enotoxic. n this product is based on an s ould not be regarded as a carc redient listed as toxic to repro rd – Category 1	s. omponents present greater th severely hydrotreated distillate inogen. duction.	
EyeRespiratorySensationSkinRespiratoryMutagenicityCarcinogenicityReproductive toxicitySpecific target organ toxicity - repAspiration hazardInformation on likely routes of exp	eated exposure	No known signi No data availab multigene or ge The base oil(s) i The product she Contains no ing Not classified Aspiration haza Not available Eye contact ma	ficant effects or critical hazard le to indicate product or any c enotoxic. n this product is based on an s puld not be regarded as a carc iredient listed as toxic to repro rd – Category 1	s. omponents present greater th everely hydrotreated distillate inogen. duction. pain.	
EyeRespiratorySensationSkinRespiratoryMutagenicityCarcinogenicityReproductive toxicitySpecific target organ toxicity - sin Specific target organ toxicity - repAspiration hazardInformation on likely routes of expPotential acute health effectsEye contactInhalation	eated exposure	No known signi No data availab multigene or ge The base oil(s) i The product she Contains no ing Not classified Aspiration haza Not available Eye contact may Inhalation of oil	ficant effects or critical hazard le to indicate product or any c enotoxic. In this product is based on an s buld not be regarded as a carc redient listed as toxic to repro rd – Category 1 y cause redness and transient mist or vapours at elevated te	s. omponents present greater th severely hydrotreated distillate inogen. duction. gain. emperatures may cause respira	
EyeRespiratorySensationSkinRespiratoryMutagenicityCarcinogenicityReproductive toxicitySpecific target organ toxicity - repAspiration hazardInformation on likely routes of expPotential acute health effectsEye contactInhalationSkin contact	eated exposure	No known signi No data availab multigene or ge The base oil(s) i The product she Contains no ing Not classified Aspiration haza Not available Eye contact ma Inhalation of oil No known signi	ficant effects or critical hazard le to indicate product or any c enotoxic. In this product is based on an s puld not be regarded as a carc redient listed as toxic to repro rd – Category 1 y cause redness and transient mist or vapours at elevated te ficant effects or critical hazard	s. omponents present greater th severely hydrotreated distillate inogen. duction. gain. emperatures may cause respira	
Eye   Respiratory   Sensation   Skin   Respiratory   Mutagenicity   Mutagenicity   Carcinogenicity   Reproductive toxicity   Specific target organ toxicity - sin Specific target organ toxi	eated exposure	No known signi No data availab multigene or ge The base oil(s) i The product she Contains no ing Not classified Aspiration haza Not available Eye contact ma Inhalation of oil No known signi	ficant effects or critical hazard le to indicate product or any c enotoxic. In this product is based on an s buld not be regarded as a carc redient listed as toxic to repro rd – Category 1 y cause redness and transient mist or vapours at elevated te	s. omponents present greater th severely hydrotreated distillate inogen. duction. gain. emperatures may cause respira	
Eye   Respiratory   Sensation   Skin   Respiratory   Mutagenicity   Mutagenicity   Carcinogenicity   Carcinogenicity   Specific target organ toxicity - sind   Specific targe	eated exposure	No known signi No data availab multigene or ge The base oil(s) i The product she Contains no ing Not classified Aspiration haza Not available Eye contact ma Inhalation of oil No known signi May be fatal if s	ficant effects or critical hazard le to indicate product or any c enotoxic. In this product is based on an s puld not be regarded as a carc redient listed as toxic to repro rd – Category 1 y cause redness and transient mist or vapours at elevated te ficant effects or critical hazard wallowed and enters airways.	s. omponents present greater th severely hydrotreated distillate inogen. duction. pain. emperatures may cause respira	
Eye   Respiratory   Sensation   Skin   Respiratory   Mutagenicity   Mutagenicity   Carcinogenicity   Reproductive toxicity   Specific target organ toxicity - sind   Specific	eated exposure	No known signi No data availab multigene or ge The base oil(s) i The product she Contains no ing Not classified Aspiration haza Not available Eye contact may Inhalation of oil No known signi May be fatal if s	ficant effects or critical hazard le to indicate product or any c enotoxic. In this product is based on an s buld not be regarded as a carc redient listed as toxic to repro rd – Category 1 y cause redness and transient mist or vapours at elevated te ficant effects or critical hazard wallowed and enters airways.	s. omponents present greater th severely hydrotreated distillate inogen. duction. pain. emperatures may cause respira	tory irritation.







Mutagenicity							
Teratogenicity							
Product / ingredient name		No known s	significant effects or critical haz	ards.			
Fertility effects							
-		Natavailable					
Other information Specific hazard		Not available					
Section 12: Ecological Information		Not over a st					
12.1 Toxicity		Not expected to be harmful to aquatic organisms.					
12.2 Persistence and degradability			ntly biodegradable.		ubilita a fabia yaya aku at		
12.3 Bioaccumulative potential		Bioaccumulation is unlikely to be significant because of the low water solubility of this product.					
12.4 Mobility in soil		Not considered mobile.					
12.5 Results of PBT & vPvB assessment		Not applica	n water. Spills may form a film or	a water surfaces causing physic	al damago to organisms		
12.6 Other adverse effects	12.6 Other adverse effects		nsfer could also be impaired.	Twater surfaces causing physics	al damage to organisms.		
Section 13: Disposal Consideration	ns						
The information in this section contains information provided in the Exposure So	generic advice and enario(s).	d guidance. T	he list of Identified Uses in Sect	ion 1 should be consulted for ar	ny available use-specific		
Product Methods of disposal		Where possible (e.g. in the absence of relevant contamination), recycling of used substance is feasible and recommended. This substance can be burned or incinerated, subject to national/local authorisations, relevant contamination limits, safety regulations and air quality legislation. Contaminated or waste substance (not directly recyclable): Disposal can be carried out directly, or by delivery to qualified waste handlers. National legislation may identify a specific organisation, and/or prescribe composition limits and methods for recovery or disposal					
Hazardous waste	Hazardous waste						
European waste catalogue (EWC) Waste	European waste catalogue (EWC) Waste Code 13 03 07*		Waste designation.				
Packaging		Mineral-based non-chlorinated insulating and heat transmission oils.					
Methods of disposal	lethods of disposal		The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.				
Section 14: Transport Information							
International transport regulations							
				ICAO / IATA Classification			
14.1 UN number	Not regul	ated	Not regulated	Not regulated	Not regulated		
14.2 UN proper shipping name	-		_	_	_		
14.3 Transport hazard class(es)	-		_	-	-		
14.4 Packing group	-		_	_	_		
14.5 Environmental hazards	No		No	No	No		
Additional Information	_		-	_	-		
14.6 Special precautions for user oils							
14.7 Transport in bulk according to An		73/78 and th	e IBC Code				
Section 15: Regulatory Informatio		Si i o anu th					
		dation energy	fic for the substance or misture	ELL Regulation (EC) No. 1007/			
15.1 Safety, health and environmental regulations / legi: Annex XIV – List of substances subject to authorisation Annex XIV Substances of very high concern		slation specific for the substance or mixture EU Regulation (EC) No. 1907/2006 (REACH) None of the components are listed					
Annex XVII – Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles.		Not applicable					
International Lists National Inventory		Inventory name					
Australia		Australian Inventory of Chemical Substances (AICS) – Yes					
Canada		Domestic Substances List (DSL) – Yes					
China		Non-Domestic Substances List (NDSL) – No					
China	Inventory of Existing Chemical Substances in China (IECSC) – Yes						





	European Inventory of Existing Commercial Chemical Substances (EINECS) – Yes			
Europe	European List of Notified Chemical Substances (ELINCS) – No			
Japan	Inventory of Existing and New Chemical Substances (ENCS) – Yes			
Korea	Existing Chemicals List (ECL) – Yes			
New Zealand	New Zealand Inventory – Yes			
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS) – Yes			
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory – Yes			
	oly with the inventory requirements administered by the governing country(s) uct are not listed or exempt from listing on the inventory administered by the governing country(s).			
Section 16: Other Information				
Revision comments				
Legend to abbreviations				
ADR	European agreement concerning the international carriage of dangerous good by road.			
RID	Regulations agreement concerning the international carriage of dangerous good by rail.			
IMDG Code	International Maritime Dangerous Goods Code.			
ICAO	International Civil Aviation Organization.			
IATA	International Air Transport Association.			
GHS	Globally Harmonized System of Classification and Labeling of Chemicals.			
CLP	Classification, Labelling and Packaging Regulation [Regulation (EC) No.1272/2008].			
SCBA	Self-Contained Breathing Apparatus.			
REACH	Registration, Evaluation, Authorization and Restriction of Chemicals Regulation [Regulation (EC) No. 1907/2006].			
LC 50	Median lethal concentration.			
LD 50	Median lethal dose.			
РВТ	Persistent, Bio accumulative and Toxic.			

Regulation (EC) no 1907/2006, Annex II as Amended by Commission Regulation (EU) 2015/830

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GANDHAR OIL REFINERY (INDIA) LTD.				
Taloja Plant	Plot No.10, MIDC, Main Road, Taloja, Taluka Panvel, District - Raigad 410208, India.			
Silvassa Plant	Plot No. 2, Survey No. 678/1/3, Village Naroli, Near Naroli Check Post, Silvassa, Dadra & Nagar Haveli, Union Territory 396230, India.			
Emergency / Info Phone No.	Phone: +91-22-40635600 • Fax: +91-22-40635601			
Email	info@gandharoil.com			



#### Gandhar Oil Refinery (India) Limited

ISO 9001:2015, ISO 14001:2015, ISO 45001:2018, GMP Certified, NABL Accreditation and Government Recognized Three Start Export House

#### **Registered Office**

18th Floor, DLH Park, S. V. Road, Goregaon (W), Mumbai 400062, India. | Phone: +91-22-40635600 | Fax: +91-22-40635601 Email: sales@gandharoil.com | Website: www.gandharoil.com

#### Branch Offices and Depots

Pune | Baroda | Indore | Raipur | Udaipur | Jaipur | Delhi | Faridabad | Ghaziabad | Sonepat | Manesar | Haridwar | Patna | Hyderabad | Mangalore | Bangalore Guwahati | Varanasi | Hapur | Dharamtar | Jaigarh | Kandla | Surat (Magdalla) | Navlakhi | Krishnapatnam | Vishakapatnam | Gangavaram

### Plants

Taloja | Silvassa | Sharjah