



# DIVYOL ENTRO ASHLESS ZINC FREE HYDRAULIC OILS – ZF-32 / 46 / 68

## **Applications:**

Divyol Entro ZF-32, ZF-46 and ZF-68 hydraulic oils are premium grade zinc-free, ash-less lubricants specially formulated for severely stressed systems that require high levels of anti-wear performance. These oils are recommended for high pressure hydraulic systems, pumps and industrial hydraulic machines operating at high speeds, loads and temperatures. They are widely used also in sophisticated high performance electro-hydraulic or numerically controlled systems found in concrete mixing units in construction applications. The product is especially suitable for applications involving yellow metals found in hydraulic pumps/hydraulic systems.

#### Standards:

Divyol Entro ZF-32, ZF-46 and ZF-68 hydraulic oils are formulated with paraffinic, high viscosity index, low pour point mineral oil. The blend is further augmented with high performance additives including a special ashless multifunctional oxidation, rust and wear inhibiting additives package. These ingredients give the product greater chemical stability even under severe operating conditions. They conform to performance specifications as per Cincinnati Milacron P69, P70; DIN 51524 Part II; Bosch Rexroth RE 90220; ISO: 11158 [HM]; Parker HF-0, HF-1, HF-2 [HM]; SAE MS 1004 [HM]; and ASTM D6158.

#### Advantages:

Divyol Entro ZF-32, ZF-46 and ZF-68 hydraulic oils have no ZnDTP or zinc. The blends also contain a low phosphorous and low sulphur EP/AW additive package.

These ingredients impart excellent hydrolytic stability, demulsibility, filterability, anti-foaming and air release properties. These qualities in turn ensure ashless performance besides effective protection against wear, corrosion, resisting emulsification and any formation of unwanted stable foam. Consequently, they help extend service life of the hydraulic systems. These oils are also compatible with calcium and zinc containing fluids.

## **Typical properties:**

Sr. No.	Characteristics	Test Method	Divyol Entrol ZF Hydraulic Oils		
			ZF-32	ZF-46	ZF-68
1	Appearance	Visual	Bright and clear	Bright and clear	Bright and clear
2	Colour, max.	ASTM D 1500	0.5	0.5	0.5
3	Kinematic viscosity at 40 °C, cSt	ASTM D 445	30 – 35	42 – 50	62 – 74
4	Flash point (COC), °C, min.	ASTM D92	205	215	225
5	Pour point, °C, max.	ASTM D 97	-21	-21	-15
6	Viscosity index, min.	ASTM D 2270	112	112	112
7	Copper strip corrosion at 100°C, 3 hrs.	ASTM D 130	1a	1a	1a
8	Rust test	ASTM D 665/B	Complies	Complies	Complies
9	FZG, Rating stage failure	DIN 51354	11	11	11

The above properties are typical values and do not constitute specification of the product.

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