

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

Applications:

Divyol Entro HVI ZF-46 and HVI ZF-68 are premium quality ashless, zinc-free hydraulic oil blends specially formulated for hydraulic and power transmission systems that are subjected to a wide range of ambient and operating temperature changes, even in environmentally sensitive applications. These oils are ideal for critical hydraulic systems such as high accuracy numerically controlled machine tools and those employing close clearance servo valves. The product is widely used for hydraulic systems of excavators, cranes and hydrostatic drives subjected to most severe outdoor operating conditions, such as high pressures and requiring high degree of load carrying capability and anti-wear protection.

Standards:

Divyol Entro HVI ZF-46 and HVI ZF-68 are blends containing severely hydro processed Group II base oils, a highly shear stable polymer and an advanced ash-less additive system. They were developed for hydraulic applications operating in a wide range of temperatures or where a small viscosity change with fluctuating temperature is needed. The blends conform to performance levels such as Global industry standards viz. DIN 51524 Part 3 HVLP; AFNOR NFE 48-603 (HV); ISO: 11158; HV and majority of the international OEMs viz. Poclain, Hitachi, Fives Cincinnati (Former MAG IAS, LLC); and Eaton & Denison.

Advantages:

Divyol Entro HVI ZF-46 and HVI ZF-68 have excellent thermal and oxidative stability which reduces deposit formation and enables efficient pump performance even in low and high temperatures. These blends provide effective protection against wear, rust and corrosion leading to extended service life of the system plus longer oil and filter change intervals. The system gets effective protection at cold start-up as well as high operating temperatures. Over time, viscosity loss is negligible, ensuring ‘stay-in-grade’ performance of the oils even under high shear conditions. Their air release properties and faster water separation resists the formation of emulsions. Their hydrolytic stability helps prevent breakdowns and improve production capacity. Lastly, their advanced ash-less additive system minimizes environmental impact in case of an accidental spillage.

Typical properties:

Sr. No.	Characteristics	Test Method	Divyol Entro HVI ZF Hydraulic Oils	
			HVI ZF-46	HVI ZF-68
1	Appearance	Visual	Bright and clear	
2	Colour, max.	ASTM D 1500	L 0.5	L 0.5
3	Kinematic viscosity at 40 °C, cSt, min.	ASTM D 445	42 – 50	62 – 74
4	Kinematic viscosity at 100 °C, cSt, min.	ASTM D 445	8.5	11.4
5	Viscosity index, min.	ASTM D 2770	160	160
6	Flash point (COC) °C, min.	ASTM D 92	200	220
7	Pour point, °C, max.	ASTM D 97	-21	-21
8	Copper strip corrosion	ASTM D 130	1a	1a
9	Foam characteristics tendency / stability, ml, max.	ASTM D 892		
	Sequence I		Nil	Nil
	Sequence II		Nil	Nil
	Sequence III		Nil	Nil
10	Rusting test, 24 hrs. with sea water	ASTM D 665/B	Complies	Complies
11	Emulsion test at 54 °C, (mins, max.)	ASTM D 1401	40-37-3(20)	40-37-3(20)
12	Turbine oil stability test, hrs.	ASTM D 943	3000	3000
13	FZG, fail load stage, min.	DIN51354	11	11

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

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