



# DIVYOL ENTRO HVI ZF HYDRAULIC OILS – 46 ZF-SC / 68 ZF-SC

### **Applications:**

Divyol Entro HVI-ZF Plus Super Clean (SC) Oils 46 ZF-SC and 68 ZF-SC are supreme quality anti-wear hydraulic oils specially developed for applications that require super clean oils and are subjected to a wide range of ambient and operating temperatures, or where a small viscosity change with fluctuating temperature is needed. They are also recommended for power transmission systems operating in similar conditions and requiring super clean oils even in environmentally sensitive applications. These oils meet the stringent requirements of modern hydraulic systems using high-pressure, high output pumps and the critical requirements of other hydraulic system components such as high accuracy numerically controlled machine tools and those employing close clearance servo valves. They can be used in hydraulic systems of excavators, cranes and hydrostatic drives subjected to most severe outdoor operating conditions as also for hydraulic systems operating under high pressures and requiring high degree of load carrying capability and anti-wear protection as also those requiring extended oil change intervals.

#### Standards:

Divyol Entro HVI-ZF Plus Super Clean (SC) Oils 46 ZF-SC and 68 ZF-SC are unique blends of severely hydro processed Group II base oils, a highly shear stable polymer and an advanced ash-less additive system to minimize environmental impact in case of an accidental release into the environment. Both these oil grades conform to performance standards of DIN 51524 Part 3 HVLP; AFNOR NFE 48-603 (HV); ISO: 11158 HV; as also of OEMs Poclain, Hitachi, FIVES CINCINNATI (Former MAG IAS, LLC), Eaton Vickers and Denison.

#### Advantages:

Divyol Entro HVI-ZF Plus Super Clean (SC) Oils have outstanding thermal, oxidative and hydrolytic stability ensuring consistent performance even through low and high temperatures. Their unique composition enables excellent air-release properties and demulsibility which helps in faster separation of water from oil and resists emulsion formation. Their extremely high viscosity index assures maximum protection to system components at cold start-up as well as high operating temperatures. Their shear stability minimizes viscosity loss over time ensuring "stay-in-grade" performance under high shear conditions. These properties help improve pump and valve performance, increase production capacity and allow extended oil and filter change intervals. They also reduce deposit formation and protect against wear, rust and corrosion, thus maximizing service life of the system.

## **Typical properties:**

Sr. No.	Characteristics	Test Method	Divyol Entro HVI – ZF SC Hydraulic Oils	
			46 ZF SC	68 ZF SC
1	Appearance	Visual	Bight and clear	Bight and clear
2	Colour, max.	ASTM D 1500	L 0.5	L 0.5
3	Kinematic viscosity at 40 °C, cSt	ASTM D 445	42 – 50	62 – 74
4	Viscosity index, min.	ASTM D 2770	140	140
5	Flash point (COC) °C, min.	ASTM D 92	210	210
6	Foam characteristics tendency / stability, ml, max.	ASTM D 892	320	320
	Sequence I		Nil	Nil
	Sequence II		Nil	Nil
	Sequence III		Nil	Nil
7	Rusting test, 24 hrs. with sea water	ASTM D 665/B	Complies	Complies
8	Emulsion test at 54°C, (mins, max.)	ASTM D 1401	40-37-3(20)	40-37-3(20)
9	Particle counter, NAS Value	ISO:16232/NAS 1638	7	7
10	Turbine oil stability test, hrs.	ASTM D 943	3000	3000
11	FZG, fail load stage, min.	DIN 51354 Part II	11	11

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

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