

Hydraulic HD 46

Antiwear Hydraulic oils

Description and Application

Hydraulic HD 46 is formulated from highly refined mineral base stocks exhibiting very good demulsibility and air-release properties blended with a highly efficient additive system including rust, oxidation and corrosion inhibitors and anti-wear agents. Hydraulic HD 46 is developed for use as working media in hydrostatic lubrication systems and in circulating systems for the lubrication of moving parts and mechanism. Both applications require lubricants of very high oxidation stability, improved anti-wear and anti-scuffing properties and ensuring reliable R&O protection. Hydraulic HD 46 successfully pass Vickers 104C Vane Pump Test.

Hydraulic HD 46 is suitable for application in hydraulic systems equipped with hydraulic vane pumps, hydraulic gear pumps and hydraulic piston units. They are also effectively used as working fluid in plastic component extruders. Thanks to the high quality base oils and additives used in the formulation of these oils they are well suited for hydraulic system operated at very high pressures exceeding 25 MPa and oil temperatures exceeding 90°C

Benefits

- High resistance to oxidation
- Maximum equipment protection of rust and corrosion
- Extremely stable in presence of water

Specifications

ISO 6743/4	ISO-L-HM
ISO 3448	VG 15, 22, 32, 46, 68, 100

ISO 11158	HM (replaced AFNOR NF E 48-603)
DIN 51524	Part 2 (HLP)
US Steel	127 (VG 32, 46, 68)
Denison	HF-O (including Denison T6C pump test), HF-1 & HF-2
Cincinnati Machine	P68 (VG-32), P69 (VG-68), P70 (VG-46)
Vickers	M-2950-S, I-286-S

Typical Characteristics

Parameter	Test Method	Typical Value					
		15	22	32	46	68	100
Density at 20°C, g/ml	EN ISO 3675	0.866	0.867	0.868	0.875	0.879	0.883
Kinematic viscosity at 40°C, mm ² /s	EN ISO 3104	15	22	32	46	68	100
Viscosity index	ISO 2909	100	100	100	100	95	95
Flash point, COC, °C	EN ISO 2592	140	160	190	200	210	220
Pour point, °C	ISO 3016	-36	-33	-30	-27	-27	-18
Copper strip corrosion, 3h, 100°C	EN ISO 2160	1					
Water separability -time to 3 ml emulsion, min	ISO 6614	10	10	10	15	15	15
Air release properties, min	ISO 9120	3	3	4	6	8	10
Oxidation stability after 1000h TAN increase, mg KOH/g	ASTM D 4310	< 1					
FZG EP Wear Test (A 8.3/90) - Failure Load Stage	DIN 51354-2	-	12	12	12	12	12

Important note: Typical data values do not constitute a specification but are an indication based on current production and can be affected by allowable production tolerances. The right to make modifications is reserved.



Health, Safety and Handling

Based on current available information, this product is not expected to produce adverse effects on health when used for the intended application.

Packages

20L