



HYDRAULIC OIL

HV ZF 46

Product Description:

HYDRAULIC OIL HV ZF 46 is an universal Zinc free mineral oil with a High Viscosity Index (HVI) for the use in heavy duty hydraulic systems and light duty gearboxes, bearings and general lubrication. Not suitable for turbine application.

HYDRAULIC OIL HV ZF 46 is formulated with high quality refined mineral base stocks in combination with a special EP-additive technology to achieve the following performance:

- Good stability against oxidation.
- High Viscosity Index
- Very good protection against wear.
- Good water demulsibility.
- Very good foaming properties.
- Very effective to rust and corrosion.
- Very good thermal stability.

HYDRAULIC OIL HV ZF 46 exceeds the following performance criteria:

DIN 51524-3 HVLP **ISO 11158 HV** **ASTM D6158 HV**
AFNOR NF E 48-603 HV **Cincinnati P-70** **Sauer Danfoss 520L0463**
Denison HF-0/HF-1/HF-2 **Bosch Rexroth RE 90 220** **Eaton Vickers M-2950-S / I-286**
General Motors LS-2



Property	Unit	Test Method	Typical Value
ISO Grade		ISO 3448	46
Density@15°C	kg/m ³	ASTM D4052	878.2
Kin. Viscosity @40°C	mm ² /s	ASTM D7042	47.2
Kin. Viscosity @100°C	mm ² /s	ASTM D7042	8.4
Viscosity Index		ASTM D2270	157
Flash Point COC	°C	ASTM D92	>200
Pour Point	°C	ASTM D7346	-36
Air Release Value @50°C	Minutes	ASTM D3427	Pass
Demulsibility @54°C	Minutes	ASTM D1401	Pass

Product Nr: 43630

Date Superseded: 02-11-2022

Date Issued: 3-1-2025

Revision nr: 07