



# 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:

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



Property	Unit	Test Method	Typical Value
ISO Grade		ISO 3448	46
Density@15°C	kg/m³	ASTM D4052	878.2
Kin. Viscosity @40°C	mm²/s	ASTM D7042	47.2
Kin. Viscosity @100°C	mm²/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

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