



Hydraulic ZF 46

Premium Zinc Free, Inherently Biodegradable Hydraulic Fluid



Features & Benefits

- Zinc-free formulation
- Low ash content
- Inherently biodegradable
- Excellent oxidation stability
- Good sludge and particulate control
- Exceptional wear protection
- Excellent separation from water

Specifications

✓ Meets Requirements ■ Suitable for use

Specification	ZF 46
ISO 11158 (HM)	✓
ASTM D6158 (HM)	✓
SAE MS 1004 (HM)	✓
DIN 51524-2 (HLP)	✓
Parker (Denison) HF-0, HF-1, HF-2	■

Typical Results

Test Method	ZF 46
ISO GRADE	46
DENSITY @ 15°C (D4052) (kg/L)	0.86
VISCOSITY (D445) cSt @ 40 °C cSt @ 100 °C	45.6 7.2
VISCOSITY INDEX (D2270)	118
POUR POINT (D5949) (°C)	-35
FLASH POINT (D93) (°C)	216
ZINC (D4951) (ppm)	< 5
DEMULSIBILITY @ 54°C (D1401) oil-water-emulsion (mins)	40-40-0 (20)
FOAM SEQUENCE I, II, III (D849) (mL/mL)	0/0
OXIDATION LIFE (D943) (Hrs)	10,000+
OECD 301B	Inherently biodegradable

Hydraulic ZF 46 is a premium, high-performance zinc-free, inherently biodegradable hydraulic fluid developed to perform in extreme conditions and environmentally sensitive areas. The Hydraulic ZF 46 additive system has superior oxidation and stability while protecting from wear, rust and corrosion. The result is a silicone-free, low-foaming product.

Hydraulic ZF 46 is formulated to provide superior performance over traditional hydraulic additive packages in severe duty and high-load applications. It is developed to increase the fluid's life while reducing environmental impact.

Hydraulic ZF 46 has an oxidation life of 10,000+ hours, which can extend oil drain intervals and reduce costs. It can reduce deposits that may improve efficiency during the length of the oil drain interval. It also has good sludge and particulate control for improving the protection of critical components with strict tolerances like servo-valves and pumps.

Hydraulic ZF 46 is formulated with anti-wear additives to maximize equipment life and reduce maintenance costs. It has excellent water separation properties allowing the water to separate from the fluid while maintaining its fluidity during service.

Sizes & Order Codes

Size	ZF 46
18.9 L / 5 US gal Pail	F0100340
1000 L / 264 US gal Tote	F0100360
1000 L / 264 US gal Bulk Tote	F0100301
BULK	B0100301

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1.800.574.5823

Always consult your owner's manual for verification of fluid type and grade!

Supporting data available to demonstrate acceptable performance. Check with your sales associate for latest product approvals.

Please note, these are typical performance indicators and can change without notice.

This data sheet replaces previous versions prior to October 6, 2022.

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