

# FS MV Zinc-Free LS Hydraulic Oil

## ISO 46

### Description

FS MV Zinc-Free LS (Low Shear) Hydraulic Oil is an exceptional multi-grade, anti-wear, high-viscosity-index hydraulic oil. This oil is formulated specifically for use in equipment that is operating over a wide range of temperatures and where oil with dielectric properties is required. It is recommended for use in Hitachi, John Deere, and other off-road equipment. These oils have a balanced additive combination of pour point depressants and a very shear-stable viscosity index improver that makes them suitable for operating in outdoor mobile equipment under cold startup operating conditions. In addition to its excellent low-temperature characteristics, FS MV Zinc-Free LS Hydraulic Oil will also maintain sufficient body film strength to lubricate at the warmer operating temperatures found in many operations. Its high viscosity index meets the all-season requirements of most major manufacturers and users of hydraulic systems.

### Recommended Use:

- Hitachi excavators with 4,000-hour service intervals
- Both high- and low-pressure hydraulic systems for industrial and mobile applications
- A broad range of industrial applications, machine tools, presses, injection molding machines, central systems, gear cases, and various bearing applications
- Mobile loading and continuous mining equipment where high speeds, loads, and temperatures are encountered
- Reduction gears and bearings with greater load-carrying requirements than are satisfied by conventional R&O fluids

### Meets or Exceeds:

- Vickers M-2950-S (Mobile), I-286-S (Industrial)
- Denison HF-0, HF-1, HF-2
- Cincinnati Machine P-68 (ISO 32), P-70 (ISO 46), P-69 (ISO 68)
- Racine Variable volume vane pumps
- DIN 51524 Part 2
- Jeffrey No. 87
- US Steel 136, 127
- General Motors LH-04-1, LH-06-1, LH-15-1
- AFNOR E 48-603
- Lee-Norse 100-1
- Ford M-6C32
- B.F. Goodrich 0152
- Commercial Hydraulics
- Hitachi Hydraulic Oil Super EX 46HN
- Kawasaki Zinc Free KCM Super EX 46HN
- John Deere Hitachi Excavator

### Product Availability:

#### FS MV Zinc Free LS Hydraulic Oil ISO 46

5 Gal. Pail	Item #279870
55-gal. Drum	Item #243905
265-gal. Totes	Item #256784
Bulk	Item #243904



## Typical Properties:

Test / Description	Specification
ISO Grade	46
Viscosity @ 100°C (cSt)	8.3
Viscosity @ 40°C (cSt)	46.0
Viscosity Index	157
Density (lb/gal)	7.20
Pour Point (°C)	-40
Pour Point (°F)	-40
Flash Point (°C)	180
Flash Point (°F)	356
Copper Corrosion	1A
Rust Test	Pass
Turbine Oil Stability Test (hrs)	5,000+