



Zinc Free Industrial Hydraulic Oils

Zinc Free Industrial Hydraulics is formulated with the latest zinc free antiwear technology to ensure exceptional performance in hydraulic systems. Based on the unique zinc-free technology, they are designed to for the performance Requirements of conventional antiwear hydraulic oils especially is severe applications, while providing additional safety concerns in case of leaks or discharge to the environment.

Features/Benefits:

- **Maximum efficiency of hydraulic systems**
- **Inhibited against wear, rust, corrosion, sludge, and foaming tendencies**
- **High viscosity index to minimize oil viscosity change with temperature**
- **Superior oxidation stability**
- **Excellent water separation**
- **Excellent filterability**
- **Environmental friendly**

Applications:

Industrial Hydraulic Oils are recommended for service in a wide range of hydraulic operating systems. They meet industry's demand for a universal type hydraulic media suitable for use in systems having vane or axial piston pumps, high pressure and high output. "Zinc Free" technology permits the use in automated machine tools and mobile and stationary applications that have stringent filterability requirements.

- **Systems having vane or axial piston pumps**
- **Automated machine tools**
- **Recommended for micro-filtration systems**
- **High pressure systems**
- **General hydraulic oil in industrial plants**
- **High output systems**
- **Mobile equipment requiring premium anti-wear hydraulic oil**

Additional Information on Reverse



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Applications/Specifications:

Industrial Hydraulic Oils Meet or Exceed the performance requirements of:

- Denison HF-O
- Din 51524 Part 2
- Commercial Hydraulics
- Vickers M-2950-S (Mobile), I-286-S (Industrial)
- Cincinnati Machine P-68 (ISO 32)
- Cincinnati Machine P-70 (ISO 46)

Typical Physical Specifications:		
ISO Grade	32	46
API Gravity @ 60° F	30	29.5
Viscosity Index	95	95
Viscosity:		
cSt @ 100° C	5.3	6.7
cSt @ 40° C	32	46
SUS @ 210° F	44	48
SUS @ 100° F	150	215
Pour Point, °C (°F)	-30 (-22)	-28 (-18)
Flash Point, °C (°F)	195 (385)	200 (395)
Color, ASTM	L1.0	1.0
ASTM Rust Test, A & B	Pass	Pass
Foam Test	Pass	Pass
Turbine Oil Stability Test, hrs.	3000+	3000+