

EMIRATES 1 ZINC FREE HYDRAULIC FLUIDS

(High Performance Anti-Wear)

DESCRIPTION

EMIRATES 1 Zinc Free Hydraulic Fluids are premium, long life formulation designed for high performance hydraulic systems. This advanced fluid provides outstanding operating and maintenance benefits for increased productivity and long service life.

EMIRATES 1 Zinc Free Anti-Wear Hydraulic Fluid is formulated using ultra-pure paraffinic base oils and high performance ash less additive technology. This shear stable fluid has outstanding resistance to viscosity breakdown in the presence of heavy mechanical stress, high temperature, and high pressure resulting in optimum viscosity retention across the life of the fluid.

APPLICATIONS

EMIRATES 1 Zinc Free Hydraulic Fluids are designed as an environmentally safer alternative to conventional zinc based hydraulic fluid and is an excellent high pressure, high temperature power transfer fluid where vane, piston, and gear pumps are utilized. This fluid may also be used as a general purpose lubricant where straight mineral oils and conventional rust and oxidation inhibited oils are recommended in the appropriate viscosity grade. Such industrial applications may include (but are not limited to) machine tools, presses, die casting and injection molding machines among others. Typical applications for **EMIRATES 1 Zinc Free Anti-Wear Hydraulic Fluid** include (but are not limited to): **Heavy duty mobile and stationary equipment in exploration, construction, agriculture, marine, logging and mining industries. Specialized hydraulic pump systems with silver bearings as there is no zinc to displace the silver. Multi-use industrial equipment lubricant for plain/ anti-friction bearings, air-line lubricators and other such uses.**

Properties

EMIRATES 1 Zinc Free Hydraulic Fluids are classified as 'inherently biodegradable' and 'not harmful' to freshwater and marine invertebrates (OECD 202, US EPA OPPTS 850.1035). It is designed to minimize environmental impact and have low environmental persistence. This greatly reduces the immediate and long-term environmental impact of the fluid in the event of an oil spill. Zinc Free (ash less) additive technology utilizes specialized anti wear and friction modifying chemistry to achieve outstanding results in all key hydraulic component wear tests as well as a proprietary blend of metal passivation, demulsifier, rust inhibitor, and anti-foam agents for extended fluid life.

Product Benefits

- High viscosity index
- Low environmental impact
- Optimal oil service life
- Superior thermal stability
- Smooth operation.
- Zinc-free chemistry

Recommendations / Specifications

EMIRATES 1 Zinc Free Hydraulic Fluids meets the requirements of the following specifications and are recommended for use in (but not limited to): **Denison** (HF-0, HF-1 and HF-2) , **Eaton Vickers** (I-186-S, M-2950-S) , **Cincinnati Machine** , **Bosch Rexroth** (mineral oil fluids for axial piston pumps RE 90220-01/09.09) , **AIST** 126 & 127, 136 , **Cincinnati-Machine** P-68, P-70, and P-69 , **Denison** HF-0, HF-1, HF-2 , **US Steel** 127, 136 , **GM** LH-04-1, LH-06-1, LH-15-1 , **Sauer Danfoss** , **DIN** 51524 Part 2 & **GM** LS-2.

TYPICAL TECHNICAL PROPERTIES

ISO Viscosity Grade (Zinc Free)	32	46
Appearance, Visual	B&C	B&C
Density at 15°C, g/ml, ASTM D4052	0.86	0.862
Kinematic Viscosity at 40°C, mm ² /s, ASTM D445	32	46
Kinematic Viscosity at 100°C, mm ² /s, ASTM D445	5.47	7.05
Viscosity Index, ASTM D2270	105	110
Flash Point(COC), °C, ASTM D92	200	210
Pour Point, °C, ASTM D97	-45	-42
Zinc, wt. %, ASTM D5185	nil	nil

*C & B: Clear & Bright

Note: The information on this Product Data Sheet is believed to be accurate and is typical of current production. Specifications are subject to change without notice. For additional queries, please contact Emirates 1 Technical Service Department.

Health and Safety: Based on available information, this product is not expected to produce adverse effects on health when used for the intended application and the recommendations provided in the Material Safety Data Sheet (MSDS). Safety Data Sheets available on request.

Available in: **Cartons:** 12x 1 L, 24x1 L, 4x5L 6 x 4 L, 6 x 5 L, **Pails:** 20 L & 25 L, **Drums:** 200 L, 208 L