



PRODUCT SPECIFICATION DATA SHEET



BOSS ZINC FREE HYDRAULIC OILS

Product Description:

Boss Zinc Free Hydraulic oils are supreme performance hydraulic oils developed for use in high-speed, high-pressure piston, vane and gear pumps. They are formulated from high quality base stocks and specially selected super-stabilised additives. Their advanced technology ashless anti-wear additive system was developed to give exceptional corrosion protection for copper-based alloys in severe hydraulic applications such as high-pressure axial piston pumps. This unique additive system also gives the Boss Zinc Free excellent compatibility with coolants used in metal working applications.

Boss Zinc Free Hydraulic Oils exhibit oxidation and thermal stability properties which results in extended oil and filter life while providing optimum equipment protection reducing both maintenance and product disposal costs. They were developed in conjunction with the major OEMs to meet the stringent requirements of severe hydraulic systems using high pressure, high output pumps as well as handling the critical requirements of other hydraulic system components such as close clearance servo-valves and the high accuracy numerically controlled (NC) machine tools. They are designed to work with systems operating under moderate to severe conditions where high levels of anti-wear and film strength are needed, yet they are formulated to work where non-anti-wear hydraulic oils are generally recommended.

Features and Benefits:

The Boss Zinc Free Hydraulic oils exhibit outstanding high temperature performance providing an extra margin of equipment protection. Their excellent oxidation resistance and thermal stability characteristics allow extension of oil and filter change intervals while assuring exceptionally clean systems and trouble-free operation. Their high level of anti-wear properties and excellent film strength characteristics result in exceptional equipment performance that not only results in fewer breakdowns but helps improve production capacity. Their controlled demulsibility permits the oils to work well in systems contaminated with small amounts of water yet readily separate large amounts of water readily.

Benefits

- * Excellent thermal stability
- * Excellent antiwear protection
- * Excellent oxidative stability
- * Superior rust protection
- * Excellent filterability
- * Excellent demulsibility
- * Good hydrolytic stability
- * Low free phenol per EPA 420.1

Specifications and Approvals

Boss Zinc Free Hydraulic Oils meet the following industry specifications	22	46
DIN 51524 Part 2	X	X
Boss Zinc Free Hydraulic Oils has the following builder approvals	22	46
Cincinnati Machine		
P-68		
P-69		
P-70		X
Denison HF-HF-2HFO		X
Vickers I-286-S		X
Vickers M-2950-S		X
USS. 127		
USS. 136		

Typical Properties

Boss Zinc Free Hydraulic Oils

ISO Viscosity Grade	22	46
Viscosity, ASTM D 445		
cST@ 40°C	19.68	46.37
cST@ 100°C	4.114	7.361
Viscosity Index, ASTM D 2270	187.0	123.0
Density 15°C ASTM D 4052, kg/L	0.8519Kg/L.	0.8688 Kg/L.
Pour Point, °C ASTM D 97	-39	-30
Flash Point, °C ASTM D 92	158.0	182.0

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) are followed. MSDS's are available upon request through your sales contract office, or via the Internet. This product should not be used for purposes other than its intended use. If disposing of used product, take care to protect the environment.

In order to continue to provide superior quality, BOSS LUBRICANTS reserves the right to change composition of its products without notice. For the location of the Distributor nearest you, please call 1-800-844-9457 or fax (403) 279-2272 #112, 6303 30th Street S.E. Calgary, AB T2C 1R4
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