COSMOLUBRIC® B-230

Less Hazardous Vegetable Based Hydraulic Fluid

DESCRIPTION

COSMOLUBRIC B-230 is a vegetable oil derived fire resistant hydraulic fluid formulated with additives to enhance corrosion protection, metal preservation, and oxidative inhibition.

Houghton's research and development team have successfully produced an advanced anti-oxidation package providing COSMOLUBRIC B-230 with outstanding performance under conditions of elevated temperature and high operating pressures.

Exhaustive oxidation testing to IP48 standards conducted at continuous temperatures to 200°C proves that sludge and varnish formation is prevented. COSMOLUBRIC B-230 provides superior performance when compared to other commercially available synthetic ester fluids.

The Cosmolubric B series of Vegetable based hydraulic fluids are approved by Factory Mutual Research as Group II (HF-D) less flammable hydraulic fluids.

TYPICAL VALUES

Product Appearance	Clear Amber Fluid
Viscosity @100.0°C	11.5 cSt
Viscosity @40.0°C	57.0 cSt
Viscosity @0.0°C	420.3 cSt
Viscosity Index	None
Total Acid Number	0.7 mg KOH/gm
Pour Point	-29°C
Corrosion Test (ASTM D-6651)	Pass
Flash Point (COC)	310°C
Fire Point (COC)	357°C

FEATURES

<u>Metals</u>: <u>COSMOLUBRIC B-230</u> is fully compatible with iron and steel alloys as well as non-ferrous metals. Additives are incorporated into the fluid for supplemental corrosion protection and metal preservation.

<u>Elastomer</u>: COSMOLUBRIC B-230 is compatible with the majority of standard Elastomer used with oil based hydraulic fluids. Compatible materials are best used for moving or seal applications while for static sealing they are preferred but not essential. Buna N, Viton, Teflon, Silicone and Polyurethane are preferred while Butyl, Ethylene Propylene and Neoprene should be considered marginal.

<u>Fluids</u>: COSMOLUBRIC B-230 is miscible and compatible with other Polyol ester fluids; water containing fluids are not compatible. A complete system drain and flush is highly recommended when converting from other fluid types.

<u>Environmental</u>: <u>COSMOLUBRIC</u> B-230 is easily environmentally biodegradable and ideal as a substitute for mineral oil based fluids in environmentally sensitive systems.

<u>System Components</u>: <u>COSMOLUBRIC B-230</u> is equipment compatible and provides the essential lubricating properties for all industrial pumps and related system components. Pump testing to ASTM D-2882 gives less than 15 milligrams total wear. This represents excellent performance in hydraulic systems.

HEALTH AND SAFETY

Refer to MSDS for proper handling and disposal. Please note that the MSDS includes handling, health and disposal information which should be passed on to your employees, and to anyone else who comes in contact with our product. Additional advice can also be obtained from your local Houghton representative.

NOTE: Read and understand all precautions on container labels before using this product.

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D.A. Stuart India Private Limited Plot No. 32A. HUDA Enclave, Jubilee Hills, Hyderabad Andhra Pradesh 500033 India Phone: +91 (40) 2354-1250 Fax: +91 (40) 2354-4869 info@houghtonindia.com www.houghtonindia.com

This document contains information based on data that is believed to be correct. However, the product may not be applicable to all uses and operating environments. No warranty or guarantee is expressed or implied.

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REFERENCES

Pump Test (ASTM D2882):

Test Period:496 hoursDischarge Pressure:1500 psiFluid Temperature:1500F (66°C)Output Volume:7.5 GPM

Test Result

Total Wear on ring and vane: < 7mg

Rust Prevention (ASTM 665A 72 hrs): Pass (specimens clean and bright)

Oxidation resistance (IP48, 200°C/16hours): Tan increase 2.0 Viscosity ratio 1.5

HOW TO USE

Houghton recommends that periodic checks for COSMOLUBRIC B-230 should be test for:

Viscosity@40°C: 38.0—50.0cSt

TAN: 1.0—3.0 mgKOH/g

These can be routinely performed and organised through Houghton's Customer Service laboratory, please contact your sales representative for further information about this service.

SHELFLIFE & AVAILABILITY

Under normal conditions the recommended shelf life for COSMOLUBRIC B-230 is a minimum of Twelve (12) months, unless otherwise specified.

COSMOLUBRIC B-230 is available in Pail, Drum or Tote. Other sizes may be available upon request, please contact your Houghton sales representative.

RELATED PRODUCTS

- CUT-MAX: Straight cutting oils
- · GARIA: Straight cutting oils
- MACRON: Straight cutting and honing oils
- DASCOLENE: Straight OEM Approved cutting oils
- WIOLAN: Straight honing and grinding oils
- HOCUT: Water miscible metalworking fluids
- DROMUS: Soluble metalworking fluids
- SUPERCUT PLUS: Economical Soluble metalworking fluids
- ADRANA: Water miscible metalworking fluids
- SITALA: Semi-Synthetic metalworking fluids
- METALINA: Synthetic metalworking fluids
- HOUGHTO-GRIND: Straight and water miscible grinding fluids
- HOUGHTO-DRAW: Straight and water miscible drawing stamping and forming fluids.
- CINDOL: Straight and water miscible drawing and forming fluids especially for Aluminium parts.
- CERFA-KLEEN: Water miscible cleaning fluids
- CALLINA: Water miscible cleaning fluids
- RUST VETO: Straight and water miscible rust preventive fluids.
- ENSIS: Straight and water miscible rust preventive fluids.
- HOUGHTO-SAFE: Fire resistant hydraulic fluids.
- COSMOLUBRIC: Fire resistant hydraulic fluids.
- HYDROLUBRIC: Fire resistant hydraulic fluids.

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