

Houghto-Safe 620E

Fire Resistant Hydraulic Fluid (ISO6743-4 Type HFC – water glycol)

DESCRIPTION

Houghto-Safe 620E is a premium performance, water containing, synthetic hydraulic fluid, which conforms to the requirements of ISO12922 for type HFC fluids.

APPLICATION PROFILE

Houghto-Safe 620E greatly reduces risks where hydraulic equipment operates near flames, hot surfaces or molten metals.

It is particularly suited to systems that require a balanced combination of fire resistance and good lubrication.

Houghto-Safe 620E has for over 50 years set a global benchmark in steel and aluminium production, pressure die-casting, glassmaking, polymer forming and many other high fire risk industries.

BENEFITS

- High security against fire and explosion
- Excellent lubrication and anti-wear characteristics
- Reliable protection of systems and components

TYPICAL PHYSICAL PROPERTIES

Test	Result
Appearance	Clear, red liquid
Specific Gravity at 15.6°C	1.09
Viscosity at 40°C	39 cSt (mm ² /sec)
pH at 20°C	9.5
Pour Point	Below -45°C

FIRE RESISTANCE

Houghto-Safe 620E has no Flash or Fire Point

Houghto-Safe 620E meets or exceeds the requirements of:

- Spray Ignition Tests (C.E.C. Luxembourg 7th Report, Factory Mutual, ISO15029)
- Factory Mutual - Hot Channel Ignition Test
- ISO 14935 Fluid Soaked Wick Test

LUBRICATION

Houghto-Safe 620E passes ISO20763 standard tests in a Vickers V104 Vane Pump.

It gives fewer than 100mg weight loss from ring and vanes at an elevated test pressure of 140bar, at which many water glycols cause significant wear.

Houghto-Safe 620E operates in a wide variety of hydraulic equipment and is suitable for medium to high-pressure hydraulic applications.

ANTI-CORROSION

Houghto-Safe 620E passes ISO4404-1 corrosion tests and is suitable for use with steel, copper, brass and anodised aluminium.

Houghto-Safe 620E contains vapour phase corrosion inhibitors to protect reservoirs and part-filled systems.

OTHER PROPERTIES

Compressibility at 20°C	3 x 10 ⁻⁵ /atm
Bulk Modulus at 20°C	3.3 x 10 ⁴ /atm
Specific Heat Capacity at 25°C	3.4kJ/kg/°C
Thermal Conductivity	1.61J/hr/m/°C
Surface Tension	35mN/m
Thermal Expansion Coefficient (volume)	7 x 10 ⁻⁴ /°C

Houghto-Safe 620E is low foaming, to minimise the risk of cavitation and air entrainment. In tests to ISO6247 it gives a result of 230/0 at 25°C.

MANAGEMENT IN USE

Houghto-Safe 620E is stable for long periods over all ranges of ambient temperature. Freezing and thawing have no adverse effects on fluid properties. Keep tops on drums and use oldest stocks first. Shelf life is approximately 2 years.

Fluid condition may be controlled on-site or by Houghton, by monitoring viscosity, pH and cleanliness.

Health and Safety Data Sheets are supplied to customers to comply with Section 6 of the Health and Safety at Work Act 1974, and should be closely studied prior to handling or use of the product. Copies are available from your Technical Health and Safety Officer.

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03/07

All data given in this Product Data Sheet are typical of this material. It does not however constitute a specification. We reserve the right to modify products without prior notice. All products, services and information supplied are provided upon the terms of our standard Conditions of Sale from time to time in force.

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