# TECHNICAL DATA SHEET

## Houghto-Safe® 419-R

#### WATER GLYCOL TYPE FIRE RESISTANT HYDRAULIC FLUID

Houghto-Safe 419-R is a water glycol type fire resistant hydraulic fluid designed to meet the exacting requirements of modern industrial hydraulic systems. The fluid provides maximum safety in terms of fire resistance together with the optimum combination of performance characteristics and economy to the user. Houghto-Safe 419-R is Factory Mutual approved as a less hazardous fluid.

Pump Test

ASTM D-2882 Procedure Vickers V-104-C pump

**Test Conditions** 

Test Period, hours	100
Discharge Pressure, psi	2000
Fluid Temperature, °F	150
Pump Speed, rpm	1200
Output Volume, GPM	7.5
Test Results	
Cam Ring Wear, mg	53.2
Vane Set (12) Wear, mg	2.4

#### **Applications**

Houghto-Safe 419-R was designed to replace mineral oil based hydraulic fluid. Houghto-Safe 419-R can be used in or near fire hazards applications without compromising the overall hydraulic system operation.

#### **Recommendation For Use**

Houghto-Safe 419-R can be used in equipment designed for traditional mineral oil in applications where a fire hazard exists

#### **Benefits**

- Factory Mutual Approved as a fire resistant hydraulic fluid that protects personnel and property from accidental fire and may lower insurance premiums
- Low pour point provides excellent stability in cold weather applications
- High viscosity index allows the fluid to be used at a wide temperature range
- Provides excellent lubrication characteristics which extends pump and component life

#### Health, Safety and Handling

Please consult the Safety Data Sheet (SDS) for information on storage, safe handling and disposal. The conditions or methods of handling, storage, use and disposal of the product are beyond our reasonable control - we assume no liability for any ineffectiveness of the product or any injury or damage, arising out of or in connection with these conditions.

### **Typical Physical Properties**

PROPERTY	TYPICAL VALUE
Appearance	Red Fluid
рН	9.5
Viscosity, SUS	
@ 0°F	3800
@ 68°F	380
@ 100°F	200
@ 130°F	119
Specific gravity, 60/60	1.08
Pour Point	-33

All reasonable care has been taken to ensure this publication is accurate upon issue. Such information may be affected by changes subsequent to issue. This Technical Data Sheet is to be used solely for this product. Prior to any use, consult the Safety D 01419300

