

**DESCRIPTION**

SUPERDRAULIC HFC-46 fluid is a new generation, high performance water-glycol type fire-resistant hydraulic fluid formulated primarily with ethylene glycol. It provides excellent pump wear protection and have inherently good lubricity, high oxidation stability and excellent detergency which contribute to system cleanliness. It provides superior protection against rust and vapour phase corrosion. SUPERDRAULIC HFC-46 fluid is suitable for most conventional hydraulic system and have superior fire resistance properties when compared with conventional mineral fluids. Pressurized oil in hydraulic systems presents a considerable fire hazard threat, particularly where ignition sources are present. The use of SUPERDRAULIC HFC-46 fluids reduces the serious risks of such fire risks. SUPERDRAULIC HFC-46 fluids are designed to provide long service and extended equipment life in demanding operation where fire hazards may be present.

**SUMMARY OF BENEFITS**

- Superior fire-resistant properties
- Maximum pump and valve wear protection
- Excellent lubricity and anti-wear properties
- Very good cold-start performance

**SUITABLE FOR**

- Iron and steel works
- Pressure molding
- Glass drawing machinery
- Die-casting foundries, furnace charging & tilting mechanism
- Operating pressure of the fluid should be controlled within 70-80% of the rated pressure of the pump
- Genral operating pressure range 120-250Pa
- Not recommended for bulk fluid temperature exceeding 60°C

**TYPICAL CHARACTERISTICS**

SUPERDRAULIC HFC-46	TEST METHOD	RESULTS
COLOR, VISUAL	-	Red
KINEMATIC VISCOSITY @ 40°C, mm <sup>2</sup> /s	ASTM D445	-45.5
ALKALI VALUE	-	>115
POUR POINT, °C	ASTM D97	-40
FLASH POINT, °C	ASTM D92	NIL
SPECIFIC GRAVITY, 15.6 C/15.6 C	ASTM D1298	1.08
pH, AM-S 1436	-	>9.2

*Typical characteristics are only a guide to industry and are not necessarily manufacturing or marketing specifications and do not constitute any legal liability.*

**USER GUIDE & RECOMMENDATIONS**

- In order to reduce the evaporation of water in hydraulic fluid and avoid the increase in viscosity that will affect use, attention should be paid to controlling the temperature in the fuel tank. Split fuel tanks should be controlled at below 55°C; in closed oil tanks, the liquid temperature should not exceed 60°C. The general operating temperature is best to maintain within the range of 35-45°C.
- During use, the viscosity of water glycol flame-resistant hydraulic fluid may change due to evaporation of water. Generally, the change in viscosity should be controlled within the range of 35-55cst.
- Water glycol flame-resistant hydraulic fluid is compatible with various grades of steel, cast iron, bronze (including Lead content<20%) brass, copper, aluminum alloy or anodized aluminum. It is not compatible with lead, zinc (except for a small amount of surface zinc plating), magnesium and cadmium.
- It shows limited compatibility with zinc-dust containing coatings or paints. Specific coating and application recommendations can be obtained from the coating manufacturers. The inner wall of the fuel tank does not need to be painted. Since water glycol fire resistant hydraulic fluid has good anti-rust properties, the inner surface of the fuel tank can be protected against rust. But because as water evaporates, condensation will take place within the inner surface of the oil tank. Therefore, it is recommended to use stainless steel materials.
- Cannot be mixed with mineral oil type, emulsion type and ester type hydraulic media, so before using this product, the hydraulic system should be cleaned & flushed.
- During use, the appearance, viscosity, and pH value, bubbles of the oil should be checked regularly (usually 3 months).
- Synthetic rubber in non-metallic materials such as nitrile, butyl, and polytetrafluoroethylene, seals made of vinyl rubber, fluor rubber, silicone rubber, and nylon and plastic products, epoxy resins and phenolic resins and water glycol fire-resistant hydraulic fluids are largely compatible. It is not compatible with polyurethane rubber, natural rubber, leather, cork, general filter paper and asbestos. The paper filter element of the filter needs to be phenolic resin treated before it can be used in water glycol flame-resistant hydraulic fluids.

**STORAGE INSTRUCTIONS & HEALTH, SAFETY AND ENVIRONMENT INFORMATION**

All packages should be stored under cover to avoid the possible ingress of water and the obliteration of drum markings. Products should not be stored above 60°C. Health, safety and environmental information is provided for this product in the relevant Materials Safety Data Sheet, which can be obtained by contacting Gulf Western Oil on: 02 9673 9600.

Aug 2024