

Product Data Sheet

Mobil Pyrotec HFD 46 Fire Resistant Hydraulic Fluid (ISO Class HFD-R)

Product Description

Mobil Pyrogard HFD 46 is a high performance fire resistant hydraulic fluid. It is designed for use in electro-hydraulic governor control systems of steam turbines, including systems using fine tolerance servo valves. It is also recommended as a fire resistant lubricant in, for example, steam and gas turbines as well as a fire resistant fluid for hydraulic systems.

Mobil Pyrotec HFD 46 is formulated to provide good oxidation stability. Physical properties such as foaming, air release and demulsibility are controlled to meet limits specified by turbine manufacturers.

Mobil Pyrotec HFD 46 has been evaluated in stringent tests for fire resistance. It will burn if the bulk fluid temperature reaches 368°C and is exposed to an open flame. However, in the spray ignition, hot manifold ignition test (Factory Mutual Standard 6930 AMS 3150C) there is no flashing or burning at 704°C.

Features & Benefits

Mobil Pyrotec HFD 46 offers the following benefits:

- Inherent resistance to fire hazards
- Long component life due to excellent anti-wear properties
- Long fluid life due to high oxidation resistance
- Factory Mutual approved

Applications

Mobil Pyrotec HFD 46 is recommended for use in electro-hydraulic governor control systems of steam turbines, especially where a high performance fluid is required.

Mobil Pyrogard HFD 46 is recommended for use in Hydraulic and oil circulation systems operating in conditions subject to fire hazards.

The normal operating temperature should normally be up to 65°C to minimise thermal degradation. However, it is possible to operate with fluid temperatures up to 150°C. It is not suitable for hydraulic systems subjected to low temperatures.

Mobil Pyrotec HFD 46 is compatible with seal and hose materials such as butyl rubber and Viton. However, neoprene, nitrile and silicone rubber materials are unsuitable.

In common with other fire resistant fluids of this type, Mobil Pyrotec HFD 46 acts as a solvent on most paints (other than two part epoxy paints), enamels and varnishes. It is necessary, therefore, to consider treating all internal surfaces likely to come into contact with it.

Mobil Pyrotec HFD 46 is not compatible with petroleum oils, conventional soluble emulsions, water in oil emulsions or water glycol fluids. ExxonMobil will be pleased to give advice on flushing procedures.

Typical Properties

Mobil Pyrotec HFD 46

	Test Method	
ISO Viscosity Grade		46
Viscosity,	ASTM D 445	
cSt at 40°C		43.4
cSt at 100°C		5.0
Pour Point, °C	ASTM D 97	-20
Flash Point, °C	ASTM D 92	246
Colour	visual	Colourless

Mobil logotype, the Pegasus design are trademarks of Exxon Mobil Corporation, or one of its subsidiaries.

Due to continual product research and development, the information contained herein is subject to change without notification. Typical Properties may vary slightly. All products may not be available locally.

© 2001 Exxon Mobil Corporation. All rights reserved.

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 Esso Petroleum Company, Ltd., by telephoning 01372 222000. This product should not be used for purposes other than its intended use. If disposing of used product, take care to protect the environment.

Esso Petroleum Company, Limited
ExxonMobil House, Ermyn Way
Leatherhead, Surrey, KT22 8UX
Telephone: 01372 22 2000

