



## Mobil Pyrotec HFD 46

### Fire-Resistant Hydraulic Fluid

#### Product Description

Mobil Pyrotec 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 fire resistant hydraulic systems. Mobil Pyrotec HFD 46 is FM approved as a fire resistant industrial fluid.

Mobil Pyrotec HFD 46 is formulated to provide good oxidation stability. Physical properties such as foaming, air release and demulsibility are controlled to meet the 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 there is no flashing or burning at 704°C.

#### Features and Benefits

Mobil Pyrotec HFD 46 has 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
- FM 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
- Hydraulic and oil circulation systems operating in conditions subject to fire hazards

Mobil Pyrotec HFD 46 is unsuitable for:

- Hydraulic systems subjected to low temperatures. The normal operating temperature should normally be up to 65°C to minimize thermal degradation. However, it is possible to operate with fluid temperatures up to a maximum of 150°C.
- Use with Neoprene, nitrile and silicone rubber materials. Mobil Pyrotec HFD 46 is compatible with seal and hose materials such as butyl rubber and Viton.
- Use with petroleum oils, conventional soluble emulsions, water in oil emulsions or water glycol fluids. ExxonMobil will be pleased to give advice on flushing procedures.
- Use on most paints (other than two part epoxy paints), enamels and varnishes. Because of the solvent properties of Mobil Pyrotec HFD 46, it is necessary, therefore, to consider treating all internal surfaces likely to come into contact with it.

#### Specifications and Approvals

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**Mobil Pyrotec HFD 46 meets or exceeds  
the requirements of:**


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FM Global <u>Standard 6930</u>	X
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**Typical Properties**


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**Mobil Pyrotec HFD 46**


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ISO Viscosity Grade	46
Viscosity, ASTM D 445, cSt @ 40°C	43.4
Viscosity, ASTM D 445, cSt @ 100°C	5.0
Pour Point, °C, ASTM D 97 (max)	-20.0
Flash Point, °C, ASTM D 92 (min)	246.0
Color, Visual	Colorless

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**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 your sales contract office, or via the Internet. This product should not be used for purposes other than its intended use. If disposing of used product, take care to protect the environment.

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Typical Properties are typical of those obtained with normal production tolerance and do not constitute a specification.

Variations that do not affect product performance are to be expected during normal manufacture and at different blending locations. The information contained herein is subject to change without notice. All products may not be available locally.

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