Mobil Pyrotec™ HFD 46B

Mobil Industrial , Iceland

Fire-Resistant Hydraulic Fluid

Product Description

Mobil Pyrotec™ HFD 46B is a high-performance phosphate ester self-extinguishing fire-resistant hydraulic fluid. Mobil Pyrotec HFD 46B is TXP-free.

Mobil Pyrotec HFD 46B has been evaluated in stringent tests for fire resistance such as the ISO 20823 manifold ignition test. Compared to other types of synthetic or mineral fire-resistant fluids, Mobil Pyrotec HFD 46B shows a much higher ignition temperature (greater than 700°C) and is very difficult to ignite. If ignited, the flame will self-extinguish.

Mobil Pyrotec HFD 46B is formulated from specially purified phosphate base stocks and additives providing improved oxidation stability and lubrication properties. Physical properties such as foaming, air release and demulsibility are controlled to meet the limits specified by turbine manufacturers.

Features and Benefits

Features	Advantages and Potential Benefits
High ignition temperature and self-extinguishing capability, approved by FM Approvals	Preferred choice in applications where fire safety is critical
TXP-free formulation	Compliance with future safety, health and environment regulations
Excellent oxidation resistance	Helps to extend oil life
Excellent anti-wear properties	Helps to extend component life

Applications

Mobil Pyrotec HFD 46B is recommended for use in applications where fire safety is critical, such as:

- 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,
- Other applications such as gas turbines, turbo-compressors, reactor coolant pumps and generators.

Please note that Mobil Pyrotec HFD 46B is fully compatible with Mobil Pyrotec HFD 46.

Special precautions should be taken when using Mobil Pyrotec HFD 46B regarding:

- System operating temperatures: normal system temperature should be between 50 and 65°C to avoid water condensation and local spot temperatures should be kept below 150°C,
- Flushing procedure when replacing petroleum oils, conventional soluble emulsions, water in oil emulsions or water glycol fluids,
- Compatibility with elastomers (for example, Mobil Pyrotec HFD 46B is not recommended for use with Neoprene, nitrile and silicon materials but compatible with seals and hose materials such as butyl rubber and Viton),
- Compatibility with paints, enamels and varnishes (for example, Mobil Pyrotec HFD 46B is not recommended for acrylic, latex and phenolic resin paints but compatible for example with epoxy type paints).

Please contact your ExxonMobil representative for further details.

Specifications and Approvals

This product has the following approvals:
FM Global Approvals Class 6930
Siemens TLV 9012 02
Siemens TLV 9012 03
Mitsubishi Power Ltd MS04-MA-CL004(Rev.6)

This product meets or exceeds the requirements of:
GE Power GEK 46357H

Properties and Specifications

Property	
Grade	ISO 46
Kinematic Viscosity @ 40C, mm2/s, ISO 3104	43.5
Flash Point, Cleveland Open Cup, °C, ISO 2592	258
Foam Sequence II, Tendency, ml, ISO6247	15
Foam Sequence II, Stability, ml, ISO6247	0
Water Separability, min, ISO 6614	5
Total Acid Number, mgKOH/g, ISO 6619	0.04
Volume Resistivity 20C, MOhm.m, IEC 60247	340
Water, wt %, ISO 760	0.06
Chlorine, ppm, IP 510/04	5
Appearance, Visual	Clear
Particle Count, Rating, ISO 4406	-/15/12 (max)

Health and safety

Health and Safety recommendations for this product can be found on the Material Safety Data Sheet (MSDS) @ http://www.msds.exxonmobil.com/psims/psims.aspx

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