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Plurasafe® HL-HFC 46

(former name Breox®¹ NF 46-2181)

Fire resistant HF-C Hydraulic Fluid – PAG based

Description

Plurasafe HL-HFC 46 is a fire-resistant, water glycol based hydraulic fluid with a typical water content of 43 %.

Application

Plurasafe HL-HFC 46 is used and recommended whenever a major fire hazard exists associated with industrial hydraulic systems (for example, in die casting machines, hydraulic forging presses and hammers, machines and drive systems in the mining industry and robot welding machines).

Features and benefits

Plurasafe HL-HFC 46 is a high performance water glycol fluid possessing good antiwear properties. It belongs to the HF-C class of FR hydraulic fluids, which represent the lowest risk of fluids generally suitable for use in performance hydraulic systems. They are substantially more fire resistant than mineral oil, synthetic polyol/organic esters or even phosphate esters.

This is demonstrated in a variety of tests, which show that HF-C fluids have:

- Lower efficiency of combustion compared to esters and mineral oils.
- Higher critical heat flux for ignition, compared to esters and mineral oils
- Lowest 'spray flammability parameter' of all performance hydraulic fluids.

Approvals/Specifications

- HFC Fluid
- Factory Mutual Approved

Typical properties

Properties	Unit	Typical value	Method
Density at 20 °C	kg/m ³	1080	ASTM D-1298
Specific heat at 20 °C	kJ/kgK	3.30	
Thermal conductivity at 20 °C	W/mK	0.45	
Viscosity at 0 °C	mm ² /s	265	ASTM D 445
Viscosity at 20 °C	mm ² /s	99	ASTM D 445
Viscosity at 40 °C	mm ² /s	46	ASTM D 445
Viscosity at 50 °C	mm ² /s	34	ASTM D 445
Pour point	°C	–47	ASTM D 97
Manifold Ignition Test	°C	700	ISO 20823

Storage stability

The product in original package can be stored for at least 5 years at ambient storage conditions and temperature without any deterioration.

Note

The data contained in this publication are based on our current knowledge and experience. In view of the many factors that may affect processing and application of our product, these data do not relieve processors from carrying out their own investigations and tests; neither do these data imply any guarantee of certain properties, nor the suitability of the product for a specific purpose. Any descriptions, drawings, photographs, data, proportions, weights etc. given herein may change without prior information and do not constitute the agreed contractual quality of the product. It is the responsibility of the recipient of our products to ensure that any proprietary rights and existing laws and legislation are observed.

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