



HYDRO FIRE HFDU 46

SAFETY HYDRAULIC FLUID CATEGORY ISO-L-HFDU



APPLICATIONS

HYDRO FIRE HFDU 46 is strongly recommended for all hydraulic systems operating in an environment where there is a fire hazard (proximity of heat source or highly flammable materials), in particular in case of accidental leakage of pressurized hydraulic fluid.

HYDRO FIRE HFDU 46 satisfies the safety requirements for use in mines, the steel, metalwork, plastic glass industries, for industrial furnace doors and pressurized molten metal moulding presses.

HYDRO FIRE HFDU 46 is more than 60 percent biodegradable according OECD 301 B method.

BENEFITS

- Anhydrous synthetic fluid, formulated from organic esters and whose ignition resistance properties are superior to those of mineral oils.
- Very high viscosity index (180), ensuring excellent lubrication, better than that obtained with mineral oils, at all temperatures.
- Compatible and mixable with mineral oils.
- Compatible with most seals, except those made of natural rubber.

PRECAUTIONS FOR USE

HYDRO FIRE HFDU 46 can be used in all hydraulic systems requiring mineral oil.

However, to preserve the ignition resistance properties, it is preferable to drain the system entirely and refill it with **HYDRO FIRE HFDU 46**.

PERFORMANCES

PERFORMANCE LEVELS	ISO 6743-4 Category HFDU NF E 48602 Category HFDU
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Unil
Opal



CHARACTERISTICS

CHARACTERISTICS	UNITS	METHODS	TYPICAL DATA
ISO grade	-	-	46
Appearance	-	Visual	Clear liquid
Specific gravity at 20°C	kg/m ³	NF T 60-101	914
Kinematic viscosity at 40°C	mm ² /s	NF T 60-100	46,62
Kinematic viscosity at 100°C	mm ² /s	NF T 60-100	9,52
Viscosity index	-	NF T 60-136	194
Flash point	°C	NF T 60-118	310
Fire point	°C	NF T 60-118	360
Self-ignition temperature	°C	ASTM D 659	416
Pour point	°C	NF T 60-105	-33
TAN	mg KOH/g	NF T 60-112	1,32
Spray jet ignition test :	-	Factory Mutual	Pass
	-	National Coal Board	Pass
Ignition test on hot surface	-	Factory Mutual	Pass
Air release at 50°C	min	NF T 60-149	1
Copper corrosion	quotation	NF M 07015	1a
Rusting test	-	NF T 60-151 A/B	Pass
Oxidation resistance 350h at 100°C			
- Viscosity variation at 40°C	%	-	+ 6
Scar diameter 4-ball 40 kg/1h wear test	mm	NF E 48617	0,4
Weld load	daN	ASTM D 2783	100
FZG damage load stage	-	DIN ISO 14635-1	12
Total weight loss Vickers V104C 250h	mg	DIN 51389/2	20
AFNOR filterability			
dry, filterability factor	IF1	NF E 48690	Pass
Compatibility with seals:			
VITON, fluorinated silicone, BUNAN	-	-	Compatible
NOPRENE, polyurethane	-	-	Compatible
Biodegradability	%	OECD 301B	> 60

This typical data is given for information only

HEALTH, SAFETY AND ENVIRONMENT

Elimination must be made conforming with the rules set for the disposal of used fluids.

Must be stored away from bad weather.

Should you need further details, our Technical Department remains at your entire disposal.

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