

# HYDRO FIRE

SAFETY HYDRAULIC FLUIDS  
CATEGORY ISO-L-HFDU

220097-220098/08.10

Rev. 0

## DESCRIPTION & APPLICATIONS

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

## ADVANTAGES

- Synthetic fluids are anhydrous (without water), formulated using organic esters, and whose properties ignition resistance are much higher than those of mineral oils.
- Biodegradable over 90%.
- Very high viscosity index (180) and not shearable, which provides excellent lubrication at all temperatures, higher than that of conventional mineral oils.
- Compatible with mineral oils.  
They are not aggressive towards the joints, except those made of natural rubber.

## PERFORMANCES

Satisfies to the following specifications:

CEC-L-33 A-93 (> 90%)

ISO 6743 HFDU

## ENVIRONMENT, HEALTH & SAFETY

Please consult also the Safety Data Sheet about how to manipulate and to stock the product as well as to learn about the first aid measurements in case of accident.

Elimination after use must be made in conformity with the local rules in force about used oils disposal.

When needed, Safety Data Sheet can be obtained upon request.

Conservation of the product: 3 year(s) in closed container and sheltered.

# HYDRO FIRE

## PROPERTIES

CHARACTERISTICS	UNITS	METHODS	TYPICAL DATA	
ISO VG	-	-	46	68
Specific gravity at 15°C	kg/m <sup>3</sup>	NFT 60101	922	927
Kinematic viscosity at 40°C	mm <sup>2</sup> /s (cSt)	NFT 60100	47	62
Kinematic viscosity at 100°C	mm <sup>2</sup> /s (cSt)	NFT 60100	9,6	11,9
Viscosity index	-	NFT 60136	180	180
Flash point	°C	NFT 60118	304	308
Fire point	°C	NFT 60118	350	350
Auto ignition temperature	°C	ASTM D659	480	480
Pour point	°C	NFT 60105	-41	-35
TAN (TotalAcid Number)	mg KOH/g	ASTM D 664	2	2
Flash point when pulverized	-	Factory Mutual	pass	pass
Plash point when used on a heated surface	-	Factory Mutual	pass	pass
Foaming characteristics, sequence I, II, III	-	ASTM D892	traces / 0	traces / 0
Air release at 50°C	min	NFT 60149	4	5
Copper corrosion	-	ASTM D 130	1a	1a
Rust preventing characteristics	-	DIN 51585	pass	pass
4 Ball wear (1H, 40 Kg)	Ø mm	ASTM D2266	0,7	0,7
Antiwear and EP characteristics	-	FZG test	stage 12	stage 12
Vane pump test	perte de poids en mg	VICKERS	20	20
Biodegradable	%	CEC-L-33-A-93	> 90	> 90
Product number	-	-	220097	220098

*The average values are given for information only.*