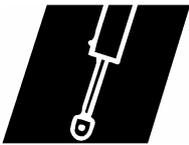


HYDRANSAFE HFDU 46



Lubrication

Biodegradable fire resistant hydraulic fluid.

APPLICATIONS

Hydraulic oil

- **HYDRANSAFE HFDU 46** is an ester-base biodegradable and fire-resistant, high-performance hydraulic fluid.
- **HYDRANSAFE HFDU 46** is recommended for hydraulic equipment operating in locations comprising a fire risk such as iron and steel works (coking plants, blast furnaces, continuous casting), mines, etc... The use of **HYDRANSAFE HFDU 46** lessens the serious risks presented by recourse to a mineral oil on the occasion of rupture of a hose or when a leak gives rise to oil mist, in the immediate vicinity of a flame, a part in the process of melting or a switch cupboard.
- **HYDRANSAFE HFDU 46** is especially recommended when there is the possibility of contamination of waters : offshore, mines.

SPECIFICATIONS

- International specifications
- ISO 6743/4 HFDU
 - ISO 12922

APPROVAL

- FACTORY MUTUAL in accordance with FM Approval Standard 6930 - "Flammability classification of Industrial Fluids".

ADVANTAGES

- With its considerable fire resistance properties must be be associated its exceptional lubricating properties which guarantee a substantial reduction in wear and therefore a longer service life of the hydraulic components.
- High flash point and high spontaneous ignition temperature.
- Low pour-point providing good performances at low temperature.
- Very high natural viscosity index guaranteeing a viscosity constantly adapted to the temperature range in which the fluid must be used.
- Very good anticorrosion properties in relation to ferrous and non-ferrous metals making up a hydraulic circuit.
- Very good antioxidation power : enhanced service life.
- The product does not represent a danger to health and is biodegradable.
- Limit temperature of use 120°C.



TOTAL

TYPICAL CHARACTERISTICS	METHODS	UNITS	HYDRANSAFE HFDU 46
Density at 15°C	ISO 3675	kg/m ³	920
Kinematic viscosity at - 20°C	ISO 3104	mm ² /s	1580
Kinematic viscosity at 40°C	ISO 3104	mm ² /s	47.5
Kinematic viscosity at 100°C	ISO 3104	mm ² /s	9.35
Viscosity index	ISO 2909		185
Air release at 50°C	ISO 9120	min	4
Foaming seq.1	ISO 6247	ml/ml	< 50/0
Pour-point	ISO 3016	° C	- 42
Flash point V.O.	ISO 2592	° C	310
Fire point	ISO 2592	° C	358
Auto ignition temperature	ASTM 2155	° C	> 420
Biodegradability	OECD 301B	-	Ultimately biodegradable

Above characteristics are mean values given as an information.

TOTAL LUBRIFIANTS

Industrie & Spécialités

10-09-2007 (Annule et remplace version du 07-03-2007)

HYDRANSAFE HFDU 46

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This lubricant used as recommended and for the application for which it has been designed does not present any particular risk.

A material safety data sheet conforming to the regulations in use in the E.C. can be obtained from your local commercial adviser or down loaded from www.quick-fds.com.