

## Hydraulic Oil FR HFDU

### FULLY SYNTHETIC BIODEGRADABLE HYDRAULIC FLUID FIRE – RESISTANT / HFDU Specification

#### Description

**Hydraulic Oil FR HFDU** is a high performance, fire-resistant, readily biodegradable hydraulic fluid based on synthetic esters. A special additive package delivers excellent extreme pressure properties, thermal oxidation resistance, anti-wear and non-foaming control. Because of the high Viscosity Index **Hydraulic Oil FR HFDU** provides extremely wide operating temperature range. **Hydraulic Oil FR HFDU** allows for very long oil-change intervals resulting in cost effectiveness and CO<sub>2</sub> emissions reduction.

Produced in viscosity classes 32/46/68.

#### Industry Performance Standards

- **HFDU: ISO 6743/4**

#### Areas of Application

**Hydraulic Oil FR HFDU** is specifically designed for use in all hydraulic systems, both hydrostatic and hydrodynamic. **Hydraulic Oil FR HFDU** is recommended for hydraulic applications in environmentally sensitive areas with a high fire risk – immediate vicinity of potential flame or heat sources. **Hydraulic Oil FR HFDU** is particularly used in mining, power generation, railway and power line maintenance, construction, earth moving and other industries.

Before changing over to **Hydraulic Oil FR HFDU** please enquire for our filling instructions.

**Note:** Cleaning function of **Hydraulic Oil FR HFDU** may loosen any deposits in the hydraulic system.

#### Characteristic features:

- Very good fire-resistance – reducing possibility of ignition in case of fluid leakage;
- Ultimate performance and anti-wear protection;
- Outstanding thermal oxidation stability;
- Extra high Viscosity Index - wide operating temperature range;
- Very long oil-change interval > reduction in CO<sub>2</sub> emissions;
- Non-toxic, readily biodegradable



#### TYPICAL CHARACTERISTICS

PARAMETER	UNIT	TEST METHOD	ISO VG 32	ISO VG 46	ISO VG 68
Density at 15 °C	kg/m <sup>3</sup>	ISO 12185	965	920	922
Kinematic Viscosity at 40°C	mm <sup>2</sup> /s	ASTM D445	32	46	68
Kinematic Viscosity at 100°C	mm <sup>2</sup> /s	ASTM D445	6,9	9,5	13,8
Viscosity Index			185	196	210
Fire point	°C	ASTM D92	>360	>360	>300
Pour point	°C	ASTM D97	-35	-40	-40
Flash point, COC	°C	ASTM D92	>320	>320	>300
Biodegradability (within 28 days)	%	OECD 301B	>80	>80	>80

The above-listed data represent average values. Material Safety Data Sheet available on request.

Issue Date: 01/11/2019

