# **Technical Data Sheet**

















# Hydromax FR-E 46

### Fire resistant hydraulic fluid

#### Description

Hydromax FR-E is a long-life hydraulic fluid with high flash point synthetic ester, provided with good lubricating properties and long equipment life. Meets the requirements of ISO 6743/4 standard as fire resistant HFDU and ISO 15380 HEES class. Hydromax FR-E can be applied as hydraulic fluid whenever operating close to heat source. Hydromax is highly biodegradable so small leakages will not cause contamination.

#### **Applications**

Hydromax FR-E is suitable for hydraulic applications in:

- Hot rolling
- Continuous casting
- Ingots conveyors
- Metal casting
- Stamping, forging, and sintering
- Thermic treatments ovens
- Welding machines

No special care is required when handling this product. Hydromax FR-E is compatible with most of the common rubbers of the mineral oil operated circuits including NBR, unless in good condition. Natural rubbers and polyurethane are not advised.

#### Use conditions

When using Hydromax FR-E in a circuit which had been operating with a mineral hydraulic oil, it is sufficient to proceed as follows:

- Unload the circuit and clean the tank, making sure that the inner wall is not painted
- Take off and clean the filters
- Load the tank with Hydromax FR-E to the minimum level
- Run the circuit 1 or 2 hours under low pressure monitoring all movements
- Unload, and then set the filters, load again the tank with new Hydromax FR-E, and operate in normal conditions

## Typical performance data

	Test method	FR-E 46
Appearance	MD 0	Clear liquid
Viscosity @ 40 °C, cSt	ASTM D-445	46
Viscosity @ 100 °C, cSt	ASTM D-445	9.13
Viscosity Index	ASTM D-2270	>180
Density @ 20 °C, g/ml	ASTM D-1298	0.925
Flash point, °C	ASTM D-92	>300
Pour point, °C	ASTM D-97	<-30
N.N., mgKOH/g	ASTM D-974	<1
Demulsivity, ml/min	ASTM D-1401	Max 40/37/3 (30')

All performance data on this Technical Data Sheet are indicative only and can vary during production

Matrix Specialty Lubricants BV - info@matrix-lubricants.com – www. matrix-lubricants.com

12/07/2022 Version 2 Page 1 of 1