



### **PRODUCT DATA SHEET**

# **EKO HYDRAULIC SAFE HFC 46**

Fire resistant hydraulic fluid

#### DESCRIPTION

EKO HYDRAULIC SAFE HFC 46 is a fire resistant, synthetic, water-glycol hydraulic fluid, whose standard water content value is 43%.

The product's high content in water protects against fire risk in case of accidental contact of the hydraulic fluid with ignition sources (flames, sparks, hot equipment surfaces).

EKO HYDRAULIC SAFE HFC 46 contains specially selected polyalkyleneglycol (PAG), that acts as a viscosity index improver and additionally renders the product more stable against oxidation and shear.

#### SPECIFICATIONS

ISO 6743/4 HFC.

#### APPLICATIONS

- EKO HYDRAULIC SAFE HFC 46 is recommended for high pressure industrial applications where there is a high risk of fire.
- The applications include casting machines, hydraulic presses and forging hammers, machines and conveyor systems (conveyor belts) in quarries and robotic welding machines.
- Also recommended for use in underground coal mining facilities.



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#### ADVANTAGES

- Excellent ignition resistance leading to safer conditions both for the employees as well as for the facilities.
- High protection against corrosion and rust.
- Excellent anti-wear protection, leading to longer equipment life.
- Very good performance in low temperatures.
- Compatible with the usual elastomers found in the hydraulic systems.

### **TYPICAL CHARACTERISTICS**

Properties	Methods	Units	EKO HYDRAULIC SAFE HFC 46
Density at 20°C	ASTM D1298	g/ml	1.081
Specific Heat at 20°C		KJ/kgK	3.30
Thermal conductivity at 20°C		W/mK	0.45
Kinematic viscosity at 0°C	ASTM D445	cSt	266
Kinematic viscosity at 20°C	ASTM D445	cSt	99
Kinematic viscosity at 40°C	ASTM D445	cSt	46
Kinematic viscosity at 50°C	ASTM D445	cSt	34
Pour Point	ASTM D5950	°C	-47
Ignition resistance, Manifold Ignition Test	ISO 20823	°C	700

#### SPECIAL INSTRUCTIONS

Fire resistant hydraulic fluids of different types should not be mixed in hydraulic systems. For instance, mixing water-containing HFA, HFB or HFC-hydraulic fluids with synthetic, anhydrous HFDU or HFDR hydraulic fluids, will lead to the formation of two layers (water/oil), and to potential damage to the pump and alteration of the performance attributes of the hydraulic fluids.



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#### **STORAGE INSTRUCTIONS**

EKO HYDRAULIC SAFE HFC 46 may be stored at ambient conditions for at least five years, without the product's properties being altered.

#### **HEALTH AND SAFETY**

Protect the environment while disposing of used product. Used lubricants should be collected at specific points to ensure they do not pollute the environment. Do not mix with solvents, brake fluids, antifreeze and water, to allow for proper handling.

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This data sheet provides basic information on the product as at the date of drafting. For further information regarding applications, please contact EKO ABEE Technical Support, tel. +30 210 5509 511 and +30 210 7725 418. Advice on safe handling is provided in the Safety Data Sheet.