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## A water-glycol fire-resistant fluid for hydraulic transmissions operated in locations where fire hazards are present.

## PERFORMANCES

SECURFLUID H46 is the fruit of many years of research and development, combined with practical experience accumulated in coal mining and the metallurgical industry.

SECURFLUID H46 possesses:

- very high ignition resistance, and is flame-retardant,
- excellent lubricating and anti-wear properties, equivalent to those of mineral hydraulic

oils,

- a well-balanced inhibitor system ensuring the requisite anti-corrosion protection of the various metals (ferrous alloys, copper, aluminium...), in both the liquid and gas phases,

- a higher viscosity index than that of most hydraulic oils,
- very low change in viscosity under pressure,
- shear stability,
- thermal conductivity and specific heat significantly greater than those of mineral hydraulic oils,
- good compatibility with all types of elastomer-based seals and hoses in hydraulic circuits,
  - excellent filterability and very good de-aeration.

SECURFLUID H46 is nitrite-free.

## **ADVANTAGES**

Anywhere in the vicinity of a heat source, a hydraulic fluid may ignite and therefore become a safety risk for personnel; SECURFLUID H 46, as an ignition-resistant fluid, offers the only possible alternative to mineral oils.

SECURFLUID H 46 can be used in hydraulic pressure plastic moulding machines, in machinery and transmission systems in the mining or metallurgical industry, and wherever there are high fire risks.

The self-ignition temperature of mineral hydraulic oils is approximately 350°C, i.e. above this temperature they catch fire, in the absence of a flame.

Using SECURFLUID H 46 prevents these ignition and fire spread hazards. Indeed, in case of fire, the approximately 42% water contained in the fluid forms a steam layer providing flame protection.

SECURFLUID H46 also possesses good anti-corrosion and anti-wear properties, equivalent to those required for a mineral hydraulic oil. It has no adverse effect on constituent materials of seals and hoses; however acrylic elastomers and elastomers that cannot withstand water-glycol mixes must be avoided.





## USES

When in the vicinity of heat sources, inflammable hydraulic fluids may spark uncontrollably and catch fire, thereby becoming a major risk to personnel safety.

SECURFLUID H46, as a fire-resistant hydraulic fluid, represents an alternative to mineral hydraulic oils.

This applies particularly to:

- pressure die casting,
- gravity die casting,
- plastic injection presses,
- forge hydraulic presses,

- transport equipment and manipulators for parts heated to high temperatures in iron and steel plants (steel works, foundries, forges),

- coking plant furnace doors, heat treatment shops, etc.,
- hydraulic machinery and motors used in mining.

By using SECURFLUID H46, ignition of the hydraulic fluid and fire spread is prevented thanks to its 45 % water content, which forms a protective steam layer and prevents combustion.

Characteristics	Methods	Units	Values
Colour	Visual	-	Green
Density at 15°C	NF T 60-101	kg/m3	1071
Kinematic viscosity at 40°C	NF T 60-100	mm2/s	38
рН	-	-	9.6

The characteristics are given purely for information and are consistent with our current production standards. IGOL reserves the right to modify them, in order to pass on technical developments to its customers. Before using this product, you should consult the instructions for use and the environmental impact shown on the technical and safety data sheets. The information given above is based on the current state of our knowledge of the product in question. The product user should take all relevant precautions relating to its use. Under no circumstances may IGOL be held liable for damages resulting from misuse.

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