

opal

LUBRIFIANTS

# HYDRO HEES ECOLOGICAL HYDRAULIC FLUID



## **APPLICATIONS**

**HYDRO HEES** is a hydraulic fluid suitable for all hydraulic systems operating under severe conditions, especially where the environment could be spoiled by oil leaks.

**HYDRO HEES** is compatible with mineral and vegetable oils, but to conserve the ecological properties of this fluid, it should not be mixed with mineral hydraulic oils.

## BENEFITS

- > Minimizes the effects of pollution on the environment in the event of leaks or accidental spillage.
- Produced from a synthetic base, HYDRO HEES has very good anti-wear and anti-corrosion properties, withstands high pressures and is very stable to oxidation and hydrolysis, because of its specific additives.
- Naturally high viscosity index and therefore a very good shear resistance so that it can be used over a wide range of temperatures (above 80°C in continuous use) and at high pressures.
- Thanks to its chemical nature, HYDRO HEES can be drained up to 4,000 hours under the most severe conditions of use and under analytical control

### PERFORMANCES

PERFORMANCE LEVELS

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DIN 51524 Part 4 category HEES ISO 15380 category HEES

#### **CHARACTERISTICS**

CHARACTERISTICS	UNITS	METHODS	TYPICAL DATA		
ISO Grade	-	-	22	32	46
Specific gravity at 15°C	kg/m3	NF T 60-101	903	909	919
Kinematic viscosity at 40°C	mm²/s	NF T 60-100	23,6	34,3	45,7
Kinematic viscosity at 100°C	mm²/s	NF T 60-100	5,9	7,5	9,1
Viscosity index	-	NF T 60-136	213	196	189
Flash point	°C	NF T 60-118	212	236	310
Pour point	°C	NF T 60-105	-24	-20	-48
Ecotoxicity on seaweeds	mg/l	OECD 201	> 100		
Ecotoxicity on daphnies	mg/l	OECD 202	> 100		
Ecotoxicity on fishes	mg/l	OECD 203	> 100		
Biodegradability	%	CEC L-33-A-93	95	98,6	
Biodegradability	%	OECD 301 B	84	75	
Compatibility with VITON –					
fluorated silicone – BUNAN	-	-	Compatible		
NEOPRENE – polyurethane joint	-	-	Compatible		

This typical data is given for information only

# HEALTH, SAFETY AND ENVIRONMENT

Elimination must be carried out to conform to the rules set for the disposal of used mineral oils. **Must be stored away from bad weather.** 

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