

# 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.

## PERFORMANCES

### PERFORMANCE LEVELS

DIN 51524 Part 4 category HEES  
ISO 15380 category HEES

## CHARACTERISTICS

| CHARACTERISTICS   | UNITS              | METHODS       | TYPICAL DATA             |           |           |
|---|--------------------|---------------|--------------------------|-----------|-----------|
| ISO Grade   | -                  | -             | <b>22</b>                | <b>32</b> | <b>46</b> |
| Specific gravity at 15°C  | kg/m <sup>3</sup>  | NF T 60-101   | 903                      | 909       | 919       |
| Kinematic viscosity at 40°C   | mm <sup>2</sup> /s | NF T 60-100   | 23,6                     | 34,3      | 45,7      |
| Kinematic viscosity at 100°C  | mm <sup>2</sup> /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 –<br>fluorated silicone – BUNAN<br>NEOPRENE – polyurethane joint | -<br>-             | -<br>-        | Compatible<br>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.**

Should you need further details, our Technical Department remains at your disposal.