

# BIOHYDRAN TMP



Hydraulic oil



EU Ecolabel : FR/27/002



Biodegradable Hydraulic Fluid complying with the European Ecolabel criteria.

## APPLICATIONS

### Hydraulic systems

- **BIOHYDRAN TMP** is a biodegradable synthetic hydraulic fluid offering good lubricating properties. It was designed for demanding hydraulic systems requiring hydraulic fluids with re-enforced anti-wear properties.
- **BIOHYDRAN TMP** is recommended for use when incidental spillage in environmentally sensitive areas can occur, eg : forestry works, navigation, off-shore, water catchment areas, ski resorts, hydroelectric stations etc...

## SPECIFICATIONS

### Specification European Ecolabel

- ISO 15380: HEES
- Registration number : FR/27/002 AFNOR CERTIFICATION.  
Reduced harm for water and soil during use. Reduced CO<sub>2</sub> emissions.  
For more information on the European Ecolabel, please consult:

<http://ec.europa.eu/environment/ecolabel/>

### Swedish Standard

- The IBC packaging doesn't meet the requirement of the European Ecolabel
- Meets the requirements of the Swedish Standard SS 15 54 34.

## ADVANTAGES

- Produced with renewable raw materials, **BIOHYDRAN TMP** contributes to CO<sub>2</sub>-emission reduction.
- High natural viscosity index gives **BIOHYDRAN TMP** a wide temperature operating window (-20°C to 80°C).
- The very high shear stability of **BIOHYDRAN TMP** will ensure the hydraulic equipment is kept to an optimum efficiency during the fluid service life.
- The good lubricating properties, as well as the very good wear and corrosion protection, will extend the life of the hydraulic system's moving components

## TECHNICAL ADVICES

- As recommended in ISO 15380, please check with the equipment supplier to see whether the installation is suitable for the use of synthetic ester hydraulic fluids.  
NBR seals is swelling more in synthetic esters than in classical mineral base oils.
- Contact our technical service for advice changing from HM or HV fluids to Biodegradable HEES hydraulic fluids.

| TYPICAL CHARACTERISTICS      | METHODS  | UNITS              | BIOHYDRAN TMP |       |       |       |
|------------------------------|----------|--------------------|---------------|-------|-------|-------|
|                              |          |                    | 32            | 46    | 68    | 100   |
| Appearance                   | visual   | -                  | Clear         | Clear | Clear | Clear |
| Density at 15°C              | ISO 3675 | kg/m <sup>3</sup>  | 913           | 920   | 923   | 927   |
| Kinematic Viscosity at 40°C  | ISO 3104 | mm <sup>2</sup> /s | 32            | 46    | 68    | 100   |
| Kinematic Viscosity at 100°C | ISO 3104 | mm <sup>2</sup> /s | 7,4           | 9,3   | 12,2  | 15,7  |
| Viscosity Index              | ISO 2909 | -                  | 195           | 185   | 180   | 175   |
| Flash Point                  | ISO 2592 | °C                 | 270           | 280   | 300   | 300   |
| Pour Point                   | ISO 3016 | °C                 | - 42          | - 42  | - 39  | - 33  |

Above characteristics are mean values given as an information

TOTAL LUBRIFIANTS  
INDUSTRIE

11-10-2020 (Supersedes 07-01-2020)

BIOHYDRAN TMP

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This lubricant used as recommended and for the application for which it has been designed does not present any particular risk.

A material safety data sheet conforming to the regulations in use in the E.C. can be obtained from your local commercial adviser or down loaded from

[www.quick-fds.com](http://www.quick-fds.com)