

# BIOHYDRAN SE



Lubrication



EU Ecolabel : FR/27/002



## High thermal stability biodegradable hydraulic fluid.

### APPLICATIONS

#### Hydraulic systems

- Based on saturated synthetic esters **BIOHYDRAN SE** is designed for demanding hydraulic systems requiring hydraulic fluids with a high thermal stability and good lubricating properties.
- The excellent biodegradability and low eco toxicity make **BIOHYDRAN SE** particularly suitable when incidental spillages in environmentally sensitive areas can occur : forestry works, public works, water navigation, off-shore, water catchments areas, ski resorts, etc...

### SPECIFICATIONS

#### STANDARDS

#### OEM

#### EUROPEAN ECO-LABEL SWEDISH STANDARD

- ISO 15380 : HEES.
- DIN 51524 (for mineral oils): except DIN 51587 and ISO 13357.
- DENISON : HF1, HF2 & HF6 approved.
- Registration number : FR/27/002 AFNOR CERTIFICATION.  
Reduced harm for water and soil during use. Reduced CO2 emissions.  
For more information on the European Ecolabel, please consult: <http://ec.europa.eu/environment/ecolabel/>  
*The IBC packaging doesn't meet the requirement of the European Ecolabel*
- Meet the requirements of the Swedish Standard SS 15 54 34.
- Meet the requirements of the specification CAT BF-2.
- JCMA HKB approval for 32 and 46 grade

### ADVANTAGES

- **BIOHYDRAN SE** has a natural high and stable viscosity index. No viscosity loss due to shear is observed. This stable viscosity level ensures an optimum hydraulic efficiency during all the fluid life.
- The good lubricating properties and corrosion protection will extend the component life of hydraulic systems.
- The excellent oxidation stability of **BIOHYDRAN SE** offers extended drain intervals compared to classical mineral hydraulic fluids.
- The very low foaming tendency and fast air release limit air contamination in the circuit.
- **BIOHYDRAN SE** is miscible with classical HM and HV mineral hydraulic fluids.
- **BIOHYDRAN SE** contains more than 80 % of renouvelable carbons.

### PRECAUTIONS

- It is recommended to check with the equipment supplier to see whether the installation is suitable for the use of synthetic ester based hydraulic fluids. **BIOHYDRAN SE** has a good compatibility level with NBR, HNBR, AU and FPM seals.
- Contact our technical service for advice changing from HM or HV fluids to **BIOHYDRAN SE**.

TYPICAL CHARACTERISTICS	METHODS	UNITS	BIOHYDRAN SE 32	BIOHYDRAN SE 46	BIOHYDRAN SE 68
Appearance	-	Visual	Clear and bright	Clear and bright	Clear and bright
Density at 15°C	ISO 3675	kg/m <sup>3</sup>	938	933	925
Kinematic Viscosity at 40°C	ISO 3104	mm <sup>2</sup> /s	32	46	68
Kinematic Viscosity at 100°C	ISO 3104	mm <sup>2</sup> /s	5,9	8,7	10,3
Viscosity Index	ISO 2909	-	150	146	142
Iodine value	-	cgl <sub>2</sub> /g	7	2	-
Flash Point	ISO 2592	°C	255	280	280
Pour Point	ISO 3016	°C	- 42	- 42	-30
<b>Biodegradability</b>	<b>OECD 301</b>	<b>Contain more than 98% of ultimately biodegradable substances</b>			

Above characteristics are mean values given as an information

#### TOTAL LUBRIFIANTS INDUSTRIE

06-10-2020 (supersedes 07-01-2020)

BIOHYDRAN SE

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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).