



Biodegradable Hydraulic Fluid.

APPLICATIONS

Environmentally Acceptable Lubricant (EAL) as per the US 2013 Vessel General Permit (VGP).

Hydraulic systems.

FEATURES AND BENEFITS

BIOHYDRAN TMP is a biodegradable synthetic hydraulic fluid offering good lubricating properties. **BIOHYDRAN TMP** is designed for use when incidental spillage in environmentally sensitive areas may occur.

BIOHYDRAN TMP range is recommended for demanding hydraulic systems requiring hydraulic fluids with re-enforced anti-wear properties.

SPECIFICATIONS AND APPROVALS

✓	ISO 15380: HEES	✓	European ECO Label FR/27/002
✓	US Vessel General Permit Compliant	✓	Swedish Standard SS 15 54 34

TECHNICAL DATA : BIOHYDRAN TMP 68

CHARACTERISTICS	METHODS	UNITS	TYPICAL VALUES*
Appearance	Visual	—	Clear
Density at 15°C	ISO 3675	kg/m ³	923
Kinematic viscosity at 40°C	ISO 3104	mm ² /s	68
Kinematic viscosity at 100°C	ISO 3104	mm ² /s	12.2
Viscosity index	ISO 2909	—	180
Flash Point (OC)	ISO 2592	°C	300
Pour Point	ISO 3016	°C	- 39

*The specifications above are for illustrative purposes and communicated for information only.

CUSTOMER BENEFITS

✓	Produced with renewable raw materials, BIOHYDRAN TMP contributes to CO ₂ -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.
✓	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.
✓	Contact our technical service for advice changing from HM or HV fluids to Biodegradable HEES hydraulic fluids.

GENERAL RECOMMENDATIONS

COMPATIBILITY

Compatibility should be checked.

Please consult your Lubmarine Lubrication Engineer should you have any questions.

STORAGE

This product should be stored under cover in clean, dry conditions and protected from frost.

Recommended storage temperature range is 5°C to 50°C.

Drums that are stored on deck should be raised on pallets and covered to protect from the elements.

Always check regularly for leakage.

COMPLIMENTARY PRODUCTS AND SERVICES

✓	DiagomarPlus – Laboratory based used oil analysis program.
✓	Tech'Care – Suite of onboard testing kits.
✓	Technical Expertise & Support – Total Lubmarine engineers are on hand at worldwide locations to assist with lubrication concerns.
✓	Lube-On-Ship – Visualize your lube oils needs aboard Total Lubmarine's innovative virtual vessel.



EU Ecolabel: FR/27/002

Total Lubmarine / 00-04-2021 / BIOHYDRAN TMP 68

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 can be obtained via your Total Lubmarine technical advisor or from sdstotalms.total.com

