



Synthetic biodegradable oil for stern tubes.

APPLICATIONS

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

BIONEPTAN is particularly recommended to lubricate sliding rolling bearings of stern tube in order to minimize environmental impacts.

FEATURES AND BENEFITS

BIONEPTAN is designed for use when incidental spillage in environmentally sensitive areas may occur.

BIONEPTAN is a range of high quality synthetic biodegradable lubricant, with outstanding anti-wear and anti-corrosion properties, high viscosimetric performances and good low temperature behaviour offering a very wide range of operating temperatures.

SPECIFICATIONS AND APPROVALS

✓	US Vessel General Permit Compliant	✓	WÄRTSILÄ PROPULSION
✓	BLOHM & VOSS (SIMPLEX)		

TECHNICAL DATA : BIONEPTAN 220

CHARACTERISTICS	METHODS	UNITS	TYPICAL VALUES*
Density at 15°C	ISO 3675	kg/m ³	965
Kinematic viscosity at 40°C	ISO 3104	mm ² /s	220
Kinematic viscosity at 100°C	ISO 3104	mm ² /s	29
Viscosity index	ISO 2909	-	> 170
Flash Point (OC)	ISO 2592	°C	> 250
Pour Point	ISO 3016	°C	- 28
Biodegradability	OECD 301 B	%	> 60
Foaming	ISO 6614	ml/ml	0/0

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

CUSTOMER BENEFITS

✓	Compatible with the main common seals: VITON and new bioseals.
✓	Environmentally Acceptable Lubricants (EAL) for 2013 Vessel General Permit (VGP).
✓	High natural viscosity index gives BIONEPTAN a wide temperature operating window (-20°C to 80°C).
✓	Produced with renewable raw materials, BIONEPTAN contributes to CO ₂ -emission reduction.

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.

Total Lubmarine / 00-04-2021 / BIONEPTAN 220

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

