



## Description

Full Saturated Ester biodegradable oil to lubricate under water equipment to meet EPA VGP 2013 requirement.

## Applications

- + BIONEPTAN HT 100 is a range of high quality synthetic biodegradable lubricant for stern tubes and thrusters.
- + BIONEPTAN HT 100 is formulated with full saturated Ester base oil to resist against hydrolysis even at High Temperature.

## Typical Characteristics

	Methods	Units	100
ISO Grade			100
Density at 15°C	ISO 3675	kg/m <sup>3</sup>	919
Kinematic viscosity at 40°C	ISO 3104	mm <sup>2</sup> /s	100
Kinematic viscosity at 100°C	ISO 3104	mm <sup>2</sup> /s	13.7
Viscosity Index	ISO 2909	–	140
Flash Point (COC)	ASTM D 92	°C	> 250
Pour Point	ISO 3016	°C	- 30
Biodegradability	OECD 301 B	%	> 60
FZG A/8.3/90	DIN ISO 14635-1	–	12
Foaming	ISO 6614	ml/ml	0/0

Characteristics of this chart are indicative typical values.

## Environmentally Acceptable Lubricants (EAL)

- + BIONEPTAN HT 100 is particularly recommended to lubricate sliding and rolling bearings from stern tube in order to minimize environmental impacts.

## Specifications

- + ISO 15380: HEES.
- + Environmentally Acceptable Lubricants (EAL) for 2013 Vessel General Permit (VGP).

## Approvals

KEMEL all types and sizes of seals.  
KAMOME Propeler.

## Features and Benefits

- + BIONEPTAN HT 100 presents outstanding viscosimetric performances and good low temperature behaviour offering a very wide range of operating temperatures.
- + Outstanding anti-wear and anti-corrosion properties.
- + Compatible with the main common seals.

## ⚠ Handling, Health & Safety

Lubricants consisting of synthetic oils with specific additives. In normal conditions of use, these lubricants present no particular toxic hazard. All lubricants, of any kind, should always be handled with great care, particularly avoiding any contact with the skin. Prevent any risk of splashing, and keep away from combustible materials. Store under cover and away from any risk of contamination.

A safety data sheet complying with current legislation is available at: [www.quickfds.com](http://www.quickfds.com) and [www.totallubmarine.com](http://www.totallubmarine.com)