Wilhelmsen Ships Service

Last updated: 05/06/2024 01:01:00

KLÜBERBIO RM 2-100 200 LTR

Product group: **681** Product number: **210012**

KLÜBERBIO RM 2-100 is a synthetic Environmentally Acceptable Lubricant (EAL) designed to support and protect your stern tubes. Offering good ageing, oxidation, and shear stability, it forms a strong hydrodynamic oil film even under high loads, empowering your parts to operate reliably.

Product information

Stern tube lubricants deal with a unique set of challenges that include working under high loads across a wide range of conditions and needing to be environmentally safe for their inevitable leaks into the sea. KLÜBERBIO RM 2-100 was formulated to handle these demands - helping your propeller shafts stay high-performing and well-protected even in rough conditions.

Built with synthetic ester oil, KLÜBERBIO RM 2-100 exhibits powerful ageing and oxidation stability, minimising the risk of any undesirable increases in viscosity levels. Supported by excellent shear stability, it is empowered to form a strong hydrodynamic oil film even under high loads. A durable hydrodynamic lubricant film is crucial to protecting your parts and bearings from damage caused by intense, sustained friction and/or extreme temperatures.

KLÜBERBIO RM 2-100 also contains over 90% renewable raw materials and is biodegradable and non-toxic to marine life in the event of contact with the seawater. As a testament to its environmental excellence, it bears both the European Ecolabel and the certification of Environmentally Acceptable Lubricant (EAL) by the US Environmental Protection Agency.

KLÜBERBIO RM 2-100 is compatible with various FKM elastomers from leading propeller shaft seal manufacturers, making it a safe and trusted lubricant solution for reduced leakage and contamination.

Features

- Compliant with the requirements for Environmentally Acceptable Lubricants (EAL) as defined by the EPA 2013 Vessel General Permit
- Biodegradable and non-toxic to marine organisms
- Shear stability
- Ageing stability
- Oxidation stability
- Compatible to use with standard FKM elastomers

Benefits

- Environmentally-friendly
- Minimises harm to the marine environment in the event of leaks
- High-performing under high loads
- High-performing under high ageing and oxidation conditions
- Protects your stern tube from frictional and/or temperature damage
- Reduces leakage and contamination

Specification

General

Invent Hazard Material (IMO/EU) classification	C-3

Physical properties

Biodegradability of the base oil, acc. to OECD 301 F, (within 28 days) [%]	≥60
Density at 20°C [g/cm³]	~ 0.94
Kinematic viscosity of the base oil, DIN 51562 pt. 01/ASTM D-445/ASTM D 7042, 100 °C [mm²/s]	~ 14
Kinematic viscosity of the base oil, DIN 51562 pt. 01/ASTM D-445/ASTM D 7042, 40 °C [mm²/s]	~ 100

Dimensions/Weight

Packing Size	200 ltr

Technical data

EU Ecolabel registration number	DE/027/261
ISO viscosity grade of the base oil, DIN ISO 3448	100
Shelf life [months]	36
Viscosity index, DIN ISO 2909	~ 137

Performance data

Anticorrosive properties on steel, DIN ISO 7120, method A, steel, 24 h/60 °C	no rust corrosion degree
Copper corrosion, DIN EN ISO 2160, 24 h/100°C	1 - 100 corrosion degree
Flash point, DIN EN ISO 2592, Cleveland, open-cup apparatus [°C]	≥230
Lower service temperature	-25°C / -13°F
Pour point, DIN ISO 3016 [°C]	≤-30
Upper service temperature	120°C / 248°F

Documents

SDoC and MD for IHM

Directions for use

KLÜBERBIO RM2-100 is suitable for lubricating propeller bushes made of white metal and propeller shaft seals. Tested and approved by all leading propeller shaft seal manufacturers.

Though it is generally miscible with stern tube oils based on mineral or ester oil, we recommend that you still perform a miscibility test beforehand to completely rule out the possibility of any incompatibility between different additives.

Please ensure that KLÜBERBIO RM2-100 is approved by the OEM of your propellor shaft seal or bearing. If it is not, or the seal or bearing's specification has been changed, consult the OEM before changing the oil.