

# KLÜBERBIO LG 39-700 N 180 KG

# Product group: 682 Product number: 210071

KLÜBERBIO LG 39-700 N is an Environmentally Acceptable Lubricant (EAL) designed for maximal efficiency and protection for your open gear drives. Powerfully adhesive, combined with excellent wear and corrosion protection. It is optimised for use in spray systems — even in low temperatures — helping you cut down on your operating costs.



# **Product information**

Equipment onboard ships like open gear drives and jack-up lifting systems are in frequent contact with seawater and hence at risk of corrosion. To ensure a longer equipment life, KLÜBERBIO LG 39-700 N makes use of a new type of base oil and additive package for a boosted load capacity, good antiwear and anticorrosive properties, and excellent adhesion strength.

Possessing good low-temperature behaviour, KLÜBERBIO LG 39-700 N is optimised for use in centralised lubricating systems where it can be pumped as low as -30 °C or sprayed at 0 °C. It is a versatile lubricant solution that you can use over a wider temperature range than what is common with mineral-oil-based greases (of the same base oil viscosity), including cold conditions.

Moreover, this high-performance grease promises that less is enough --- sprayed in jack-up lifting systems, KLÜBERBIO LG 39-700 N cuts your lubricant consumption by over 50%, meaning lesser operating costs for you, and reduced wastage for the environment.

KLÜBERBIO LG 39-700 N complies with the 2013 Vessel General Permit requirements of the Environmental Protection Agency (EPA) for biodegradability, nontoxicity and non-bioaccumulation. Its base oil is made from 100% renewable resources and ultimately biodegradable, minimising any damage caused to our waters in the event of a leak.

### Features

- Compliant with the requirements for Environmentally Acceptable Lubricants (EAL) as defined by the EPA 2013 Vessel General Permit
- Good low-temperature behaviour
- Optimised for use in spray lubrication systems
- Antiwear and anticorrosive
- Powerful adhesion
- Meets requirements for OSPAR conformance, including Norway Yellow 1, Denmark (registration no. 2458948) and Cefas E (registration no. 27423)

#### Benefits

- Environmentally-friendly
- Protects your equipment from corrosion
- Protects your equipment from wear and tear
- · Performs well over a wide range of temperatures including cold ones
- No drip off that could contaminate your deck or goods
- Effective and economical in use, especially by spray systems

# **Specification**

#### General

General		Physical properties	
Invent Hazard Material (IMO/EU) classification	C-30	Biodegradability of the base oil, acc. to OECD 301 F, (within 28 days) [%]	
		Colour	
		Density at 20°C [g/cm³]	
		Kinematic viscosity of the base oil, DIN 51562 pt. 01/ASTM D-445/ASTM D7042, 100 $^{\circ}\text{C}$ [mm²/s]	
		Kinematic viscosity of the base oil, DIN 51562 pt. 01/ASTM D- 445/ASTM D7042, 40 °C [mm²/s]	
		Texture	

180 kg

#### Technical data

Chemical composition, thickener	Calcium soap
Chemical composition, type of oil	Natural ester
Flow pressure of lubricating greases, DIN 51805-2, test temperature: -30 °C [mbar]	≤1400
Shelf life [months]	24
Vessel General Permit	Passed

≥60

Beige ~0.93

~90

~680

Homogeneous

Packing Size

Dimensions/Weight

#### Performance data

Drop point, DIN ISO 2176, IP 396 [°C]	≥100
FZG scuffing test, based on DIN ISO 14635, A/2,76/50, scuffing load stage	>12
Worked penetration, DIN ISO 2137, 25 °C, lower limit value [mm]	355 x 0.1
Worked penetration, DINISO 2137, 25 °C, upper limit value [mm]	385 x 0.1

# **Documents**

## SDoC and MD for IHM

#### **Directions for use**

KLÜBERBIOLG 39-700 N was developed for lubricating open gear drives, rack-and-pinion drives, rudder stocks and sliding surfaces with high surface pressure.

It is ideal for maritime applications requiring good eco-compatibility, anticorrosive effects, and/or high load-carrying capacity.

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