Wilhelmsen Ships Service

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KLÜBEROIL GEM 1-68 N 200 LTR

Product group: **685** Product number: **210032**

KLÜBEROIL GEM 1-68 N is a gear and multipurpose oil designed for maximum protection of your gear and bearings. Infused with KlüberComp Lube Technology, it offers excellent wear, scuffing, micropitting, oxidation and ageing resistance, so your parts last longer — and more reliably.

Product information

KLÜBEROIL GEM 1-68 N ensures that your gears remain protected against scuffing damage even at extremely high peak loads, vibrations, or oscillations. Moreover, with high micropitting resistance of GFT ≥ 10 (according to FVA 54/7, tested at 90, 60 and 40°C), it protects your parts from damage even in high loads. The product's good shear stability offers a strong and reliable lubricant film formation that protects equipment from intense, sustained friction and/or extreme temperatures.

Coupled with its built-in wear and corrosion protection and low-foaming tendency, it also offers excellent ageing and oxidation resistance and significantly longer service intervals, compared to other mineral-oil-based standard gear oils.

KLÜBEROIL GEM 1-68 N is compatible with Freudenberg seals made of 72 NBR 902, 75 FKM 585, 75 FKM 260466 and 75 FKM 170055.

It has already been granted approvals by numerous gear OEMs, and it is used and recommended by brands around the world such as Siemens-Flender, Siemens Geared Motors, FLSmidth MAAG Gears, SEW Eurodrive, Getriebebau Nord, Lenze Gears, Stöber Antriebstechnik, ZAE Antriebssysteme, Moventas, and Bonfiglioli

Features

- Scuffing and wear protection
- Micropitting resistance
- Shear stability
- Ageing and oxidation resistance
- Low foaming tendency
- Good elastomer compatibility
- Compliant with DIN 51517-6

Benefits

- Protects your gears and rolling bearing from wear, scuffing and micropitting, extending their service lives
- Strong and reliable lubricant film formation
- High-performing under high loads
- Reduces your maintenance and repair costs
- Reduces leakage and contamination
- Easy to switch to without excessive consultation with gear manufacturers

Specification

General

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

Physical properties

Density, DIN 51757 at 15 °C [kg/m³]	~ 880
Kinematic viscosity of the base oil, DIN 51562 pt. 01/ASTM D-445/ASTM D 7042, 100 °C [mm²/s]	~ 9
Kinematic viscosity of the base oil, DIN 51562 pt. 01/ASTM D-445/ASTM D 7042, 40 °C [mm²/s]	~ 68

Dimensions/Weight

Packing Size	200 ltr

Technical data

Classification acc. to ISO 12925-1	CKC 68
ISO viscosity grade of the base oil, DIN ISO 3448	68
Marking acc. to DIN 51502	CLP 68
Shelf life [months]	60
Viscosity index, DIN ISO 2909	≥90

Performance data

Ageing properties, ASTM D 2893, increase in viscosity [%]	≤6
Anticorrosive properties on steel, DIN ISO 7120, method A, steel, 24 h/60 °C	no rust corrosion degree
Copper corrosion, DIN EN ISO 2160, 3 h/100 °C	1 - 100 corrosion degree
FAG FEB rolling bearing test, DIN 51819-3, D 7,5/80-80, wear of cage [mg]	≤200
FAG FEB rolling bearing test, DIN 51819-3, D 7,5/80-80, wear of rolling element [mg]	<5
Flash point, DIN EN ISO 2592, Cleveland, open-cup apparatus [°C]	≥200
Foam test, ASTM-D 892, ISO 6247, sequence I/24 °C [ml]	≤100/10
Foam test, ASTM-D 892, ISO 6247, sequence II/ 93.5 °C [ml]	≤100/10
Foam test, ASTM-D 892, ISO 6247, sequence III/24°C [ml]	≤100/10
FZG scuffing test, based on DIN ISO 14635-1, A/16.6/90, scuffing load stage	≥12
FZG scuffing test, based on DIN ISO 14635-1, A/8.3/90, scuffing load stage	≥14
Lower service temperature	-15°C / 5°F
Pour point, DIN ISO 3016 [°C]	≤-15
Upper service temperature	100°C / 212°F

Documents

SDoC and MD for IHM

Directions for use

KLÜBEROIL GEM 1-68 N was developed for the lubrication of spur, bevel, hypoid, and planetary gears that are subject to high loads. It may also be used to lubricate standard worm gears as defined in DIN 3996.

Other applications of KLÜBEROIL GEM 1-68 N include the lubrication of plain and rolling bearings, all kinds of toothed couplings, chains, guideways, joints, spindles and pumps.

Apply KLÜBEROIL GEM 1-68 N by immersion, immersion circulation or injection. Alternatively, you may use drip-feed oilers, brushes, oil cans or suitable automatic lubricating systems.

When using automatic lubricating systems, please heed the manufacturer's instructions regarding the maximum permissible viscosity. The low-viscosity options are suitable for oil mist lubrication.