# **MICROLUBE® GL 261 / GL 262** Special lubricating greases for boundary friction conditions and tribo-corrosion



## Description

MICROLUBE GL 261/GL 262 greases are special lubricating greases on a mineral hydrocarbon base. They also contain special lithium soap and the MICROLUBE additive package which ensures a wear-free surface finish. Running-in wear is reduced to a minimum. In addition, the MICROLUBE additive package provides protection in the boundary friction regime, thus preventing tribo-corrosion. MICROLUBE GL 261/GL 262 greases have the capacity to absorb high pressures, and they have good anti-corrosion properties.

#### Application

MICROLUBE GL 261/GL 262 greases are particularly suitable for low to medium-speed rolling bearings, and for swivel movements and vibrations.

They can be used in friction points subject to micro-sliding movements, especially in serrated teeth elements, spline shafts, sliding components and plain bearings. They are also generally suitable for all machine elements potentially subject to tribocorrosion.

#### **Application notes**

MICROLUBE GL 261/GL 262 greases can be applied by brush, spatula, grease gun, and through centralized lubrication systems.

#### Storage

The storage period is approx. 3 years if the product is stored in the original closed container in a dry place.

## Pack sizes

- 1 kg can
- 25 kg bucket
- 180 kg drum (only MICROLUBE GL 261)

# MICROLUBE GL 261 / GL 262

- Greases for plain and rolling bearings
- Also for low speeds, vibrations and swivel movements
- Protection against tribocorrosion
- Good pressure absorption capacity
- Good antiwear properties
- Good corrosion protection
- Good pumpability
- Free from solid particles

#### Product data

MICROLUBE	GL 261	GL 262
Colour	yellowish-brown	yellowish-brown
Service temperature range, °C, $\approx$	-30 - 140	-25 – 140
Drop point, DIN ISO 2176, °C	> 220	> 250
Worked penetration, DIN ISO 2137, at 25 °C; 0.1 mm	310 – 340	265 – 295
Consistency grade, DIN 51 818, NLGI	1	2
Density, DIN 51 757, at 20 °C, g/cm <sup>3</sup>	0.89	0.89
Flow pressure, DIN 51 805, mbar	at -30 °C < 1400	at -25 °C approx. 1400
Water resistance, DIN 51 807, 3 h/90 °C, rating	1 – 90	0/1 – 90
Corrosion protection behaviour, DIN 51 802, Emcor test (1 week, dist. water), corrosion rating	1	1
Speed factor $(d_m \cdot n)$ , approx.	300,000	300,000

# MICROLUBE® GL 261 / GL 262 Safety Data Sheet

1.1	Product name: MICROLUBE GL 261 / GL 262 Code-No. : a) 020 195 / b) 020 200		Drop point Flash point	a) > 220 b) > 250 [°C] > 200 °C
	Klüber Lubrication München KG, Geisenhausenerstr. 7		Flammability	not applicable
	D-81379 Munich; Tel. (089) 7876-0, Fax (089) 7876-333 Emergency no.: (089) 7876-0		Ignition temperature	not applicable
			Autoflammability	not applicable
2.	Composition/information on ingredients		Lower explosion limit	not applicable
	Chemical characterization: Mineral oil, special lithium soap		Upper explosion limit	not applicable
	Additional information: No hazardous ingredients		Vapour pressure – first	not applicable
			Density (20 °C)	≈ 0.89 g/cm <sup>3</sup>
3.	Hazards identification		Water solubility	insoluble
	No particular hazards known.		pH value	not applicable
			Kinematic viscosity	not applicable
4.	First aid measures		Further information	None
	Contact with skin: Wash off with soap and plenty of water.			
	Contact with eyes: Rinse with plenty of water. Ingestion: Do not induce vomiting. Obtain medical attention.		Stability and reactivity	
			Conditions to avoid: None	
	Advice to doctor: Treat symptomatically.		Materials to avoid: Strong oxida	zing agents
5.	Fire-fighting measures			
	5 5		Hazardous decomposition products: None under normal use. Additional information: None	
	Suitable extinguishing media: Water spray, foam, dry powder, CO <sub>2</sub>			
	Unsuitable extinguishing media: High volume water jet Special hazards: In case of fire can be released: CO, hydrocarbons	11.	Toxicological information	
	Special protecting equipment: Standard procedure for chemical fires.		The toxicological data have bee	n taken from products of similar
	Additional information: Cool closed containers with water. Do not		composition.	
	breathe fumes.		Acute toxicity: $LD_{50}$ oral/rat = > 2	2g/kg (literature data)
6.	Accidental release measures		Chronic toxicity: None	
			Human experience: Prolonged s and/or dermatitis.	kin contact may cause skin irritation
	Personal precautions: Not required.		and/or dermatitis.	
	Environmental precautions: Do not flush into surface water or sanitary sewer system.	12.	Ecological information	
	Methods for cleaning up/taking up: Use mechanical handling		-	
	equipment. Dispose of absorbed material in acc. with the regulations.		Information on elimination: The	
	Additional information: None		Behaviour in environmental com known or expected under norma	partments: Ecological injuries are not
7.	Handling and storage		Ecotoxic effects: The products h	
<i>'</i> .			•	
	Safe handling: No special handling advice required.		Additional Information: Should h	ot be released into the environment.
	Protection against fire and explosion: No special precautions required.	13.	Advice on disposal	
	Requirements on storage rooms and vessels: —	13.		
	Incompatible materials: Oxidazing agents; do not store together with food.			pliance with local, state and federal
	Further information: Store at room temperature in the original container.		regulations.	aing and recommended cleaning:
			Offer rinsed packaging material	ging and recommended cleaning: to local recycling facilities.
8.	Exposure controls / personal protection			
	Additional advice on system design: Not applicable	14.	Transport information	
	Ingredients and specific control parameters: None		GGVS / GGVE: not applicable	ADN / ADNR: not applicable
	Personal protective equipment		IMDG / GGVsee: not applicable	ICAO / IATA: not applicable
	Respiratory/hand/eye/body protection: No special protective equip- ment required.			ed as dangerous in the meaning of
	General protection and hygiene measures:		transport regulations.	
	Avoid prolonged and/or repeated contact with skin. Remove soiled or		-	
	soaked clothing immediately. Clean skin thoroughly after work; apply	15.	Regulatory information	
	skin cream.		Labelling: The products do not r	equire a hazard warning label in acc.
9.	Physical and chemical properties			lations on dangerous substances.
	Form paste	16.	Other information	
	Colour tan	10.		
	Odour characteristic		None	

The data in this brochure is based on our general experience and knowledge at the time of printing and is intended to give information of possible applications to a reader with technical experience without, however, constituting an assurance of properties for specific cases. We recommend contacting our Technical Consulting Staff for information regarding specific applications. If required and possible we will be pleased to provide a sample for testing.



Klüber Lubrication, a member of the Freudenberg Group