

UNISILKON GLK 112

Special lubricating grease for Bowden cables, seals and plastics



Description

UNISILKON GLK 112 ensures smooth running of components subject to low temperatures as well as providing excellent thermal resistance.

It is based on silicone oil and a special lithium soap. The product is compatible with many elastomers (except for silicone rubber) and plastics.

Application

UNISILKON GLK 112 is used particularly for the lubrication of friction points incorporating rubber-metal, plastic-metal or plastic-plastic material combinations. Applications are for example:

- slideways
- seals (also EPDM)
- Bowden cables

UNISILKON GLK 112 reduces friction, impedes creaking noises and protects against atmospheric attack on rubber and plastics.

UNISILKON GLK 112 can often be used where lifetime lubrication of components is required.

Application notes

Apply by spatula, brush or grease gun. Owing to the many different elastomer and plastic compositions their compatibility should be checked prior to series application use.

We recommend complete removal of oil and grease from friction points before applying UNISILKON GLK 112 in order to ensure optimum material adhesion.

Minimum shelf life

The minimum shelf life is approx. 36 months if the product is stored in the original closed container in a dry place.

Pack sizes

1 kg	cans
25 kg	bucket
50 kg	bucket
180 kg	drum

UNISILKON GLK 112

- Compatible with many plastics and elastomers
- Ensures smooth running of components subject to low temperatures
- Good adhesion and wetting of functional surfaces

Product data

Service temperature range, ° C *	-50 to +180
Colour	white
Drop point, DIN ISO 2176, ° C	> 220
Worked penetration, DIN ISO 2137 at 25° C, 0.1 mm	265 - 295
Apparent dynamic viscosity at 25° C**	L / M
Flow pressure, DIN 51805 at -50° C, mbar	≤ 1400
Oil separation, FTMS 791 C-321 after 30 h at 150° C, % by wt.	< 4
Density at 20° C, g/cm ³	0.96
Water resistance DIN 51 807 3 h/40° C rating 3 h/90° C rating	0/40 1/90

* Service temperatures are guide values which depend on the lubricant's composition, the intended use and the application method. Lubricants change their consistency, apparent dynamic viscosity or viscosity depending on the mechano-dynamical loads, time, pressure and temperature. These changes in product characteristics may affect the function of a component.

** Klüber viscosity grades: EL = extra light lubricating grease; L = light lubricating grease; M = medium lubricating grease; S = heavy lubricating grease; ES = extra heavy lubricating grease

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Safety Data Sheet

1.1 Product name:	UNISILKON GLK 112
Code-No.:	022 169
	28.06.2001
1.2	Klüber Lubrication München KG Geisenhausenerstraße 7 D-81379 München Tel. ++49 - 89 78 76 - 0 telephone exchange Fax: ++49 - 89 78 76 - 333
Emergency telephone no.:	++49 - 89 7876 - 0
2. Composition / information on ingredients	Chemical characterization (preparation): Silicone oil, special lithium soap
3. Hazards identification	No particular hazards known
4. First aid measures	After inhalation: Not applicable After contact with skin: Wash off with soap and plenty of water After contact with eyes: Rinse with plenty of water After ingestion: Do not induce vomiting. Obtain medical attention Advice to doctor: Treat symptomatically
5. Fire-fighting measures	Suitable extinguishing media: Water spray, foam, dry powder, carbon dioxide (CO ₂) Unsuitable extinguishing media: High volume water jet Special Hazards: In case of fire the following can be released: Carbon monoxide, hydrocarbons Special protective equipment for firefighters: Standard procedure for chemical fires Additional information: Water mist may be used to cool closed containers. In the event of fire and/or explosion do not breathe fumes
6. Accidental release measures	Personal precautions: Not required Environmental precautions: Do not flush into surface water or sanitary sewer system Methods for cleaning up / taking up: Use mechanical handling equipment. Dispose of absorbed material in accordance with the regulations Additional information: None
7. Handling and storage	Advice on safe handling: No special handling advice required Advice on protection against fire and explosion: No special precautions required Requirements on storage rooms and vessels: No special storage conditions required Incompatible materials: Incompatible with oxidizing agents. Do not store together with food Further information on storage conditions: Store at room temperature in the original container
8. Exposure controls / personal protection	Additional advice on system design: Not applicable Ingredients and specific control parameters: None Respiratory protection: No special protective equipment required Hand protection: No special protective equipment required Eye protection: No special protective equipment required Body protection: No special protective equipment required Other protection measures: No special protective equipment required General protection and hygiene measures: Avoid prolonged and/or repeated contact with skin. Remove soiled or soaked clothing immediately. Clean skin thoroughly after work; apply skin cream

9. Physical and chemical properties	Form: paste Colour: off-white Odour: characteristic Drop point: > 220 °C, DIN ISO 2176 Flash point: > 300 °C (base oil) Flammability: not applicable Ignition temperature: not applicable Autoflammability: not applicable Lower explosion limit: not applicable Upper explosion limit: not applicable Vapour pressure-first: not applicable Density: approx. 0.96 g/cm ³ , 20 °C Water solubility: insoluble pH value: not applicable Kinematic viscosity: not applicable Further information: none
10. Stability and reactivity	Conditions to avoid: None Materials to avoid: Strong oxidizing agents Hazardous decomposition products: None under normal use Additional information: None
11. Toxicological information	The toxicological data has been taken from products of similar composition Acute toxicity: LD ₅₀ /oral/rat = > 2 g/kg (literature data) Chronic toxicity: None Human experience: Prolonged skin contact may cause skin irritation and/or dermatitis
12. Ecological information	Information on elimination (persistence and degradability): Product is insoluble in water. May be separated out mechanically in purification plants Behaviour in environmental compartments: Ecological injuries are not known or expected under normal use Ecotoxic effects: Aquatic toxicity is unlikely due to low solubility Additional information: Should not be released into the environment
13. Advice on Disposal	Code of waste: 120 112, Wastes from shaping and surface treatment of metals and plastics; wastes from shaping (including forging, welding, pressing, drawing, turning, cutting and filling); spent waxes and fats Disposal: Can be incinerated when in compliance with local, state and federal regulations Dispose of contaminated packaging and recommended cleaning: Offer rinsed packaging material to local recycling facilities
14. Transport information	GGVS / GGVE: not applicable ADN / ADNR: not applicable IMDG-Code: not applicable ICAO / IATA-DGR: not applicable Further information: Not classified as dangerous in the meaning of transport regulations
15. Regulatory information	Labelling according to EU-guidelines: The product does not require a hazard warning label in accordance with EC-directives/German regulations on dangerous substances National regulations
16. Other information	Issue-department of Safety Data Sheet: Chemical Documentation, Tel.: ++49 - 89 7876 - 564

The data in this product information 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. It constitutes neither an assurance of product properties nor does it release the user from the obligation of performing preliminary tests with the selected product. We recommend contacting our Technical Consulting Staff to discuss your specific application. If required and possible we will be pleased to provide a sample for testing. Klüber products are continually improved. Therefore, Klüber Lubrication reserves the right to change all the technical data in this product information at any time without notice.



Klüber Lubrication München KG, a member of the Freudenberg group