

Description:

Klüberpaste ME 31-52 is a white to beige lubricating and assembly paste containing mineral oil, calcium complex soap and inorganic solid lubricants. The raw materials are free from lead, cadmium, nickel and halogens.

Klüberpaste ME 31-52 prevents stick slip and fretting corrosion. It is very resistant to the static and dynamic impact of water.

Application:

Klüberpaste ME 31-52 is especially recommended for frictional connections, such as bolts, bushings and plain bearings, as well as rolling bearing seats subject to transition or pressfit forces.

Application notes:

Apply Klüberpaste ME 31-52 to clean surfaces which were previously treated with a solvent, if required.

A thin film is recommended for loose fits. In case of interference fits we recommend applying Klüberpaste ME 31-52 to both friction components.

The paste can be applied by spatula, brush or sponge.

If Klüberpaste ME 31-52 is in contact with plastic materials, we recommend having the original material tested for compatibility.

Minimum shelf life:

The minimum shelf life is approx. 24 months if the product is stored in the original closed container in a dry place.

Package sizes:

75 g tube
750 g can
30 kg drum

Klüberpaste ME 31-52

- Protects against fretting corrosion
- Excellent pressure absorption capacity
- Prevents stick slip
- Very good resistance to water
- Good corrosion protection
- Free from metals
- Good resistance to cutting fluids

Product data:

Colour	white to beige
Service temperature range*, °C, approx.	– 15 to 150
Density, DIN 51 757, at 20 °C, g/cm ³ , approx.	1.38
Base oil viscosity, DIN 51 561 at 40 °C, mm ² /s	42 to 50
Drop point, DIN ISO 2176, °C	> 170
Worked penetration, DIN ISO 2137, at 25 °C (ASTM D 271); 0.1 mm	250 – 280
Corrosion behaviour, SKF Emscor test, DIN 51 802, 1 week, dist. water, rating	0/1
Copper corrosion, DIN 51 811, after 24 h/100 °C, corrosion rating	1 – 100
Water resistance, DIN 51 807 pt 1, 24 h, 90 °C	0
Pressfit, friction coefficient, no stick slip adhesive friction sliding friction	0.12 0.10
Four-ball tester, welding load, DIN 51 350 pt 4, N	> 4 000

* 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 mechanical loads, time, pressure and temperature. These changes in product characteristics may affect the function of a component.

Klüberpaste® ME 31-52

Safety Data Sheet

<p>1.1 Product name: Klüberpaste ME 31-52 Code-No.: 005 115 26.06.2001</p>	<p>9. Physical and chemical properties Form: paste Colour: white to beige Odour: characteristic Drop point: > 170 °C, DIN ISO 2176 Flash point: > 200 °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. 1.38 g/cm³, 20 °C Water solubility: insoluble pH value: not applicable Kinematic viscosity: not applicable Further information: none</p>
<p>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</p> <p>Emergency telephone no.: ++49 - 89 7876 - 0</p>	<p>10. Stability and reactivity Conditions to avoid: None Materials to avoid: Strong oxidizing agents Hazardous decomposition products: None under normal use Additional information: None</p>
<p>2. Composition / information on ingredients Chemical characterization (preparation): Mineral oil, calcium complex soap, inorganic solid lubricants</p>	<p>11. Toxicological information The toxicological data has been taken from products of similar composition Acute toxicity: LD₅₀/oral/rat = > 2 g/kg (literature data) Chronic toxicity: None Human experience: Prolonged skin contact may cause skin irritation and/or dermatitis</p>
<p>3. Hazards identification No particular hazards known</p>	<p>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</p>
<p>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</p>	<p>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</p>
<p>5. Fire-fighting measures Suitable extinguishing media: Water spray, foam, dry powder, carbon dioxide (CO₂) 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</p>	<p>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</p>
<p>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</p>	<p>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</p>
<p>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</p>	<p>16. Other information Issue-department of Safety Data Sheet: Chemical Documentation, Tel.: ++49 - 89 7876 - 564</p>
<p>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</p>	

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