

# STABURAGS® N 12 MF

Long-term lubricating grease for plain and rolling bearings



## Description:

STABURAGS N 12 MF is a mineral oil grease for long-term applications, as well as plain and rolling bearings operating at high temperatures and medium speeds. The solid lubricant it contains (MoS<sub>2</sub>) ensures emergency operation at increased temperatures or loads.

## Application:

For the lubrication of bearings operating at high temperatures in fans, spline shafts, exhaustors and hot air blowers. Especially suitable for long-term lubrication of electric motors and enclosed rolling bearings which are not relubricated.

## Application notes:

STABURAGS N 12 MF is applied by brush, spatula or conventional metering systems.

## 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:

400 g cartridge  
1 kg can  
25 kg bucket

## STABURAGS N 12 MF

- Meets DIN 51 806, May 1970, test run B at 140 °C
- Good corrosion protection
- Reduces wear
- Good emergency lubrication properties due to solid lubricant

## Product data:

Base	mineral oil / Na complex / MoS <sub>2</sub>
Colour	black
Service temperature range*, °C, approx.	- 20 to 140
Density, DIN 51 757, at 20 °C, g/cm <sup>3</sup> , approx.	0.95
Drop point, DIN ISO 2176, °C	> 220
Worked penetration, DIN ISO 2137, at 25 °C; 0.1 mm	245 to 275
Base oil viscosity, DIN 51 561 at 40 °C, mm <sup>2</sup> /s, approx. at 100 °C, mm <sup>2</sup> /s, approx.	210 18
Speed factor** (n x d <sub>m</sub> ), approx.	500,000
Apparent viscosity***, Klüber viscosity grade	M

\* 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.

\*\* Speed factors are guide values which depend on the type and size of the rolling bearing type and the local operating conditions, which is why they have to be confirmed in tests carried out by the user in each individual case.

\*\*\* 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

# STABURAGS® N 12 MF

## Safety Data Sheet

<p><b>1.1 Product name: STABURAGS N 12 MF</b> Code-No.: 017 016 03.07.2000</p>	<p><b>9. Physical and chemical properties</b></p> <table border="0"> <tr><td>Form</td><td>paste</td></tr> <tr><td>Colour</td><td>black</td></tr> <tr><td>Odour</td><td>characteristic</td></tr> <tr><td>Drop point</td><td>&gt; 220 °C, DIN ISO 2176</td></tr> <tr><td>Flash point</td><td>&gt; 200 °C (base oil)</td></tr> <tr><td>Flammability</td><td>not applicable</td></tr> <tr><td>Ignition temperature</td><td>not applicable</td></tr> <tr><td>Autoflammability</td><td>not applicable</td></tr> <tr><td>Lower explosion limit</td><td>not applicable</td></tr> <tr><td>Upper explosion limit</td><td>not applicable</td></tr> <tr><td>Vapour pressure-first</td><td>not applicable</td></tr> <tr><td>Density</td><td>approx. 0.95 g/cm<sup>3</sup>, 20 °C</td></tr> <tr><td>Water solubility</td><td>insoluble</td></tr> <tr><td>pH value</td><td>not applicable</td></tr> <tr><td>Kinematic viscosity</td><td>not applicable</td></tr> <tr><td>Further information</td><td>none</td></tr> </table>	Form	paste	Colour	black	Odour	characteristic	Drop point	> 220 °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. 0.95 g/cm <sup>3</sup> , 20 °C	Water solubility	insoluble	pH value	not applicable	Kinematic viscosity	not applicable	Further information	none
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<p><b>1.2</b> 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><b>Emergency telephone no.:</b> ++49 - 89 7876 - 0</p>	<p><b>10. Stability and reactivity</b></p> <p>Conditions to avoid: None Materials to avoid: Strong oxidizing agents Hazardous decomposition products: None under normal use Additional information: None</p>																																
<p><b>2. Composition / information on ingredients</b> Chemical characterization (preparation): Mineral oil, sodium complex soap, solid lubricants (e.g. MoS<sub>2</sub>)</p>	<p><b>11. Toxicological information</b></p> <p>The toxicological data has been taken from products of similar composition Acute toxicity: LD<sub>50</sub>/oral/rat = &gt; 2 g/kg (literature data) Chronic toxicity: None Human experience: Prolonged skin contact may cause skin irritation and/or dermatitis</p>																																
<p><b>3. Hazards identification</b> No particular hazards known</p>	<p><b>12. Ecological information</b></p> <p>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><b>4. First aid measures</b> 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><b>13. Advice on Disposal</b></p> <p>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><b>5. Fire-fighting measures</b> Suitable extinguishing media: Water spray, foam, dry powder, carbon dioxide (CO<sub>2</sub>) 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><b>14. Transport information</b></p> <table border="0"> <tr><td>GGVS / GGVE:</td><td>not applicable</td></tr> <tr><td>ADN / ADNDR:</td><td>not applicable</td></tr> <tr><td>IMDG-Code:</td><td>not applicable</td></tr> <tr><td>ICAO / IATA-DGR:</td><td>not applicable</td></tr> </table> <p>Further information: Not classified as dangerous in the meaning of transport regulations</p>	GGVS / GGVE:	not applicable	ADN / ADNDR:	not applicable	IMDG-Code:	not applicable	ICAO / IATA-DGR:	not applicable																								
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<p><b>6. Accidental release measures</b> 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><b>15. Regulatory information</b></p> <p>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><b>7. Handling and storage</b> 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><b>16. Other information</b> Issue-department of Safety Data Sheet: Chemical Documentation, Tel.: ++49 - 89 7876 - 564</p>																																
<p><b>8. Exposure controls / personal protection</b> 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