

STABURAGS® NBU 4, 12, 30

Lubricating greases with excellent wear resistance



Description:

STABURAGS NBU 4, 12, 30 are lubricating greases based on mineral oil and barium complex soap. These products are resistant to very high specific surface pressure, thus ensuring excellent wear protection. In addition, they are resistant to corrosion, water and many diluted alkaline and acid solutions.

Application:

STABURAGS NBU 4 is suitable for high-speed rolling bearings exposed to humidity or ambient media. It is used on rolls, spindles, cam rollers, tensioning rollers and motors.

STABURAGS NBU 12 is efficient on medium-speed rolling bearings subject to humidity or ambient media. It is used on water pumps, wheel bearings and motors, and in the textile industry on wet processing machines, mercerising and dyeing machines, etc.

STABURAGS NBU 30 is suitable for valves and fittings and as a sealing grease. It is also used on low-speed plain and rolling bearings exposed to humidity or ambient media. As a valve grease it is used on water valves and taps (however not in context with drinking water), and as a sealing grease it is efficient on labyrinth seals and shields.

Application notes:

These greases are applied by brush, spatula or conventional metering systems.

Minimum shelf life:

The minimum shelf life is approx. 60 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 NBU 4, 12, 30

- Good corrosion protection
- Good resistance to ambient media
- Excellent wear protection
- Good resistance to tribo-corrosion
- Good load-carrying capacity
- Good sealing effect

Product data:

	STABURAGS NBU 4	STABURAGS NBU 12	STABURAGS NBU 30
Base	mineral oil / Ba complex	mineral oil / Ba complex	mineral oil / Ba complex
Colour	beige	light brown	light brown
Service temperature*, °C	- 20 to 130	- 15 to 140	- 10 to 150
Drop point, DIN ISO 2176, °C	> 220	> 220	> 220
Worked penetration, DIN ISO 2137, at 25 °C, 0.1 mm	245 to 275	245 to 275	245 to 275
Density, DIN 51 757, at 20 °C, g/cm ³ , approx.	0.96	0.99	0.99
Base oil viscosity, DIN 51 561 at 40 °C, mm ² /s, approx. at 100 °C, mm ² /s, approx.	45 7	220 19	500 31
Speed factor** (n x d _m), approx.	500,000	350,000	100,000
Apparent viscosity, Klüber viscosity grade***	M	M/S	S

* 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.

** 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

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Safety Data Sheet

1.1 Product name: STABURAGS a) NBU 4, b) NBU 12, c) NBU 30 Code-No.: a) 017 050, b) 017 052, c) 017 053 <p style="text-align: right;">08.03.2000</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		Emergency telephone no.: ++49 - 89 7876 - 0									
2. Composition / information on ingredients Chemical characterization (preparation): Mineral oil, barium complex soap Hazardous ingredients <table border="1"> <thead> <tr> <th>Components</th> <th>Value</th> <th>Symbols</th> <th>R-phrases</th> </tr> </thead> <tbody> <tr> <td>Barium soap</td> <td>~ 30%</td> <td>Xn</td> <td>22</td> </tr> </tbody> </table>				Components	Value	Symbols	R-phrases	Barium soap	~ 30%	Xn	22
Components	Value	Symbols	R-phrases								
Barium soap	~ 30%	Xn	22								
3. Hazards identification Xn – Harmful. R phrases: 22. Harmful if swallowed. No further particular hazards known.											
4. First aid measures After inhalation: Not applicable After contact with skin: Wash off with mild cleaners 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: a) beige, b) and c) light brown Odour: characteristic Drop point: > 220 °C, DIN ISO 2176 Flash point: a) > 200 °C, b) > 250 °C, c) > 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.: a) 0.96, b) 0.99, c) 0.99 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 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 / ADN: 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 is classified and labelled in accordance with EC-directives/German regulations on dangerous substances Hazard(s): Xn – Harmful Hazardous component(s) to be indicated on label: Barium soap R phrases: 22. Harmful if swallowed. S phrases: 28. After contact with skin, wash immediately with plenty water and mild cleaners National regulations: Labelling according to the Swiss regulations: No toxicological class, BAGT-no. a) 83032, b) and c) 611 500	
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