STABURAGS® NBU 12 ALTEMP

Lubricating grease for plain and rolling bearings



Description:

STABURAGS NBU 12 ALTEMP is a mineral oil based lubricating grease for plain and rolling bearings operating at low to medium speeds. It has proven effective in lubricating points subject to external vibrations or oscillations. Containing solid lubricants, STABURAGS NBU 12 ALTEMP protects against fretting corrosion and is resistant to hot water.

Application:

STABURAGS NBU 12 ALTEMP is used as a grease for rolling and plain bearings and for assembly purposes. It is suitable for slideways, threaded spindles, bearing seats and clamping chucks.

Application notes:

The product is applied by brush, spatula or conventional metering systems. When used as an assembly grease, it is applied to the entire component surface by hand, using a piece of cloth or a brush.

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:

1 kg can 30 kg bucket

STABURAGS NBU 12 ALTEMP

- For plain and rolling bearings
- Good corrosion protection
- Resistant to hot water
- Suitable for assembly purposes
- Effective on lubrication points subject to external vibrations
- Protects against tribocorrosion

Product data:

Base	Mineral oil / barium complex, solid lubricant
Colour	beige
Service temperature range*, °C, approx.	– 15 to 140
Density, DIN 51 757, at 20 °C, g/cm ³ , approx.	1.08
Drop point, DIN ISO 2176, °C	170
Worked penetration, DIN ISO 2137, at 25 °C, 0.1 mm	245 to 275
Base oil viscosity, DIN 51 561 at 40 °C, mm²/s, approx. at 100 °C, mm²/s, approx.	225 19
Speed factor** (n x d _m), approx.	350,000
Apparent viscosity, Klüber viscosity grade***	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 mechanodynamical 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® NBU 12 ALTEMP

Safety Data Sheet

1.1 Product name: STABURAGS NBU 12 ALTEMP

005 018 Code-No.:

08.03.2000

1.2 Klüber Lubrication München KG

Emergency telephone no.:

Geisenhausenerstraße 7 D-81379 München

++49 - 89 7876 - 0

Tel. ++49 - 89 78 76 - 0 telephone exchange

Fax: ++49 - 89 78 76 - 333

Composition / information on ingredients

Chemical characterization (preparation): Mineral oil, barium complex soap, inorganic solid

Hazardous ingredients

Components Value Symbols R-phrases Barium soap ~ 30% Xn 22

Hazards identification

Xn - Harmful. R phrases: 22. Harmful if swallowed. No further particular

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

Fire-fighting measures

Suitable extinguishing media: Water spray, foam, dry powder, carbon dioxide (CO₂)

Unsuitable extinguishing media: High volume water iet

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

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

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

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

without notice.

Klüber Lubrication München KG, a member of the Freudenberg group

Physical and chemical properties

Form paste Colour beige Odour characteristic

~ 170 °C, DIN ISO 2176 Drop point > 250 °C (base oil) Flash point Flammability not applicable Ignition temperature not applicable not applicable Autoflammability Lower explosion limit not applicable not applicable Upper explosion limit not applicable Vapour pressure-first

approx. 1.08 g/cm³, 20 °C insoluble Density

Water solubility 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: LD₅₀/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

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 / 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 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. 83035

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

