

# STABURAGS NBU 4, 12

Lubricating greases with excellent wear resistance



## Benefits for your application

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

## Description

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

It is used on water pumps, wheel bearings and motors; and in the textile industry, on all wet processing equipment such as washing, mercerising and dyeing machines.

## Application

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

## Application notes

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

STABURAGS NBU 12 is efficient on medium-speed rolling bearings subject to humidity or ambient media.

## Material safety data sheets

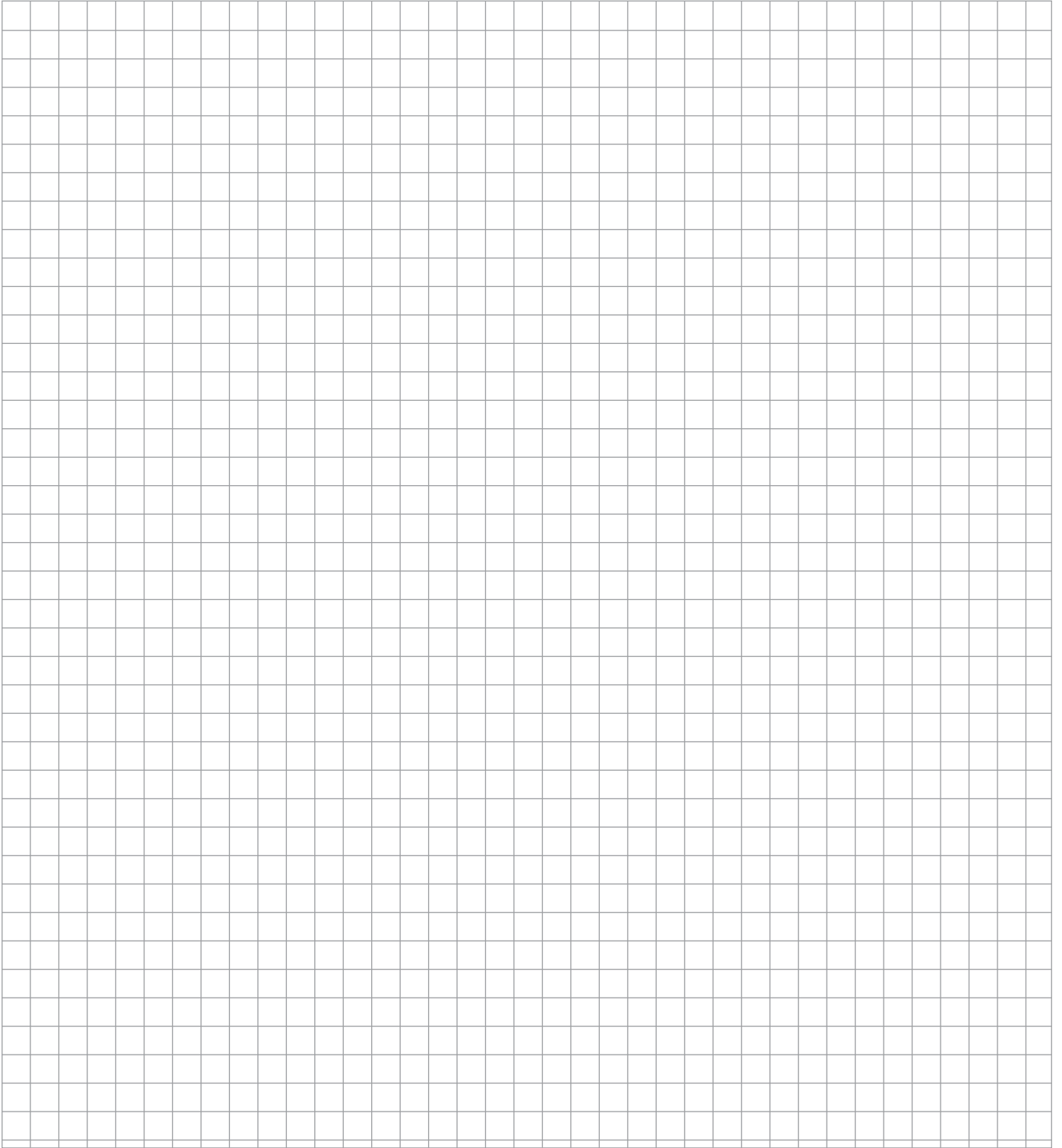
Material safety data sheets can be requested via our website [www.klueber.com](http://www.klueber.com). You may also obtain them through your contact person at Klüber Lubrication.

| Pack sizes      | STABURAGS NBU 4 | STABURAGS NBU 12 |
|-----------------|-----------------|------------------|
| Cartridge 400 g | +               | +                |
| Can 1 kg        | +               | +                |
| Drum 180 kg     | +               | +                |

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| Product data   | STABURAGS NBU 4                | STABURAGS NBU 12               |
|--|--------------------------------|--------------------------------|
| Article number   | 017050                         | 017052                         |
| NSF-H2 registration  |                                | 135 689                        |
| Chemical composition, type of oil  | mineral oil                    | mineral oil                    |
| Chemical composition, thickener  | barium complex soap            | barium complex soap            |
| Lower service temperature  | -20 °C / -4 °F                 | -15 °C / 5 °F                  |
| Upper service temperature  | 90 °C / 194 °F                 | 130 °C / 266 °F                |
| Service temperature, upper limiting value for continuous lubrication   | 130 °C                         |                                |
| Colour space   | beige                          | brown                          |
| Density at 20 °C   | approx. 0.96 g/cm <sup>3</sup> | approx. 0.99 g/cm <sup>3</sup> |
| Worked penetration, DIN ISO 2137, 25 °C, lower limit value   | 245 x 0.1 mm                   | 245 x 0.1 mm                   |
| Worked penetration, DIN ISO 2137, 25 °C, upper limit value   | 275 x 0.1 mm                   | 275 x 0.1 mm                   |
| Shear viscosity at 25 °C, shear rate 300 s <sup>-1</sup> , equipment: rotational viscometer, lower limit value               | 6 000 mPas                     | 9 000 mPas                     |
| Shear viscosity at 25 °C, shear rate 300 s <sup>-1</sup> , equipment: rotational viscometer, upper limit value               | 10 000 mPas                    | 15 000 mPas                    |
| Kinematic viscosity of the base oil, DIN 51562 pt. 01/ASTM D-445/ASTM D 7042, 40 °C  | approx. 46 mm <sup>2</sup> /s  | approx. 220 mm <sup>2</sup> /s |
| Kinematic viscosity, DIN 51562 pt. 01/ASTM D-445/ASTM D 7042, 100 °C   | approx. 7 mm <sup>2</sup> /s   | approx. 19 mm <sup>2</sup> /s  |
| Drop point, DIN ISO 2176   | >= 220 °C                      | >= 220 °C                      |
| Four-ball tester, welding load, DIN 51350 pt. 04   | >= 3 000                       | >= 3 000                       |
| Speed factor (n x dm)  | 500 000 mm/min                 | approx. 350 000 mm/min         |
| Water resistance, DIN 51807 pt. 01, 3 h/90 °C, rating  | <= 1 - 90                      | <= 1 - 90                      |
| Flow pressure of lubricating greases, DIN 51805, test temperature: -15 °C  |                                | <= 1 600 mbar                  |
| Minimum shelf life from the date of manufacture - in a dry, frost-free place and in the unopened original container, approx. | 60 months                      | 60 months                      |





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### **Klüber Lubrication – your global specialist**

Innovative tribological solutions are our passion. Through personal contact and consultation, we help our customers to be successful worldwide, in all industries and markets. With our ambitious technical concepts and experienced, competent staff we have been fulfilling increasingly demanding requirements by manufacturing efficient high-performance lubricants for more than 80 years.

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