

# STABURAGS NBU 4, 12

Lubricating greases with excellent wear resistance



## Your benefits at a glance

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

## Your requirements - our solution

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

## 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.

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 all wet

processing equipment such as washing, mercerising and dyeing machines.

## Application notes

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

STABURAGS NBU 12 is also available in our automatic lubricant dispenser Klübermatic. Please consult the application engineering experts from Klüber Lubrication to determine whether Klübermatic might be used under the conditions in your processes.

## 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        | +               | +                |
| Bucket 25 kg    | +               | +                |
| Bucket 50 kg    |                 | +                |
| Drum 180 kg     |                 | +                |

| Characteristics          | STABURAGS NBU 4     | STABURAGS NBU 12    |
|--------------------------|---------------------|---------------------|
| Article number           | 017050              | 017052              |
| Composition, thickener   | barium complex soap | barium complex soap |
| Composition, type of oil | mineral oil         | mineral oil         |

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| Characteristics                                                                                                               | STABURAGS NBU 4                | STABURAGS NBU 12               |
|-------------------------------------------------------------------------------------------------------------------------------|--------------------------------|--------------------------------|
| Colour space                                                                                                                  | beige                          | brown                          |
| Service temperature, lower limit                                                                                              | -20 °C                         | -15 °C                         |
| Service temperature, upper limit                                                                                              | 90 °C                          | 130 °C                         |
| Service temperature, upper limit, in case of continuous lubrication                                                           | 130 °C                         | -                              |
| NSF H2 registration number                                                                                                    | -                              | 135689                         |
| Density, Klüber method: PN 024, 20°C                                                                                          | approx. 0.96 g/cm <sup>3</sup> | approx. 0.99 g/cm <sup>3</sup> |
| Worked penetration, DIN ISO 2137 / ASTM D217, 25°C, lower limit                                                               | 245 0.1 mm                     | 245 0.1 mm                     |
| Worked penetration, DIN ISO 2137 / ASTM D217, 25°C, upper limit                                                               | 275 0.1 mm                     | 275 0.1 mm                     |
| Shear viscosity, Klüber method: PN 008@DIN 53019-1, equipment: rotational viscometer, 25°C, 300 s <sup>-1</sup> , lower limit | 6000 mPas                      | 9000 mPas                      |
| Shear viscosity, Klüber method: PN 008@DIN 53019-1, equipment: rotational viscometer, 25°C, 300 s <sup>-1</sup> , upper limit | 10000 mPas                     | 15000 mPas                     |
| Kinematic viscosity of the base oil, DIN EN ISO 3104 / DIN 53000-1, based on standard / ASTM D445 / ASTM D7042, 100°C         | approx. 7 mm <sup>2</sup> /s   | approx. 19 mm <sup>2</sup> /s  |
| Kinematic viscosity of the base oil, DIN EN ISO 3104 / DIN 53000-1, based on standard / ASTM D445 / ASTM D7042, 40°C          | approx. 46 mm <sup>2</sup> /s  | approx. 220 mm <sup>2</sup> /s |
| Flow pressure, DIN 51805-2, -15°C                                                                                             | -                              | ≤ 1600 mbar                    |
| Dropping point, DIN ISO 22286 / IP 396                                                                                        | ≥ 220 °C                       | ≥ 220 °C                       |
| Four-ball tester, welding load, DIN 51350-4                                                                                   | ≥ 3000 N                       | ≥ 3000 N                       |
| Speed factor (n x dm)                                                                                                         | 500000 mm/min                  | approx. 350000 mm/min          |
| Water resistance, DIN 51807-1, 3 h, 90°C                                                                                      | ≤ 1 - 90 rating                | ≤ 1 - 90 rating                |
| 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                      |

## 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 95 years.

Klüber Lubrication München GmbH & Co. KG /  
Geisenhausenerstraße 7 / 81379 München / Germany /  
phone +49 89 7876-0 / fax +49 89 7876-333.

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