

Klübersynth PEG 46

Special greases for the lubrication of enclosed gear drives



Your benefits at a glance

- The good wear protection of both the gears and the rolling bearings ensures a long service life of the components
- The excellent viscosity-temperature behaviour supports the formation of a sufficient lubricating film even at elevated and high temperatures
- Much longer service life than mineral oils due the excellent ageing und oxidation stability of the synthetic base oil used in Klübersynth PEG 46 greases: Thus maintenance intervals can be extended and in certain cases even lifetime lubrication is possible
- The excellent friction behaviour of the polyglycol base oil reduces power losses and improves efficiency

Your requirements - our solution

Klübersynth PEG 46 special greases are formulated from a polyglycol base oil and a lithium thickener, available in NLGI grades 00 and 1.

Application

Klübersynth PEG 46 greases were developed especially for the lubrication of spur gears, bevel gears, planetary gears and worm gears with material pairings steel/steel or steel/brass in small enclosed gear drives. Klübersynth PEG 46 greases can also be used for the lubrication of ball and roller guides, rolling and plain bearings as well as toothed couplings.

Application notes

Immersion lubrication of gears operating at circumferential speeds up to approx. 10 m/s is possible if NLGI grade 00 is used. Sufficient heat dissipation is essential. Depending on the operating conditions higher circumferential speeds are possible. The dynamic stresses of design elements made of aluminium or aluminium alloys may lead to increased wear. If necessary, wear tests should be carried out.

Material safety data sheets

Material safety data sheets can be requested via our website www.klueber.com. You may also obtain them through your contact person at Klüber Lubrication.

| Pack sizes | Klübersynth PEG 46-121 | Klübersynth PEG 46-1200 |
|--------------|------------------------|-------------------------|
| Can 1 kg | + | + |
| Bucket 25 kg | + | + |
| Drum 180 kg | + | + |

| Characteristics | Klübersynth PEG 46-121 | Klübersynth PEG 46-1200 |
|--------------------------------------|--------------------------------|--------------------------------|
| Article number | 027041 | 027042 |
| Colour space | brown | brown |
| Texture | homogeneous | homogeneous |
| Service temperature, lower limit | -50 °C | -50 °C |
| Service temperature, upper limit | 120 °C | 120 °C |
| Density, Klüber method: PN 024, 20°C | approx. 0.98 g/cm ³ | approx. 0.99 g/cm ³ |
| NLGI grade, DIN 51818 | 1 | 00 |

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| Characteristics | Klübersynth PEG 46-121 | Klübersynth PEG 46-1200 |
|--|--------------------------------|--------------------------------|
| Worked penetration, DIN ISO 2137 / ASTM D217, 25°C, lower limit | 310 0.1 mm | 400 0.1 mm |
| Worked penetration, DIN ISO 2137 / ASTM D217, 25°C, upper limit | 340 0.1 mm | 430 0.1 mm |
| Kinematic viscosity of the base oil, DIN EN ISO 3104 / DIN 53000-1, based on standard / ASTM D445 / ASTM D7042, 100°C | approx. 20 mm ² /s | approx. 20 mm ² /s |
| Kinematic viscosity of the base oil, DIN EN ISO 3104 / DIN 53000-1, based on standard / ASTM D445 / ASTM D7042, 40°C | approx. 120 mm ² /s | approx. 120 mm ² /s |
| Copper corrosion, DIN 51811, 24 h, 100°C | 1 - 100 - 24 corrosion degree | 1 - 100 - 24 corrosion degree |
| Dropping point, DIN ISO 22286 / IP 396 | ≥ 180 °C | ≥ 160 °C |
| FZG scuffing test, DIN ISO 14635-3, based on standard, A / 2.8 / 50, failure load stage | > 12 | > 12 |
| Minimum shelf life from the date of manufacture - in a dry, frost-free place and in the unopened original container, approx. | 36 months | 24 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.

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