SYNTHESO GLEP 1

Special lubricating grease with EP additives, compatible with EPDM

Your benefits at a glance

- Special lubricating grease for the assembly and lifetime lubrication of elastomers
- Almost neutral towards most sliding material pairings like EPDM/metal or plastic
- Reduces friction and wear

Your requirements - our solution

SYNTHESO GLEP 1 is a special lubricant for a wide variety of applications with an almost neutral behaviour towards many elastomers (including EPDM) and plastics (except PC and ABS). SYNTHESO GLEP 1 can be used in a wide service temperature range and offers efficient protection against wear, good adhesion and resistance to water.

Application

SYNTHESO GLEP has been designed for the lubrication of metal – metal; elastomer – metal, plastic – metal, plastic – plastic sliding material combinations. The product is typically used in the automotive industry as assembly grease for plain bearings, e.g. in brake and clutch systems for linear motion in contact with brake fluids DOT 3, 4 and 5.1. Application examples: guide bushes and bolts, EPDM and SBR seals, clutch master and slave cylinders, corrosion protection of brake pad supports in disc brake calipers, brake boosters and noise reduction in elastic axle bearings, seals of steering columns. In such applications, SYNTHESO GLEP 1 facilitates assembly and provides reliable lubrication. Due to its good resistance to EPDM elastomers, SYNTHESO GLEP 1 is mainly used in car brakes as it offers good advantages versus silicone greases, like better load-carrying capacity, good adhesion and compatibility with electric contacts.

Application notes

SYNTHESO GLEP 1 can be applied by brush, spatula, grease gun or the usual central lubrication systems. A wear test should be carried out prior to using SYNTHESO GLEP 1 in context with aluminum or aluminum alloys under dynamically high load conditions. Owing to the many different elastomer and plastic compositions we recommend checking their compatibility prior to series application. The possibility of a change in colour is inherent in this product concept. It has, however, no influence on product performance.

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	SYNTHESO GLEP 1
Cartridge 400 g	+
Can 1 kg	+
Bucket 5 kg	+
Bucket 18 kg	+
Bucket 25 kg	+
Drum 180 kg	+

a brand of FREUDENBERG

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Characteristics	SYNTHESO GLEP 1
Article number	012142
Composition, thickener	lithium complex soap
Composition, type of oil	polyalkylenglycol
Colour space	beige
Texture	fibrous , homogeneous
Service temperature, lower limit	-50 °C
Service temperature, upper limit	150 °C
Density, Klüber method: PN 024, 20°C	approx. 0.97 g/cm³
Worked penetration, DIN ISO 2137 / ASTM D217, 25°C, lower limit	280 0.1 mm
Worked penetration, DIN ISO 2137 / ASTM D217, 25°C, upper limit	310 0.1 mm
Shear viscosity, Klüber method: PN 008@DIN 53019-1, equipment: rotational viscometer, 25°C, 300 s^{-1}, lower limit	3000 mPas
Shear viscosity, Klüber method: PN 008@DIN 53019-1, equipment: rotational viscometer, 25°C, 300 s^{-1}, upper limit	5500 mPas
Kinematic viscosity of the base oil, DIN EN ISO 3104 / DIN 53000-1, based on standard / ASTM D445 / ASTM D7042, 40°C	approx. 360 mm²/s
Copper corrosion, DIN 51811, 24 h, 100°C	1 - 100 - 24 corrosion degree
SKF-EMCOR, DIN 51802, Klüber method: distilled water, 164 h	≤ 1 corrosion degree
Flow pressure, DIN 51805-2, -45°C	≤ 1400 mbar
Dropping point, DIN ISO 22286 / IP 396	≥ 220 °C
Water resistance, DIN 51807-1, 3 h, 90°C	≤ 1 - 90 rating
Minimum shelf life from the date of manufacture - in a dry, frost-free place and in the unopened original container, approx.	36 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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