

# SYNTHESO GLEP 1

Special lubricating grease with EP additives, compatible with EPDM



## Benefits for your application

- 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

## Description

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](http://www.klueber.com). You may also obtain them through your contact person at Klüber Lubrication.

Pack sizes	SYNTHESO GLEP 1
Can 1 kg	+
Bucket 25 kg	+
Drum 180 kg	+

Product data	SYNTHESO GLEP 1
Article number	012142
Chemical composition, thickener	special lithium soap
Chemical composition, type of oil	PAG
Lower service temperature	-50 °C / -58 °F
Upper service temperature	150 °C / 302 °F
Colour space	beige
Texture	homogeneous



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Product data	SYNTHESO GLEP 1
Texture	fibrous
Density at 20 °C	approx. 0.97 g/cm <sup>3</sup>
Worked penetration, DIN ISO 2137, 25 °C, lower limit value	280 x 0.1 mm
Worked penetration, DIN ISO 2137, 25 °C, upper limit value	310 x 0.1 mm
Kinematic viscosity of the base oil, DIN 51562 pt. 01/ASTM D-445/ASTM D 7042, 40 °C	approx. 360 mm <sup>2</sup> /s
Shear viscosity at 25 °C, shear rate 300 s <sup>-1</sup> , equipment: rotational viscometer, lower limit value	4 000 mPas
Shear viscosity at 25°C, shear rate 300 s <sup>-1</sup> , equipment:rotational viscometer, upper limit value	5 500 mPas
Corrosion inhibiting properties of lubricating greases, DIN 51802, (SKF-EMCOR), test duration: 1 week, distilled water	<= 1 corrosion degree
Copper corrosion, DIN 51811, (lubricating grease), 24h/100°C	1 - 100 corrosion degree
Drop point, DIN ISO 2176, IP 396	>= 220 °C
Flow pressure of lubricating greases, DIN 51805, test temperature:-45 °C	<= 1 400 mbar
Water resistance, DIN 51807 pt. 01, 3 h/90 °C, rating	<= 1 - 90
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 80 years.

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