

ISOFLEX TOPAS L 32, L 32 N

Special low-temperature greases for wide field of applications



Benefits for your application

- Low breakaway torque even at very low temperatures in small gears and actuators
- Reduced wear due to reliable lubricating film over a wide service temperature range enabling longer component life.
- For-life lubrication enabled by strong corrosion protection, oxidation and ageing resistance

Description

As a manufacturer of automotive components, you are dealing with customers asking for reliable component function over a long service life and in particular at low temperatures. By selecting an appropriate lubricant, you can meet all these ever more demanding requirements in the market. With ISOFLEX TOPAS L 32 and L 32 N, we offer you two lubricants that have both been designed for particularly low temperatures.

ISOFLEX TOPAS L 32 and L 32 N are based on a synthetic hydrocarbon oil and a lithium soap. The corrosion protection properties of these oils are good as is their ageing and oxidation stability.

The additional UV indicator contained in ISOFLEX TOPAS L 32 N enables reliable quality control upon application, even with minimum quantities.

This will increase the reliability of your production process.

Application

You may use ISOFLEX TOPAS L 32 and L 32 N especially for the lubrication of small gears as can be found in electric actuators in vehicles (e.g. in window lifters, sun roofs, seat adjustments, headlights and ventilation flaps).

ISOFLEX TOPAS L 32 and L 32 N have been successfully used in the automotive industry for many years and are specified and approved by most automobile makers and their suppliers worldwide.

Further fields of application are:

- Slideways, bowden wires, door locks
- Rolling bearings in small motors, fans, pumps
- Gear flanks in plastic/plastic gearboxes (e.g. POM, PA or PBT) and for plastic/steel material pairings

For applications in the car interior (e.g. ventilation flaps) with special requirements regarding neutrality in odour acc. to VDA 270, Klübersynth LMI 44-42 may be used as an alternative.

Application notes

You can apply ISOFLEX TOPAS L 32 and L 32 N by spatula, brush, grease gun or grease cartridge.

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	ISOFLEX TOPAS L 32	ISOFLEX TOPAS L 32 N
Can 1 kg	+	-
Bucket 25 kg	+	+
Drum 170 kg	+	+

Product data	ISOFLEX TOPAS L 32	ISOFLEX TOPAS L 32 N
Article number	004337	004227
Colour space	beige	beige
Texture	homogeneous	homogeneous

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Product data	ISOFLEX TOPAS L 32	ISOFLEX TOPAS L 32 N
Texture	short-fibred	short-fibred
Chemical composition, type of oil	synthetic hydrocarbon oil	synthetic hydrocarbon oil
Chemical composition, thickener	lithium soap	lithium soap
Lower service temperature	-60 °C / -76 °F	-60 °C / -76 °F
Upper service temperature	130 °C / 266 °F	130 °C / 266 °F
Density at 20 °C	approx. 0.84 g/cm ³	approx. 0.86 g/cm ³
NLGI grade, DIN 51818	2	2
Drop point, DIN ISO 2176, IP 396	>= 185 °C	>= 185 °C
Flow pressure of lubricating greases, DIN 51805-2, test temperature: -35 °C	<= 450 mbar	<= 450 mbar
Worked penetration, DIN ISO 2137, 25 °C, lower limit value	265 x 0.1 mm	265 x 0.1 mm
Worked penetration, DIN ISO 2137, 25 °C, upper limit value	295 x 0.1 mm	295 x 0.1 mm
Kinematic viscosity of the base oil, DIN 51562 pt. 01/ASTM D-445/ASTM D 7042, 40 °C	approx. 17 mm ² /s	approx. 17 mm ² /s
Kinematic viscosity of the base oil, DIN 51562 pt. 01/ASTM D-445/ASTM D 7042, 100 °C	approx. 3.8 mm ² /s	approx. 3.8 mm ² /s
Shear viscosity at 25 °C, shear rate 300 s ⁻¹ , equipment: rotational viscometer, lower limit value	2 000 mPas	2 000 mPas
Shear viscosity at 25 °C, shear rate 300 s ⁻¹ , equipment: rotational viscometer, upper limit value	4 500 mPas	5 000 mPas
Speed factor (n x dm)	1 000 000 mm/min	1 000 000 mm/min
Water resistance, DIN 51807 pt. 01, 3 h/90 °C, rating	<= 1 - 90	<= 1 - 90
Corrosion inhibiting properties of lubricating greases, DIN 51802, (SKF-EMCOR), test duration: 1 week, distilled water	<= 1 corrosion degree	<= 1 corrosion degree
Minimum shelf life from the date of manufacture - in a dry, frost-free place and in the unopened original container, approx.	36 months	36 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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The data in this document is based on our general experience and knowledge at the time of publication and is intended to give information of possible applications to a reader with technical experience. It constitutes neither an assurance of product properties nor does it release the user from the obligation of performing preliminary field tests with the product selected for a specific application. All data are guide values which depend on the lubricant's composition, the intended use and the application method. The technical values of lubricants change depending on the mechanical, dynamical, chemical and thermal loads, time and pressure. These changes may affect the function of a component. We recommend contacting us to discuss your specific application. If possible we will be pleased to provide a sample for testing on request. Klüber products are continually improved. Therefore, Klüber Lubrication reserves the right to change all the technical data in this document at any time without notice.

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