

ISOFLEX TOPAS L 32, L 32 N

Special low-temperature greases for wide field of applications



Your benefits at a glance

- 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

Your requirements - our solution

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
Cartridge 370 g	+	+
Can 1 kg	+	+
Bucket 5 kg	+	+
Bucket 18 kg	+	+
Bucket 25 kg	+	+
Bucket 45 kg		+
Bucket 50 kg	+	+

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Drum 170 kg	+	+

Characteristics	ISOFLEX TOPAS L 32	ISOFLEX TOPAS L 32 N
Article number	004337	004227
Composition, thickener	lithium soap	lithium soap
Composition, type of oil	synthetic hydrocarbon oil	synthetic hydrocarbon oil
Colour space	beige	beige
Texture	homogeneous , short fibrous	homogeneous , short fibrous
Service temperature, lower limit	-60 °C	-60 °C
Service temperature, upper limit	130 °C	130 °C
Density, Klüber method: PN 024, 20°C	approx. 0.84 g/cm ³	approx. 0.86 g/cm ³
NLGI grade, DIN 51818	2	2
Worked penetration, DIN ISO 2137 / ASTM D217, 25°C, lower limit	265 0.1 mm	265 0.1 mm
Worked penetration, DIN ISO 2137 / ASTM D217, 25°C, upper limit	295 0.1 mm	295 0.1 mm
Shear viscosity, Klüber method: PN 008@DIN 53019-1, equipment: rotational viscometer, 25°C, 300 s ⁻¹ , lower limit	2000 mPas	2000 mPas
Shear viscosity, Klüber method: PN 008@DIN 53019-1, equipment: rotational viscometer, 25°C, 300 s ⁻¹ , upper limit	4500 mPas	5000 mPas
Kinematic viscosity of the base oil, DIN EN ISO 3104 / DIN 51562-1 / ASTM D445 / ASTM D7042, 100°C	approx. 3.8 mm ² /s	approx. 3.8 mm ² /s
Kinematic viscosity of the base oil, DIN EN ISO 3104 / DIN 51562-1 / ASTM D445 / ASTM D7042, 40°C	approx. 17 mm ² /s	approx. 17 mm ² /s
SKF-EMCOR, DIN 51802, Klüber method: distilled water, 168 h	≤ 1 corrosion degree	≤ 1 corrosion degree
Flow pressure, DIN 51805-2, -35°C	≤ 450 mbar	≤ 450 mbar
Dropping point, DIN ISO 2176 / IP 396	≥ 185 °C	≥ 185 °C
Speed factor (n x dm)	1000000 mm/min	1000000 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.	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 90 years.

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