

# ISOFLEX TOPAS L 32, L 32 N

Special low-temperature greases



## Benefits for your application

- Exceed OEM requirements of -40 °C
- Long service life due to high corrosion protection and resistance to oxidation and ageing
- Many years of successful use in the automotive industry (specified and approved by most car manufacturers and component suppliers worldwide)

## Description

ISOFLEX TOPAS L 32 and L 32 N have been designed for extremely low temperatures. These greases consist of a synthetic hydrocarbon oil and a special lithium soap. ISOFLEX TOPAS L 32 and L 32 N are resistant to ageing and oxidation and provide good corrosion protection as well as water resistance.

ISOFLEX TOPAS L 32 N also contains a UV indicator, which ensures quality checking even with minimum quantity lubrication.

## Application

ISOFLEX TOPAS L 32 and L 32 N are especially used for the lubrication of small gears used in automotive engineering for electrical adjustment mechanisms, e.g. window lifters, sun roofs, seats, headlamps, fan flaps.

Both products have been approved by renowned car manufacturers, such as

- Volkswagen VW TL 778 A
- Daimler DBL 6827.40 and
- Daimler DBL 6827.41.

ISOFLEX TOPAS L 32 and L 32 N can also be used for:

- guideways, bowden cables, door locks
- rolling bearings in small motors, fans, pumps
- tooth flanks in plastic/plastic gears (e.g. POM, PA and PBT) or plastic/steel material combinations.

## Application notes

The lubricant is applied by spatula, brush, grease gun or cartridge.

## 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	ISOFLEX TOPAS L 32	ISOFLEX TOPAS L 32 N
Cartridge 370 g	+	-
Can 1 kg	+	+
Bucket 25 kg	+	+
Drum 170 kg	+	+

# ISOFLEX TOPAS L 32, L 32 N

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Product data	ISOFLEX TOPAS L 32 N	ISOFLEX TOPAS L 32
Article number	004227	004130
Lower service temperature	-60 °C / -76 °F	-60 °C / -76 °F
Upper service temperature	130 °C / 266 °F	130 °C / 266 °F
Colour space	beige	beige
Texture	homogeneous	homogeneous
Texture	short-fibred	short-fibred
Density at 20 °C	approx. 0.86 g/cm <sup>3</sup>	approx. 0.88 g/cm <sup>3</sup>
NLGI grade, DIN 51818	2	2
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, DIN 51562 pt. 01/ASTM D-445/ASTM D 7042, 100 °C	approx. 3.8 mm <sup>2</sup> /s	approx. 3.8 mm <sup>2</sup> /s
Kinematic viscosity of the base oil, DIN 51562 pt. 01/ASTM D-445/ASTM D 7042, 40 °C	approx. 17 mm <sup>2</sup> /s	approx. 17 mm <sup>2</sup> /s
Shear viscosity at 25 °C, shear rate 300 s <sup>-1</sup> , equipment: rotational viscometer, lower limit value	2 000 mPas	2 000 mPas
Shear viscosity at 25 °C, shear rate 300 s <sup>-1</sup> , equipment: rotational viscometer, upper limit value	5 000 mPas	4 500 mPas
Flow pressure of lubricating greases, DIN 51805, test temperature: -35 °C	<= 450 mbar	<= 450 mbar
Drop point, DIN ISO 2176	>= 185 °C	>= 185 °C
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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