

# ISOFLEX TOPAS NB 5051

Synthetic long-term grease



## Benefits for your application

- Synthetic long-term lubricating grease for a wide service temperature range
- Low starting and running torque
- Good wear protection
- Good corrosion protection
- Resistant to oxidation and ageing

## Description

ISOFLEX TOPAS NB 5051 is a beige-colored, homogeneous, short-fibred long-term grease for a wide service temperature range. It is a dynamically light grease consisting of synthetic hydrocarbon oil and barium complex soap. The barium complex soap used is not classified as harmful under the EU Directives on dangerous substances.

ISOFLEX TOPAS NB 5051 ensures low starting and running torques. In addition, it is resistant to oxidation and ageing, and protects reliably against corrosion.

## Application

ISOFLEX TOPAS NB 5051 is used for plain and rolling bearings (e.g. in automotive engineering) and for gas meters. It is also used in small gears, where it reduces the noise produced by the gear wheels. ISOFLEX TOPAS NB 5051 is also suitable for the lubrication of tooth flanks in precision gears (e.g. bevel gears in milling machines, electromechanical actuators for valves).

Its good adhesion on smooth surfaces makes it ideal for the running-in lubrication (assembly) of plastic and composite bearings.

## Application notes

The lubricant is applied by brush or conventional metering systems. Gears are dip-feed lubricated. Owing to the different compositions of elastomers and plastic materials, compatibility tests are indispensable before series application.

## 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 NB 5051
Can 1 kg	+
Bucket 25 kg	+

Product data	ISOFLEX TOPAS NB 5051
Article number	004128
Chemical composition, type of oil	synthetic hydrocarbon oil
Chemical composition, thickener	barium complex soap
Lower service temperature	-60 °C / -76 °F
Upper service temperature	130 °C / 266 °F



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Product data	ISOFLEX TOPAS NB 5051
Colour space	beige
Texture	short-fibred
Texture	homogeneous
Density at 20 °C	approx. 0.91 g/cm <sup>3</sup>
Worked penetration, DIN ISO 2137, 25 °C, lower limit value	385 x 0.1 mm
Worked penetration, DIN ISO 2137, 25 °C, upper limit value	415 x 0.1 mm
Kinematic viscosity of the base oil, DIN 51562 pt. 01/ASTM D-445/ASTM D 7042, 40 °C	approx. 30 mm <sup>2</sup> /s
Kinematic viscosity, DIN 51562 pt. 01/ASTM D-445/ASTM D 7042, 100 °C	approx. 5.9 mm <sup>2</sup> /s
Shear viscosity at 25 °C, shear rate 300 s <sup>-1</sup> , equipment: rotational viscometer, lower limit value	700 mPas
Shear viscosity at 25°C, shear rate 300 s <sup>-1</sup> , equipment:rotational viscometer, upper limit value	1 500 mPas
Corrosion inhibiting properties of lubricating greases, DIN 51802, (SKF-EMCOR), test duration: 1 week, distilled water	<= 1 corrosion degree
Flow pressure of lubricating greases, DIN 51805, test temperature: -60 °C	<= 1 400 mbar
Drop point, DIN ISO 2176	>= 170 °C
Minimum shelf life from the date of manufacture - in a dry, frost-free place and in the unopened original container, approx.	36 months

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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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