# **ISOFLEX® TOPAS NB 52**

# Synthetic long-term grease for rolling and plain bearings



# **Description:**

ISOFLEX TOPAS NB 52 is a lubricating grease with a wide service temperature range for plain and rolling bearings. It consists of synthetic hydrocarbon oil and barium complex soap. It is resistant to water, ambient media, oxidation and ageing, and it protects reliably against corrosion.

# Application:

ISOFLEX TOPAS NB 52 is used in high-speed, high-load plain and rolling bearings; also suitable for low temperatures.

It is also suitable for electric contacts and components. Properly applied, ISOFLEX TOPAS NB 52 reduces electrical resistance in the lubrication point (e.g. electroconductive flexible roller bearings, interrupter tubes).

In addition, the product is resistant to many synthetic materials.

Owing to the different compositions of elastomers and plastic materials. compatibility tests are indispensable before series application.

# **Application notes:**

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

# Minimum shelf life:

The minimum shelf life is approx. 36 months if the product is stored in the original closed container in a dry place.

# Package sizes:

400 g cartridge 1 kg can 25 kg bucket

#### **ISOFLEX TOPAS NB 52**

- Synthetic grease for plain and rolling bearings for a wide temperature range
- Also suitable for low temperatures
- Good pressure absorption
- Good resistance to water and ambient media
- Good corrosion protection
- Good resistance to oxidation and ageing

#### Product data:

Colour	beige
Texture	homogeneous, short-fibred
Density at 20 °C, g/cm <sup>3</sup> , approx.	0.96
Service temperature range*, °C, approx.	- 50 to 120
Drop point, DIN ISO 2176, °C	> 240
Worked penetration, DIN ISO 2137, (ASTM D 217); 0.1 mm	265 to 295
Corrosion protection (Emcor test), DIN 51 802, 1 week, distilled water, corrosion rating	0
Base oil viscosity, DIN 51 562/1 at 40 °C, mm²/s, approx. at 100 °C, mm²/s, approx.	30.0 5.5
Speed factor** (n x d <sub>m</sub> ), mm x min <sup>-1</sup> , approx.	1,000,000
Apparent dynamic viscosity, Klüber viscosity grade***	М
* Conjugatemporatures are quide values which depend on the lubricant's composition, the intended use and the applies	

Service temperatures are guide values which depend on the lubricant's composition, the intended use and the application method. Lubricants change their consistency, apparent dynamic viscosity or viscosity depending on the mechanodynamical loads, time, pressure and temperature. These changes in product characteristics may affect the function of a

Speed factors are guide values which depend on the type and size of the rolling bearing type and the local operating conditions, which is why they have to be confirmed in tests carried out by the user in each individual case

Klüber viscosity grades: EL = extra light lubricating grease; L = light lubricating grease; M = medium lubricating grease; S = heavy lubricating grease; ES = extra heavy lubricating grease

# **ISOFLEX® TOPAS NB 52** Safety Data Sheet

#### 1.1 Product name: ISOFLEX TOPAS NB 52

Code-No.: 004 131

15.11.2001

1.2 Klüber Lubrication München KG

Geisenhausenerstraße 7

Emergency telephone no.: ++49 - 89 7876 - 0

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#### Composition / information on ingredients

Chemical characterization (preparation): Synthetic hydrocarbon oil, barium complex soap

Hazardous ingredients

Components Value R-phrases Barium soap > 25% 52/53

#### Hazards identification

R phrases: 52/53. Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Prolonged skin contact may cause skin irritation and/or dermatitis

#### First aid measures

After inhalation: Not applicable

After contact with skin: Wash off with mild cleaners and plenty of water. If symptoms persist, call a physician

After contact with eyes: Rinse with plenty of water. If symptoms persist, call a physician

After ingestion: Do not induce vomiting. Obtain medical attention Advice to doctor: Treat symptomatically

#### Fire-fighting measures

Suitable extinguishing media: Water spray, foam, dry powder, carbon dioxide (CO<sub>2</sub>)

Unsuitable extinguishing media: High volume water jet

Special Hazards: In case of fire the following can be released: Carbon monoxide, hydrocarbons

Special protective equipment for firefighters: Standard procedure for chemical fires

Additional information: Water mist may be used to cool closed containers. In the event of fire and/or explosion do not breathe fumes

#### Accidental release measures

Personal precautions: Not required

Environmental precautions: Do not flush into surface water or sanitary sewer system

Methods for cleaning up / taking up: Use mechanical handling equipment. Dispose of absorbed material in accordance with the regulations Additional information: None

#### Handling and storage

Advice on safe handling: No special handling advice required

Advice on protection against fire and explosion: No special precautions

Requirements on storage rooms and vessels: Store at room temperature in the original container

Incompatible materials: Incompatible with oxidizing agents. Do not store together with food

Further information on storage conditions: None

#### Exposure controls / personal protection

Additional advice on system design: Not applicable

Ingredients and specific control parameters: None

Respiratory protection: No special protective equipment required

Hand protection: No special protective equipment required

Eye protection: No special protective equipment required

Body protection: No special protective equipment required

Other protection measures: No special protective equipment required

General protection and hygiene measures: Avoid prolonged and/or repeated contact with skin. Remove soiled or soaked clothing immediately. Clean skin thoroughly after work; apply skin cream

#### Physical and chemical properties

Form Colour beige Odour characteristic > 240 °C, DIN ISO 2176 Drop point

> 200 °C (base oil) Flash point not applicable Ignition temperature Lower explosion limit not applicable not applicable Upper explosion limit not applicable Vapour pressure-first

approx. 0.96 g/cm<sup>3</sup>, 20 °C Density

Water solubility insoluble pH value not applicable Kinematic viscosity not applicable Further information none

#### 10. Stability and reactivity

Conditions to avoid: None

Materials to avoid: Strong oxidizing agents

Hazardous decomposition products: None under normal use

Additional information: None

#### 11. Toxicological information

Prolonged skin contact may cause skin irritation and/or dermatitis

#### 12. Ecological information

Information on elimination (persistence and degradability): Product is insoluble in water. May be separated out mechanically in purification

Behaviour in environmental compartments: Ecological injuries are not known or expected under normal use

Ecotoxic effects: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

Additional information: Should not be released into the environment

## 13. Advice on Disposal

Code of waste: 120 112. Wastes from shaping and surface treatment of metals and plastics; wastes from shaping (including forging, welding, pressing, drawing, turning, cutting and filling); spent waxes and fats

Disposal: The code of waste has to correspond to the Council Directive 75/442/EEC and be specific as far as the related sector and process are concerned. Can be incinerated when in compliance with local, state and federal regulations

Dispose of contaminated packaging and recommended cleaning: Offer rinsed packaging material to local recycling facilities

#### 14. Transport information

GGVS / GGVF: not applicable ADN / ADNR: not applicable IMDG-Code: not applicable ICAO / IATA-DGR: not applicable

Further information: Not classified as dangerous in the meaning of transport regulations

### Regulatory information

Labelling according to EU-guidelines: The product is classified and labelled in accordance with EC-directive 99/45/CE

R phases: 52/53. Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment

S phrases: 61. Avoid release to the environment. Refer to special instructions / Safety data sheets

National regulations: Labelling according to the Swiss regulations: No toxicological class, BAGT-no. 83029

#### 16. Other information

Issue-department of Safety Data Sheet: Chemical Documentation, Tel.: ++49 - 89 7876 - 564

The data in this product information is based on our general experience and knowledge at the time of printing 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 tests with the selected product. We recommend contacting our Technical Consulting Staff to discuss your specific application. If required and possible we will be pleased to provide a sample for testing. Klüber products are continually improved. Therefore, Klüber Lubrication reserves the right to change all the technical data in this product information at any time without notice.



Klüber Lubrication München KG, a member of the Freudenberg group