# **ISOFLEX<sup>®</sup> TOPAS NB 52** Synthetic long-term grease for high and low temperatures



# **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 operating at high and/or 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. 60 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
- 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 130
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, mm <sup>2</sup> /s, approx. at 100 °C, mm <sup>2</sup> /s, approx.	30.0 5.5
Speed factor <sup>**</sup> (n x d <sub>m</sub> ), mm x min <sup>-1</sup> , approx.	1,000,000
Apparent dynamic viscosity, Klüber viscosity grade***	М

\* 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 component.

\*\* 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<sup>®</sup> TOPAS NB 52 Safety Data Sheet

1.1	Product name: ISOFLEX TOPAS NB 52 Code-No.: 004 131 15.11.2001		General protection and hygiene measures: Avoid prolonged and/or repeated contact with skin. Remove soiled or soaked clothing im- mediately. Clean skin thoroughly after work; apply skin cream
°	Klüber Lubrication München KG Emergency telephone no.:	9.	Physical and chemical properties
.2	Geisenhausenerstraße 7 ++49 - 89 7876 - 0	0.	Form paste
	D-81379 München		Colour beige
	Tel. ++49 - 89 78 76 - 0 telephone exchange		Odour characteristic
	Fax: ++49 - 89 78 76 - 333		
	1 42. 1140 00 10 10 000		Drop point > 240 °C, DIN ISO 2176
			Flash point > 200 °C (base oil)
	Composition / information on ingredients		Ignition temperature not applicable
	Chemical characterization (preparation): Synthetic hydrocarbon oil,		Lower explosion limit not applicable
	barium complex soap		Upper explosion limit not applicable
	Hazardous ingredients		Vapour pressure-first not applicable
	Components Value R-phrases		Density approx. 0.96 g/cm <sup>3</sup> , 20 °C
	·		, , , , , , , , , , , , , , , , , , , ,
	Barium soap > 25% 52/53		······
			pH value not applicable
•	Herende identification		Kinematic viscosity not applicable
3.	Hazards identification		Further information none
	R phrases: 52/53. Harmful to aquatic organisms, may cause long-term		
	adverse effects in the aquatic environment. Prolonged skin contact may	40	Stability and reactivity
	cause skin irritation and/or dermatitis	10.	Stability and reactivity
4.			Conditions to avoid: None
	First aid measures		Materials to avoid: Strong oxidizing agents
			Hazardous decomposition products: None under normal use
	After inhalation: Not applicable		Additional information: None
	After contact with skin: Wash off with mild cleaners and plenty of water.		Additional mormation. None
	If symptoms persist, call a physician		
	After contact with eyes: Rinse with plenty of water. If symptoms persist,	11.	Toxicological information
	call a physician		Prolonged skin contact may cause skin irritation and/or dermatitis
	After ingestion: Do not induce vomiting. Obtain medical attention		······································
	5	40	
	Advice to doctor: Treat symptomatically	12.	Ecological information
			Information on elimination (persistence and degradability): Product is
	Fire fighting measures		insoluble in water. May be separated out mechanically in purification
5.	Fire-fighting measures		plants
	Suitable extinguishing media: Water spray, foam, dry powder,		Behaviour in environmental compartments: Ecological injuries are not
	carbon dioxide (CO <sub>2</sub> )		known or expected under normal use
	Unsuitable extinguishing media: High volume water jet		Ecotoxic effects: Toxic to aquatic organisms, may cause long-term
	Special Hazards: In case of fire the following can be released: Carbon		adverse effects in the aquatic environment
	monoxide, hydrocarbons		•
	Special protective equipment for firefighters: Standard procedure for		Additional information: Should not be released into the environment
	chemical fires		
		13.	Advice on Disposal
	Additional information: Water mist may be used to cool closed		Code of waste: 120 112. Wastes from shaping and surface treatment o
	containers. In the event of fire and/or explosion do not breathe fumes		metals and plastics; wastes from shaping (including forging, welding,
			pressing, drawing, turning, cutting and filling); spent waxes and fats
6.	Accidental release measures		Disposal: The code of waste has to correspond to the Council Directive
	Personal precautions: Not required		75/442/EEC and be specific as far as the related sector and process ar
			concerned. Can be incinerated when in compliance with local, state and
	Environmental precautions: Do not flush into surface water or sanitary		federal regulations
	sewer system		5
	Methods for cleaning up / taking up: Use mechanical handling equip-		Dispose of contaminated packaging and recommended cleaning: Offer
	ment. Dispose of absorbed material in accordance with the regulations		rinsed packaging material to local recycling facilities
	Additional information: None		
		14.	Transport information
_			GGVS / GGVE: not applicable
	Handling and storage		ADN / ADNR: not applicable
	Advice on safe handling: No special handling advice required		IMDG-Code: not applicable
	Advice on protection against fire and explosion: No special precautions		ICAO / IATA-DGR: not applicable
	required		Further information: Not classified as dangerous in the meaning of
	Requirements on storage rooms and vessels: Store at room temperature		transport regulations
	in the original container		
	Incompatible materials: Incompatible with oxidizing agents. Do not store	15.	Regulatory information
			Labelling according to EU-guidelines: The product is classified and
	together with food		labelled in accordance with EC-directive 99/45/CE
	together with food		
	together with food Further information on storage conditions: None		R phases: 52/53. Harmful to aquatic organisms, may cause long-term
3.	together with food Further information on storage conditions: None Exposure controls / personal protection		R phases: 52/53. Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment
3.	together with food Further information on storage conditions: None		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
3.	together with food   Further information on storage conditions: None   Exposure controls / personal protection   Additional advice on system design: Not applicable		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
5.	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		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
5.	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		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
3.	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		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:
3.	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	40	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
	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	16.	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 Other information
·.	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	16.	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

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.

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