ISOFLEX® TOPAS NCA 52

Synthetic long-term grease for plain and rolling bearings



Description:

ISOFLEX TOPAS NCA 52 is a synthetic long-term grease for a wide service temperature range. It consists of synthetic hydrocarbon oil and special calcium soap, and it has good pressure absorption properties.

Application:

ISOFLEX TOPAS NCA 52 is suitable for plain and rolling bearings, and for small gears subject to high specific loads. It is also used in plastic/plastic and plastic/steel components. The low base oil viscosity ensures low starting torques even at low temperatures.

Application notes:

The lubricant is applied by brush, spatula, grease gun or grease cartridge. Owing to the different compositions of elastomers and plastic materials, compatibility tests are indispensable before series application.

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.

Pack sizes:

400 g cartridge 1 kg can 25 kg bucket

ISOFLEX TOPAS NCA 52

- synthetic long-term grease
- good pressure absorption
- low starting and running torque
- good wear protection
- resistant to oxidation and ageing

Product data:

Colour	beige
Texture	homogeneous short-fibred
Density at 20 °C, g/cm³, approx.	0.89
Service temperature range*, °C, approx.	– 50 to 130
Drop point, DIN ISO 2176, °C	> 220
Worked penetration, DIN ISO 2137 (ASTM D 217); 0.1 mm	265 to 295
Copper corrosion (lubricating grease), DIN 51 811, after 24 h / 120 °C, corrosion rating	1 – 120
Base oil viscosity, DIN 51 562/1 at 40 °C, mm²/s, approx. at 100 °C, mm²/s, approx.	30.0 5.6
Speed factor** (n x d _m), mm x min ⁻¹ , approx.	1,000,000
Apparent dynamic viscosity***, Klüber viscosity grade	L/M

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® TOPAS NCA 52

Safety Data Sheet

1.1 Product name: ISOFLEX TOPAS NCA 52

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26.06.2001

1.2 Klüber Lubrication München KG Geisenhausenerstraße 7 D-81379 München

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

Tel. ++49 - 89 78 76 - 0 telephone exchange Fax: ++49 - 89 78 76 - 333

Composition / information on ingredients

Chemical characterization (preparation): Synthetic hydrocarbon oil, special calcium soap

Hazards identification

No particular hazards known

First aid measures

After inhalation: Not applicable

After contact with skin: Wash off with soap and plenty of water

After contact with eyes: Rinse with plenty of water

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_2)

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

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 required

Requirements on storage rooms and vessels: No special storage conditions required

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

Further information on storage conditions: Store at room temperature in the original container

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

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.

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

Freudenberg

Klüber Lubrication München KG, a member of the Freudenberg group

Physical and chemical properties

Form paste Colour beige characteristic Odour

> 220 °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. 0.89 g/cm3, 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

The toxicological data has been taken from products of similar composition

Acute toxicity: LD₅₀/oral/rat = > 2 g/kg (literature data)

Chronic toxicity: None

Human experience: 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: Aquatic toxicity is unlikely due to low solubility 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: 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 / GGVE: not applicable ADN / ADNR not applicable not applicable IMDG-Code: ICAO / IATA-DGR: not applicable

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

15. Regulatory information

Labelling according to EU-guidelines: The product does not require a hazard warning label in accordance with EC-directives/German regulations on dangerous substances

National regulations

16. Other information

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

