

# ISOFLEX® NCA 15

High-speed lubricating grease for plain and rolling bearings



## Description:

ISOFLEX NCA 15 is a dynamically light grease with good pressure absorption properties for plain and rolling bearings. It consists of ester oil, synthetic hydrocarbon oil, mineral oil and special calcium soap. The product is resistant to water and protects reliably against wear.

## Application:

ISOFLEX NCA 15 is particularly suitable for the lubrication of spindle and tapered roller bearings, threaded spindles, ball screws subject to high loads, and for all high-speed bearings, e.g. bearings in OE-spinning turbines used in the textile industry. It is also suitable for tooth flanks of precision gears (bevel gears in milling machines).

## 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 NCA 15

- Rolling bearing grease
- For very high speeds
- Good pressure absorption
- Good resistance to water
- Good wear protection
- Resistant to oxidation and ageing

## Product data:

Colour	beige
Texture	homogeneous, short-fibred
Density, at 20 °C, g/cm <sup>3</sup> , approx.	0.94
Service temperature range*, °C, approx.	- 50 to 120
Drop point, DIN ISO 2176, °C	> 180
Worked penetration, DIN ISO 2137, (ASTM D 217); 0.1 mm	265 to 295
Water resistance, DIN 51 807/1, 3 h / 90 °C, rating	0/1 – 90
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.	23.0 4.7
Speed factor** (n x d <sub>m</sub> ), mm x min <sup>-1</sup> , approx.	1,300,000
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 mechanical 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® NCA 15

## Safety Data Sheet

<p><b>1.1 Product name: ISOFLEX NCA 15</b>  <b>Code-No.: 004 180</b>  <b>19.01.2001</b></p>
<p><b>1.2</b> Klüber Lubrication München KG          Geisenhausenerstraße 7          D-81379 München          Tel. ++49 - 89 78 76 - 0 telephone exchange          Fax: ++49 - 89 78 76 - 333</p> <p><b>Emergency telephone no.:</b>  <b>++49 - 89 7876 - 0</b></p>
<p><b>2. Composition / information on ingredients</b>          Chemical characterization (preparation): Ester oil, synthetic hydrocarbon oil, mineral oil, special calcium soap</p>
<p><b>3. Hazards identification</b>          No particular hazards known</p>
<p><b>4. First aid measures</b>          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</p>
<p><b>5. Fire-fighting measures</b>          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</p>
<p><b>6. Accidental release measures</b>          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</p>
<p><b>7. Handling and storage</b>          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: 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</p>
<p><b>8. Exposure controls / personal protection</b>          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</p>

<p><b>9. Physical and chemical properties</b>          Form: paste          Colour: beige          Odour: characteristic          Drop point: &gt; 180 °C, DIN ISO 2176          Flash point: &gt; 200 °C (base oil)          Ignition temperature: not applicable          Lower explosion limit: not applicable          Upper explosion limit: not applicable          Vapour pressure-first: not applicable          Density: approx. 0.94 g/cm<sup>3</sup>, 20 °C          Water solubility: insoluble          pH value: not applicable          Kinematic viscosity: not applicable          Further information: none</p>
<p><b>10. Stability and reactivity</b>          Conditions to avoid: None          Materials to avoid: Strong oxidizing agents          Hazardous decomposition products: None under normal use          Additional information: None</p>
<p><b>11. Toxicological information</b>          The toxicological data has been taken from products of similar composition          Acute toxicity: LD<sub>50</sub>/oral/rat = &gt; 2 g/kg (literature data)          Chronic toxicity: None          Human experience: Prolonged skin contact may cause skin irritation and/or dermatitis</p>
<p><b>12. Ecological information</b>          Information on elimination (persistence and degradability): Product is insoluble in water. May be separated out mechanically in purification plants          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</p>
<p><b>13. Advice on Disposal</b>          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</p>
<p><b>14. Transport information</b>          GGVS / GGVE: 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</p>
<p><b>15. Regulatory information</b>          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: Labelling according to the Swiss regulations: No toxicological class, BAGT-no. 611500</p>
<p><b>16. Other information</b>          Issue-department of Safety Data Sheet: Chemical Documentation,          Tel.: ++49 - 89 7876 - 564</p>

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