

ISOFLEX® TEL 3000 ALTEMP

Sliding grease



Description:

ISOFLEX TEL 3000 ALTEMP is a light-coloured, dynamically light lubricating grease for friction points in the textile and precision engineering industry. It consists of ester oil, mineral oil, lithium soap and ALTEMP, a special solid lubricant combination.

Application:

Owing to its good low-temperature properties, ISOFLEX TEL 3000 ALTEMP is suitable for plain and rolling bearings, including those used in automotive engineering. It has also proven effective as a low-friction grease for zig-zag winding guides used in the textile industry.

Application notes:

The lubricant is applied to the clean friction point by brush, spatula, or similar devices. 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. 24 months if the product is stored in the original closed container in a dry place.

Pack sizes:

1 kg can
25 kg bucket

ISOFLEX TEL 3000 ALTEMP

- Low-friction grease with emergency operating properties
- Efficient lubricating film
- Good corrosion protection
- Long maintenance intervals
- Clean lubrication

Product data:

Colour	light beige
Texture	homogeneous, short-fibred
Service temperature range*, °C, approx.	– 45 to 60
Drop point, DIN ISO 2176, °C, approx.	140
Density, at 20 °C, g/cm ³ , approx.	0.84
Worked penetration, DIN ISO 2137, (ASTM D 217); 0.1 mm	280 to 310
Copper corrosion, DIN 51 811, 24 h / 60 °C, corrosion rating	1 – 60
Base oil viscosity, DIN 51 562/1, at 40 °C, mm ² /s, approx. at 100 °C, mm ² /s, approx.	19.0 4.5
Apparent dynamic viscosity, Klüber viscosity grade***	L

* 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 mechano-dynamical loads, time, pressure and temperature. These changes in product characteristics may affect the function of a component.

** 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® TEL 3000 ALTEMP

Safety Data Sheet

1.1 Product name: ISOFLEX TEL 3000 ALTEMP Code-No.: 005 060 08.03.2000	9. Physical and chemical properties Form paste Colour beige Odour characteristic Drop point ~ 140 °C, DIN ISO 2176 Flash point > 200 °C (base oil) Flammability not applicable Ignition temperature not applicable Autoflammability not applicable Lower explosion limit not applicable Upper explosion limit not applicable Vapour pressure-first not applicable Density approx. 0.84 g/cm ³ , 20 °C Water solubility insoluble pH value not applicable Kinematic viscosity not applicable Further information none
1.2 Klüber Lubrication München KG Geisenhausenerstraße 7 D-81379 München Tel. ++49 - 89 78 76 - 0 telephone exchange Fax: ++49 - 89 78 76 - 333 Emergency telephone no.: ++49 - 89 7876 - 0	10. Stability and reactivity Conditions to avoid: None Materials to avoid: Strong oxidizing agents Hazardous decomposition products: None under normal use Additional information: None
2. Composition / information on ingredients Chemical characterization (preparation): Mineral oil, ester oil, lithium soap, inorganic solid lubricants	11. Toxicological information The toxicological data has been taken from products of similar composition Acute toxicity: LD ₅₀ /oral/rat = > 2 g/kg (literature data) Chronic toxicity: None Human experience: Prolonged skin contact may cause skin irritation and/or dermatitis
3. Hazards identification No particular hazards known	12. Ecological information 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
4. 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	13. Advice on Disposal 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
5. 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	14. Transport information GGVS / GGVE: not applicable ADN / ADN: not applicable IMDG-Code: not applicable ICAO / IATA-DGR: not applicable Further information: Not classified as dangerous in the meaning of transport regulations
6. 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	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
7. 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	16. Other information Issue-department of Safety Data Sheet: Chemical Documentation, Tel.: ++49 - 89 7876 - 564
8. 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	

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