

ISOFLEX ALLTIME SL1, ALLTIME SL 2

Dynamically light rolling bearing greases



Description:

ISOFLEX ALLTIME SL1, ALLTIME SL2 are dynamically light lubricating greases for high-speed rolling bearings operating in a wide temperature range. They are based on a synthetic hydrocarbon oil, ester oil and lithium soap. Their texture and consistency ensure low starting and running torques.

Application:

Suitable for rolling bearings where smooth operation is a key requirement, as are low starting and running torques and a wide service temperature range, e.g. in the textile industry and precision engineering.

Application notes:

The lubricants can be applied by brush or spatula. Due to the great variety of different elastomers and plastics, their compatibility with these greases has to be checked prior to series application.

Minimum shelf life:

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

Pack sizes:

1 kg can
25 kg bucket

ISOFLEX ALLTIME SL1, SL 2

- wide service temperature range
- resistant to ageing and oxidation
- good corrosion protection
- low starting and running torques
- high speeds

Product data:

	SL1	SL 2
Colour	light yellow, beige	beige
Texture	homogeneous, short-fibred	homogeneous short-fibred
Service temperature range*, °C, approx.	- 50 to 140	- 50 to 150
Drop point, DIN ISO 2176, °C	> 170	> 180
Density at 20 °C, g/cm ³ , approx.	0.97	0.96
Worked penetration, DIN ISO 2137 (ASTM D 217); 0.1 mm	310 to 340	265 to 295
Corrosion protection (Emcor test), DIN 51 802, 1 week, distilled water, corrosion rating	0	0
Base oil viscosity, DIN 51 562, pt. 01, at 40 °C, mm ² /s, approx. at 100 °C, mm ² /s, approx.	25.0 5.0	25.0 5.0
Speed factor** (n x dm), mm x min ⁻¹ , approx.	1,000,000	1,000,000
Apparent dynamic viscosity***, Klüber viscosity grade	EL	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 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; L = light; M = medium; S = heavy; ES = extra-heavy

ISOFLEX ALLTIME SL1, ALLTIME SL2

Safety Data Sheet

<p>1.1 Product name: a) ISOFLEX ALLTIME SL1 b) ISOFLEX ALLTIME SL2 Code-No.: a) 004 125 b) 004 126 08.03.2000</p>
<p>1.2 Klüber Lubrication München KG Emergency telephone no.: Geisenhausenerstraße 7 ++49 - 89 7876 - 0 D-81379 München Tel. ++49 - 89 78 76 - 0 telephone exchange Fax: ++49 - 89 78 76 - 333</p>
<p>2. Composition / information on ingredients Chemical characterization (preparation): Synthetic hydrocarbon oil, ester oil, lithium soap</p>
<p>3. Hazards identification No particular hazards known</p>
<p>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</p>
<p>5. Fire-fighting measures Suitable extinguishing media: Water spray, foam, dry powder, carbon dioxide (CO₂) 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>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</p>
<p>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</p>
<p>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</p>

<p>9. Physical and chemical properties Form: paste Colour: beige Odour: characteristic Drop point: a) > 170 °C; b) > 180 °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: a) approx. 0.97 g/cm³, 20 °C b) approx. 0.96 g/cm³, 20 °C Water solubility: insoluble, g/l pH value: not applicable Kinematic viscosity: not applicable Further information: None</p>
<p>10. Stability and reactivity Conditions to avoid: None Materials to avoid: Strong oxidizing agents Hazardous decomposition products: None under normal use Additional information: None</p>
<p>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</p>
<p>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</p>
<p>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</p>
<p>14. Transport information 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>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</p>
<p>16. Other information 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, a member of the Freudenberg group