Klüberoil Tex 1-22 N, -32 N, -46 N

Biodegradable needle and sinker oils providing good wear protection



Description

Klüberoil Tex 1-...N oils are based on our well-proven Klüberoil Tex 1 oils. We have improved the additives in order to meet the increased requirements originating in higher knitting speeds and temperatures.

Owing to the improved additives, our new Klüberoil Tex 1-...N oils provide better wear protection than the standard Klüberoil Tex 1 oils. These new oils are easily scourable with modern, environmentally sound washing liquors. They provide excellent corrosion protection and are biodegradable in acc. with OECD guidelines 301c.

Klüberoil Tex 1-...N oils are light yellow in colour and are compatible with elasthan fibers.

Application

Klüberoil Tex 1-...N oils can be used on needles, sinkers, needle cams, needle cylinders, dials and sinker rings.

They keep needle tracks clean, clearly extend the service life of needle and sinkers, and reduce operating temperatures.

Klüberoil Tex 1-...N oils are available in three viscosities: ISO VG 22, 32 and 46. They are suitable for all applications on hosiery, circular and flat-bed knitting machines.

Please observe the machine manufacturer's viscosity recommendations.

Application notes

Klüberoil Tex 1-...N oils can be precisely metered by means of conventional oil feeders.

Before changing over to Klüberoil Tex 1-...N needle and sinker oils, please make sure that the oil feeders are drained and the oil containers are thoroughly cleaned. Different types of needle oils should never be mixed. We recommend SOLUTIN TEX M, our special cleaning agent, to clean your machines.

We also recommend to monitor the lubricant quantity and to readjust it, if required.

Minimum shelf life

The minimum shelf life is approx. 12 months if the product is stored in the closed original container in a dry place.

Owing to viscosity changes at low temperatures, the oil should be slightly heated before application in order to ensure trouble-free machine operation. Please observe the pertinent information on the oil containers.

Packs

20 I canister 200 I drum

Note:

Biodegradable products should be handled with the same care as conventional oils. Avoiding contamination of any kind helps to protect the environment.

Klüberoil Tex 1-... N-oils

- good scourability with conventional washing liquors
- biodegradable in acc. with OECD 301 c
- improved wear protection
- "totally corrosion inhibitive" based on DIN ISO 11659-1
- · noise and vibration damping
- · compatible with elasthan fibres
- suitable for oil circulation systems in hosiery knitting machines

Product data

Klüberoil	Tex 1-22 N	Tex 1-32 N	Tex 1-46 N
Base oil	mineral oil	mineral oil	mineral oil
Colour	yellowish/clear	yellowish/clear	yellowish/clear
Kinematic viscosity, DIN 51 562/1, approx. (mm²/s) at 40°C / at 100°C	22/4.3	32/5.5	46/6.8
Pour point	< 0°C	< 0°C	< 0°C
Emulsibility in conventional washing liquor (1:5)	stable for approx. 3 days	stable for approx. 3 days	stable for approx. 3 days
Steel corrosion 24 h/60°C, DIN 51 585	0 – A	0 – A	0 – A
Corrosion inhibition on steel (needle test), based on DIN ISO 11659-1	5	5	5
Oscillation-friction test (b/400 N/70°C/1 h) Friction coefficient m Wear scar Wk (mm) Wear depth R _z (µm)	< 0.1 < 0.6 < 0.6	< 0.1 < 0.6 < 0.6	< 0.1 < 0.6 < 0.6

This product information leaflet should provide the reader with information for initial product selection. It constitutes neither an assurance of the product properties nor does it release the user from the obligation of performing preliminary tests with the selected lubricant. Klüber will make samples available for test purposes upon request.

Klüberoil Tex 1-22 N, -32 N, -46 N Safety Data Sheet

1.1 Product name: Klüberoil Tex a) 1-22 N b) 1-32 N c) 1-46 N a) 035 027 b) 035 028 c) 035 029 4.5.1999

1.2 Klüber Lubrication München KG Geisenhausenerstraße 7

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

D-81379 München

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

Composition / information on ingredients

Chemical characterization (preparation): Mineral oil, emulsifier Additional information: No hazardous ingredients

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. If swallowed or in the event of

vomiting, risk of product entering the lungs

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

Accidental release measures

Personal precautions: Risk of slipping due to leakage/spillage of product Environmental precautions: Do not flush into surface water or sanitary sewer system

Methods for cleaning up / taking up: Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Dispose of absorbed material in accordance with the regulations Additional information: None

Handling and storage

Advice on safe handling: Avoid formation of aerosol

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

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. Clean skin thoroughly after work; apply skin cream. Remove soiled or soaked clothing immediately. Do not inhale aerosol

·Freudenberg Klüber Lubrication, a member of the Freudenberg Group

Physical and chemical properties

Form liauid Colour yellow characteristic Odour

~ 0 °C, DIN ISO 3016 Pour point Flash point a) + c) > 150 °C; b) > 160 °C, DÍN IŚO 2592

not applicable °C Flammability Ignition temperature not applicable °C not applicable Autoflammability Lower explosion limit not applicable Upper explosion limit not applicable Vapour pressure-first not applicable

Density approx. 0,86 g/cm3, 20 °C,

DIN 51 757 Water solubility emulsifiable, g/l not applicable pH value

Kinematic viscosity a) approx. 22 mm²/s, 40 °C

b) approx. 32 mm²/s, 40 °C c) approx. 46 mm²/s, 40 °C DIN 51 562

Further information

10. Stability and reactivity

Conditions to avoid: Do not heat above flash point

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): a) Rapidly biodegradable (> 70%). b + c) Biological degradability > 50%. Test method: OECD 301 c

Behaviour in environmental compartments: Ecological injuries are not known or expected under normal use

Ecotoxic effects: The product has not been tested

Additional information: Do not discharge product unmonitored into the environment

13. Advice on Disposal

Disposal: Dispose of in accordance with our local, state and federal regulations as used oil for reconditioning

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

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