

# Klüber Silvertex T 22, T 32, T 46

Semi-synthetic, high-performance needle and sinker oils



### Your benefits at a glance

- Comply with the legal requirements set forth in EU Directive 2003/53/EC for placing NP/NPE-containing products on the market
- Long service life of stitch-forming elements due to good wear protection and damping effect
- Compatible with electronic control systems, elastane fibres and commonly used sealing materials and plastics due to the special base oils and additives
- Improved cold start behaviour due to the semi-synthetic formulation
- Higher economical efficiency of knitting machines due to reduced downtime
- Reduction of operating costs due to extended maintenance intervals

#### Your requirements - our solution

In the knitting industry, requirements in terms of consistent product quality, compatibility of materials, wear protection and scourability are becoming more and more stringent. We therefore developed the Klüber Silvertex T needle oils, which are manufactured in consistent quality using special mineral and synthetic base oils and additives.

Klüber Silvertex T oils reduce wear and deposits on stitch-forming elements, thus ensuring long and trouble-free operation of knitting machines, while at the same time reducing operating costs. The semi-synthetic formulation of these oils improves cold start of your large circular knitting machines equipped with a high number of needles. This will contribute to reducing operating costs.

Klüber Silvertex T oils are scourable using customary washing liquors.

#### **Application**

Klüber Silvertex T oils lubricate needles, sinkers, couplings, needle cams, cylinders, dials and sinker rings in knitting machines and protect them against wear. In addition, they ensure clean needle grooves and help to extend needle and sinker life.

Klüber Silvertex T oils are compatible with elastane fibres and commonly used synthetic fibres as well as sealing materials and plastics.

Klüber Silvertex T oils are available in the viscosity grades ISO VG 22, 32, 46 and 68 and can therefore be used for circular and flat-

bed knitting machines. The oils are tested and approved by leading knitting machine manufacturers.

#### **Application notes**

Klüber Silvertex T oils can be precisely metered by means of conventional oil feeders. Please observe the machine manufacturer's viscosity recommendations.

Before changing over to Klüber Silvertex T oils, please make sure the oil feeders are drained and the oil containers are thoroughly cleaned. Different types of needle oils should never be mixed due to their different chemical composition.

We recommend Klüber Silvertex R 14, our special cleaning and flushing agent, to clean your machines. Monitoring of the lubrication quantity is recommended following changeover with readjustment where necessary.

As the oils change their viscosity with decreasing temperatures, we recommend heating it up before use in order to ensure trouble-free operation of the machines.

If you wish to optimise the service life of your knitting machine or have any other questions regarding your application, our experts will be pleased to help you. We look forward to hearing from you.

#### Material safety data sheets

Material safety data sheets can be requested via our website www.klueber.com. You may also obtain them through your contact person at Klüber Lubrication.





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Pack sizes	Klüber Silvertex T 22	Klüber Silvertex T 32	Klüber Silvertex T 46
Canister 20 I	+	+	+
Drum 60 I	+	+	+
Drum 200 I	+	+	+
Container 1000 I	+		

Characteristics	Klüber Silvertex T 22	Klüber Silvertex T 32	Klüber Silvertex T 46
Article number	035507	035508	035509
Appearance	clear	clear	clear
Colour space	colourless	colourless	colourless
Density, DIN 51757, 20°C	approx. 0.87 g/cm <sup>3</sup>	approx. 0.87 g/cm <sup>3</sup>	approx. 0.88 g/cm <sup>3</sup>
Flash point, DIN EN ISO 2592, Cleveland open cup	≥ 180 °C	≥ 180 °C	≥ 180 °C
Kinematic viscosity, DIN EN ISO 3104 / DIN 51562-1 / ASTM D445 / ASTM D7042, 100°C	approx. 4.4 mm <sup>2</sup> /s	approx. 5.6 mm <sup>2</sup> /s	approx. 7.4 mm <sup>2</sup> /s
Kinematic viscosity, DIN EN ISO 3104 / DIN 51562-1 / ASTM D445 / ASTM D7042, 40°C	approx. 22 mm <sup>2</sup> /s	approx. 32 mm <sup>2</sup> /s	approx. 46 mm <sup>2</sup> /s
Pour point, DIN ISO 3016	≤ -9 °C	≤ -9 °C	≤ -9 °C
Minimum shelf life from the date of manufacture - in a dry, frost-free place and in the unopened original container, approx.	24 months	24 months	24 months

## Klüber Lubrication – your global specialist

Innovative tribological solutions are our passion. Through personal contact and consultation, we help our customers to be successful worldwide, in all industries and markets. With our ambitious technical concepts and experienced, competent staff we have been fulfilling increasingly demanding requirements by manufacturing efficient high-performance lubricants for more than 90 years.

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