



# Tixo Stainless 22,32,46

## DESCRIPTION

High performance, self-emulsifiable, scourable needle oil, for circular and flatbed knitting machines, based on highly refined mineral base oils

## APPLICATIONS

Lubrication of needles, needle beds, sinkers and tuck cams on small and large diameter circular knitting machines as well as on flatbed knitting machines.

## SPECIFICATIONS

Oeko-Tex Eco Passport certified → Standard 100 compliant

GRS compliant

« Heavy-metal free » according to GOTS 7.0, hence compliant with machine oils requirements for GOTS goods processing

Homologated/recommended by several major large diameter circular knitting machine manufacturers

## ADVANTAGES

DIN 62136 standard certified in terms of friction coefficient, wear, and maximum load, extending stitch forming parts' lifespan, making it one of the best products in terms of machine protection

High level corrosion protection on machinery

Good temperature regulation in high-speed machines

Good washability in low to medium temperatures (20 to 60°C if not detergents added)

Environmentally friendly (no ethoxylated alkylphenol (APEO)).

Compatible with commonly used electronic cards, rubber, paint, and elastane fibers\*.

*\* As it is not possible to guarantee compatibility with all materials possibly used in all knitting machines, before using Tixo Stainless, customers are encouraged to run compatibility tests for their knitting machine components which may come into contact with the oil.*

This lubricant used as recommended and for the application for which it has been designed does not present any particular risk.

A material safety data sheet conforming to the regulations in use in the E.C. can be obtained from your local commercial adviser or downloaded at [ms-sds.totalenergies.com](https://ms-sds.totalenergies.com)

## RECOMMENDATIONS

### Method of Application:

- Suitable for application through all conventional oil feeding systems commonly used in knitting machinery.
- Before switching to Tixo Stainless, it is strongly recommended to drain and clean the machine and oil feeders.

### De-Oiling:

Best conditions for a good removal:

- For optimal performances, temperatures between 20 and 60°C.
- pH from 8 to 9.
- 1 to 2g/l of detergent from our Deterfix range.

### Storage:

- Temperature from 5°C to 40°C.
- Optimal performance is obtained if the product is stored for a period of maximum 24 months in a dry, indoor, frost-free place and in its unopened original packaging.

## TYPICAL CHARACTERISTICS

| PROPERTIES                              | VALUES      |              |             | UNITS | STANDARDS            |
|-----------------------------------------|-------------|--------------|-------------|-------|----------------------|
|                                         | 22          | 32           | 46          |       |                      |
| Aspect at 20°C                          |             | Clear Liquid |             | /     | Internal             |
| Visual color                            |             | Colorless    |             | /     | Internal             |
| Density at 20°C                         |             | 0,85         |             | g/cm³ | ISO 12185            |
| Viscosity at 40°C                       | 20,0 – 24,0 | 29,0 – 35,0  | 42,0 – 50,0 | cSt   | ISO 3104 / ASTM D445 |
| Flash point                             |             | > 200        |             | °C    | ISO 2592             |
| Copper strip test                       |             | 1a           |             | /     | ISO 2160             |
| <u>Oscillation friction test (SRV):</u> |             |              |             |       |                      |
| - Friction coefficient                  |             | < 0,1        |             | /     | DIN 62136 - 1        |
| - Wear scar length (ball)               |             | < 0,6        |             | mm    |                      |
| - Wear depth (plate)                    |             | < 1          |             | µm    |                      |
| - Load capacity                         |             | > 1000       |             | N     |                      |

*Above characteristics are typical values given as an information.*

This lubricant used as recommended and for the application for which it has been designed does not present any particular risk.

A material safety data sheet conforming to the regulations in use in the E.C. can be obtained from your local commercial adviser or downloaded at [ms-sds.totalenergies.com](http://ms-sds.totalenergies.com)