

# **MAK TEXTROL EE 11**

# Energy efficient spindle oil for textile spinning frames

MAK Textrol EE 11 is a superior quality spindle oil developed for lubricating the bearings of ring frames in textile industries. It is formulated with high quality severely hydroprocessed mineral base oils and a high performance additive system designed to provide outstanding resistance to oxidation and thermal stress. Special antiwear additive package provides exceptional equipment protection against low temperature wear and offers reliability under stressed operating conditions. High quality base oil coupled with special friction modifier has the potential for energy efficiency during the operation of the ring frames. This oil is of washable type and leaves no stain on threads or cloth. MAK Textrol EE 11 is compatible with the seal materials and paints normally specified for use with mineral oils.

#### **Applications:**

MAK Textrol EE 11 is recommended for lubrication of spindle bearings of textile spinning frames. These bearings generally run at a speed of more than 20000 rpm. It is also suitable for automated machine tool bearings running at a very high speed.

## Performance/ Benefits:

**Energy Saving Potential** – special lubricity agents reduces the coefficient of friction to offer energy efficiency potential during operation. Offers savings in power consumption in the spinning frames.

**Outstanding Oxidation Stability** – outstanding resistance to the effects of oxidising agents. Resists sludge and deposit formation. Ensures reliability, longer operating life and less maintenance.

**Excellent Demulsibility** – excellent water separation characteristics for smooth and efficient operation. Maintains critical oil film between highly loaded parts.

**Excellent Thermal Stability** – provides resistance to thermal break-down and capability to work under varied operating temperatures to offer optimum life and performance. Offers longer oil life.

**Antiwear Property** – helps minimise wear of machine components. Offers reliability.

**Strong Rust & Corrosion Protection** – prevents rusting and corrosion. Fewer unscheduled stoppages and lower maintenance costs.

**Non-Staining** – does not stain the threads or the machine parts that come in contact with the oil.

## **Specification:**

Proprietary Grade

## Approval:

Approved by M/s. Lakshmi Machine Works Ltd., Coimbatore (LMW) for their textile spinning machine

Typical Physico-Chemical Data: MAK Textrol EE 11

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|--|------------|-------------|
| Characteristics                                    | Method     | Value       |
| Appearance   | Visual     | Clear fluid |
| Density, g/cc @15°C                                | ASTM D1298 | 0.845       |
| Kinematic Viscosity @40°C, cSt                     | ASTM D445  | 10.9        |
| Viscosity Index                                    | ASTM D2270 | 104         |
| Pour Point, °C                                     | ASTM D97   | -15         |
| Flash Point, COC, <sup>o</sup> C                   | ASTM D92   | 186         |
| Copper Corrosion, 100°C, 3 hrs.                    | ASTM D130  | 1b          |
| Rust Test  | ASTM D665  | Pass        |

#### Storage & Handling:

The product should be stored inside. Keep it properly sealed to avoid contamination. Avoid freezing. Shelf life is 3 yrs. under protected storage conditions.

## **Health & Safety:**

It is unlikely to be hazardous when properly used in recommended applications. Contamination of the coolant from other oils, greases, chemicals, dirty water etc. can occur during the use. It should be avoided. Regular monitoring of the in-use product is recommended.