



# Spindle/Needle Bearing Lubricants

## Typical Specifications

Engine Armour Spindle/Needle Bearing Lubricants are low viscosity oils used to lubricate the bearings of commercial sewing and textile equipment where the yarn or fabric does not contact the lubricant. These oils are also recommended for high-speed spindle bearings in precision grinders and other machine tools requiring low-viscosity oils. The product offers strong oxidation and rust resistance properties. The higher the viscosity index (VI) of these oils reduced the tendency for stray mist or fogging in higher speed applications.

Engine Armour Spindle/Needle Bearing Lubricants are suitable for use wherever strong antiwear protection, oxidation protection, and rust inhibition are required.

Not recommended for applications where the spindle oil contact the yarn or Fabric.

Applications: (Cincinnati Machine)

<b>ISO Grade</b>	<b>5</b>	<b>10</b>	<b>15</b>	<b>22</b>	<b>32</b>
<b>API Gravity</b>	<b>28.7</b>	<b>32.0</b>	<b>33.8</b>	<b>33.0</b>	<b>30.0</b>
<b>Viscosity cSt</b>					
<b>@ 40 C</b>	<b>5.0</b>	<b>10.0</b>	<b>15.0</b>	<b>22.0</b>	<b>32.0</b>
<b>@ 100 C</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>4.2</b>	<b>5.4</b>
<b>Vis Index</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>100</b>	<b>100</b>
<b>Flash Point C</b>	<b>130</b>	<b>150</b>	<b>170</b>	<b>200</b>	<b>200</b>
<b>Pour Point C</b>	<b>-21</b>	<b>-15</b>	<b>-15</b>	<b>-15</b>	<b>-12</b>
<b>Rust ASTM D 665 A,B</b>	<b>Pass</b>	<b>Pass</b>	<b>Pass</b>	<b>Pass</b>	<b>Pass</b>
<b>Corrosion</b>					
<b>ASTM D 130</b>	<b>Pass</b>	<b>Pass</b>	<b>Pass</b>	<b>Pass</b>	<b>Pass</b>
<b>Demulsibility</b>					
<b>ASTM D 2711</b>	<b>Pass</b>	<b>Pass</b>	<b>Pass</b>	<b>Pass</b>	<b>Pass</b>
<b>Oxidation, S-200</b>	<b>Pass</b>	<b>Pass</b>	<b>Pass</b>	<b>Pass</b>	<b>Pass</b>
<b>Foam Inhibition</b>					
<b>ASTM D892</b>	<b>Pass</b>	<b>Pass</b>	<b>Pass</b>	<b>Pass</b>	<b>Pass</b>
<b>FZG Load Stage</b>	<b>Pass</b>	<b>Pass</b>	<b>Pass</b>	<b>Pass</b>	<b>Pass</b>

The data presented in this specification sheet are believed to be accurate; however, Engine Armour shall not be liable for its content and makes no warranty with respect thereto.