Rheolube® 462 Low-Temperature Grease

Synthetic hydrocarbon grease with superior corrosion protection, and resistance to oxidation to prolong automotive component service life.

Rheolube® 462 was formulated for low-temperature applications to exceed the OEM requirement of -40°C. The grease has a long service life due to its resistance to oxidation, and demonstrates improved load carrying ability and anti-wear performance over competitive greases. Nye’s advanced formulation offers advantages in many plastic-on-plastic gears or plastic-on-metal material combinations for the automotive industry.

**PRODUCT DESCRIPTION**

Rheolube® 462 is a lithium soap thickened synthetic hydrocarbon grease, designed to perform at extremely low temperatures, while providing superior wear protection across the usable temperature range. The grease contains a UV indicator for visual inspection.

**ADVANTAGES OF RHEOLUBE® 462**

- Superior corrosion protection
- Excellent load carrying ability
- Resistance to oxidation and aging
- Exceeds OEM requirement of -40°C
- Reduces wear
- Prolongs component life

**TYPICAL APPLICATIONS**

Developed for automotive applications, including small gears and rolling bearings found in motors, electromechanical devices and electric signaling systems. 462 can also be used in the following applications:

**EXTERIOR**
- Sunroof
- Exterior Mirrors
- Headlights
- Wiper Motors

**CHASSIS**
- Steering Column Systems
- Electric Braking Systems

**INTERIOR**
- Seating Systems
- Door Lock Mechanisms
- Window Lifters
- Headrests
- HVAC Actuators

**POWERTRAIN**
- Gear Shift Actuators
### TYPICAL PROPERTIES: RHEOLUBE® 462 VS. COMPETITIVE GREASE

<table>
<thead>
<tr>
<th>Lubricant Properties</th>
<th>Conditions</th>
<th>Rheolube® 462</th>
<th>Competitive Grease</th>
<th>Test Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemistry</td>
<td>Lithium Soap / PAO</td>
<td>Lithium Soap / PAO</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Service Temperature Range (°C)</td>
<td>-54 to 130</td>
<td>-60 to 130</td>
<td></td>
<td>ASTM D-217</td>
</tr>
<tr>
<td>Color / Texture</td>
<td>Beige / Smooth</td>
<td>Beige / Smooth</td>
<td></td>
<td>ASTM D-1403</td>
</tr>
<tr>
<td>NLGI Grade</td>
<td>2</td>
<td>2</td>
<td></td>
<td>ASTM D-2265</td>
</tr>
<tr>
<td>Penetration</td>
<td>P0 (25°C)</td>
<td>272</td>
<td>276</td>
<td>ASTM D-217</td>
</tr>
<tr>
<td></td>
<td>P60 (25°C)</td>
<td>271</td>
<td>272</td>
<td>ASTM D-1403</td>
</tr>
<tr>
<td>Dropping Point</td>
<td>1hr, 80°C</td>
<td>203°C</td>
<td>195°C</td>
<td>ASTM D-2265</td>
</tr>
<tr>
<td>Copper Corrosion</td>
<td>24 hrs, 150°C</td>
<td>1a, Slight Tarnish</td>
<td>2c, Moderate Tarnish</td>
<td>ASTM D-4048</td>
</tr>
<tr>
<td>EMCOR Test (3% synthetic sea water)</td>
<td>0.0</td>
<td>5.5</td>
<td></td>
<td>ASTM D-6138</td>
</tr>
<tr>
<td>SRV OK Load</td>
<td>50 Hz, 1.0 mm stroke, 75°C</td>
<td>1600 N</td>
<td>700 N</td>
<td>ASTM D-5705</td>
</tr>
<tr>
<td>4-Ball Wear</td>
<td>COF</td>
<td>0.08</td>
<td>0.10</td>
<td>ASTM D-2266</td>
</tr>
<tr>
<td></td>
<td>Scar</td>
<td>0.51 mm</td>
<td>0.57 mm</td>
<td>ASTM D-2266</td>
</tr>
<tr>
<td>Low Temp Torque</td>
<td>Starting (-40°C)</td>
<td>594 g-cm</td>
<td>708 g-cm</td>
<td>ASTM D-2596</td>
</tr>
<tr>
<td></td>
<td>10 min. (-40°C)</td>
<td>166 g-cm</td>
<td>431 g-cm</td>
<td>ASTM D-2596</td>
</tr>
<tr>
<td></td>
<td>60 min. (-40°C)</td>
<td>139 g-cm</td>
<td>145 g-cm</td>
<td>ASTM D-2596</td>
</tr>
</tbody>
</table>

### PACKAGING OPTIONS

Nye greases are available in a variety of packaging sizes for both high-volume production dispensing and small-volume dispensing.

- 1 kg jar
- 35 lb pail
- 385 lb drum
- 400 g cartridge

Please contact us at orders@nyelubricants.com for more information.

### Since 1844: Our performance is reflected in the value we bring to our customers.

Nye Lubricants is a leader in the innovation, formulation and provision of synthetic lubricants, enabling and improving breakthrough products and critical new technologies. We bring proven experience, deep technical knowledge and customer focus to solve our customers’ toughest challenges, adding tangible value to products in a wide range of industries and applications.

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