**TOUGHLIX GREASE RB**

TOUGHLIX GREASE RB is a mineral-oil-based lithium complex soap thickened grease, containing performance additives. TOUGHLIX GREASE RB has superior shear stability, heat resistance and water resistance due to its unique manufacturing method and strong thickener micell structure. TOUGHLIX GREASE RB which is formulated with most suitable organic molybdenum compound, extreme pressure (EP) agents and rust inhibitors, exhibits exceptional load carrying and anti-wear properties and excellent corrosive preventive property. TOUGHLIX GREASE RB is a multipurpose grease especially intended for use in roller bearings operating.

**● SPECIAL FEATURES**

1. **Outstanding Heat Resistance**

TOUGHLIX GREASE RB formulated with lithium complex soap can withstand higher temperatures than traditional lithium greases and exhibits little penetration change. This grease can be used in a very wide temperature range, from -20°C to 175°C.

2. **Small Bearing Temperature Rise**

TOUGHLIX GREASE RB has better fluidity compared to lithium soap greases, so that it will prevent bearing temperature rise. It is expected to prolong the life of instruments.

3. **Good Rust Protection and Water Resistance.**

TOUGHLIX GREASE RB is fortified with excellent rust and corrosion inhibitors, so that it will provide superior rust protection under severe operating conditions. This product also has good water resistance.

4. **Outstanding anti-wear and high extreme pressure characteristics**

TOUGHLIX GREASE RB, which is formulated with organic molybdenum compound and extreme pressure agent, exhibits outstanding anti-wear and high extreme pressure characteristics. Its excellent performances were recognized in road test using trailer with load capacity of over 100 tons.

**● Application**

(1) Rolling bearings of large-size industrial machines
- Bearings of paper machine partially wetted with acidic water which support the rolls in paper-manufacturing company
- Bearings of large size industrial machines used in acidic atmosphere at galvanizing plant

(2) High-load wheel bearings of large-sized vehicles
(3) Rolling bearings of electric motor, blower and others
(4) Lubrication point under severe conditions of heat, load and water-soak

**● CONTAINERS**

- 180kg drum, 16kg can,
- 400 g bellows-type tube (20 pcs.)

**● Typical Properties of TOUGHLIX GREASE RB**

<table>
<thead>
<tr>
<th>Grade</th>
<th>0</th>
<th>1</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Yellow Semi solid</td>
<td>Yellow Semi solid</td>
<td>Yellow Semi solid</td>
</tr>
<tr>
<td>Penetration(25°C, Worked 60 Strokes)</td>
<td>363</td>
<td>315</td>
<td>286</td>
</tr>
<tr>
<td>Dropping point °C</td>
<td>245</td>
<td>Over 250</td>
<td>Over 250</td>
</tr>
<tr>
<td>Oil separation (100°C, 24h), mass%</td>
<td>8.6</td>
<td>3.2</td>
<td>0.7</td>
</tr>
<tr>
<td>Copper corrosion (100°C, 24h)</td>
<td>No color change</td>
<td>No color change</td>
<td>No color change</td>
</tr>
<tr>
<td>High speed four-ball test</td>
<td>Weld load, N</td>
<td>3923</td>
<td>3923</td>
</tr>
<tr>
<td>Corrosion preventive property</td>
<td>EMCOR test: artificial water</td>
<td>#0(no corrosion)</td>
<td>#0(no corrosion)</td>
</tr>
<tr>
<td>Water washing resistance (38°C, 1h), mass%</td>
<td>9.6</td>
<td>2.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Approx. operating temperature range, °C</td>
<td>-20 to 175</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Handling Precautions

Follow these precautions when handling this product.

<table>
<thead>
<tr>
<th>Composition</th>
<th>Base Oil, Thickener, Additives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Precautionary pictograms:</td>
<td><img src="image1.png" alt="Warning" /> <img src="image2.png" alt="Signal" /></td>
</tr>
<tr>
<td>Signal word:</td>
<td>Warning</td>
</tr>
<tr>
<td>Hazard Statement:</td>
<td>Causes serious eye irritation. May cause allergic skin reaction. May cause damage to organs (or state all organs affected (blood systems)).</td>
</tr>
</tbody>
</table>
| Precautionary Statements: | - Do not handle until all safety precautions have been read and understood.  
- Wear protective gloves/protective clothing/eye protection/face protection.  
- Do not allow the eyes to become exposed to the product. Do not swallow the product.  
- Contaminated work clothing should not be allowed out of the workplace.  
- Do not breathe dust/fume/gas/mist/vapours/spray.  
- Wash hands thoroughly after handling.  
- Do not eat, drink or smoke when using this product. |
| Response | - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.  
- IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.  
- If the eyes are exposed to the product: Rinse the eyes with plenty of running water and immediately contact a physician.  
- IF ON SKIN: Wash with plenty of soap and water.  
- IF exposed or concerned: Call a POISON CENTER or doctor/physician.  
- Take off contaminated clothing and wash before reuse.  
- If skin irritation or a rash occurs: Get medical advice/attention.  
- IF IN EYES: Rinse continuously with water for several minutes. Continue EYES: Rinse continuously with water for several minutes. |
| Storage | - The product must be stored in a cool, well-ventilated location where it will not be exposed to direct sunlight.  
- Containers that have been opened must be tightly sealed.  
- Store locked up. |
| Disposal | - Dispose of contents/container in accordance with local/regional/national/international regulations.  
- If there are any doubts about proper methods of handling the product, contact the point of purchase before proceeding with usage. |