MULTINOC UREA
A UREA GREASE FOR HIGH-SPEED ANTIFFRITION BEARINGS

MULTINOC UREA is a specially prepared grease for high-speed antifriction bearings used at high temperatures. It delivers long life at high temperatures with both large and small bearings. MULTINOC UREA has been newly developed using a highly refined mineral oil base with organic urea compounds used as thickeners.

- **SPECIAL FEATURES**
  1. **Long Life at High Temperatures**
     MULTINOC UREA was carefully developed to ensure that every factor that can affect the life of a grease provides the best performance possible. It has a high dropping point; its base oil offers superior oxidation stability with little evaporation; its thickeners are ashless and will not cause oxidation degradation of the base oil; and its antioxidants are very effective even at high temperatures. MULTINOC UREA delivers bearing lubrication life five times longer than conventional lithium high-grade multipurpose grease, and it can be used at temperatures as high as 175°C.
  2. **Usable with Wide Range of Bearings**
     The penetration and base oil viscosity of MULTINOC UREA have been chosen to allow the grease to be used with all types of bearings.
  3. **Superior Rust Prevention**
     MULTINOC UREA provides excellent rust prevention even with bearings affected by seawater, such as those used in marine electric motors and on dredging barges.
  4. **Excellent Water Resistance**
     MULTINOC UREA does not dissolve easily in water, and since it softens very little even when mixed with moisture, there is no danger of leaking.

- **APPLICATIONS**
  MULTINOC UREA is ideal for the following demanding situations:
  1. When exposed to temperatures up to 175°C.
  2. When there is a danger of rust, such as in high humidity or in ocean air.
  3. When exposure to moisture is unavoidable.

**Examples:**
Bearings with type F or H electric motors used in any kind of industrial machinery; bearings in electric components in automobiles; bearings in marine electric motors; pump bearings in dredging barges; and bearings in machine tools and textile mills.

- **CONTAINERS**
  16-kg pail cans.

- **TYPICAL TEST DATA FOR MULTINOC UREA**

<table>
<thead>
<tr>
<th>Thickeners</th>
<th>Organic urea compounds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Penetration (60 strokes)</td>
<td>290</td>
</tr>
<tr>
<td>(100,000 strokes)</td>
<td>319</td>
</tr>
<tr>
<td>Dropping point °C</td>
<td>over 250</td>
</tr>
<tr>
<td>Oxidation stability (99°C,100h) MPa</td>
<td>0.0196</td>
</tr>
<tr>
<td>Oil separation (100°C,24h) mass%</td>
<td>1.8</td>
</tr>
<tr>
<td>Evaporation (99°C,22h) mass%</td>
<td>0.52</td>
</tr>
<tr>
<td>Rinsed water resistance (38°C 1h) mass%</td>
<td>0.7</td>
</tr>
<tr>
<td>Approx. operating temperature range °C</td>
<td>-20 to 175</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>![Warning] ![Face Protection]</td>
</tr>
<tr>
<td>Signal word:</td>
<td>Warning</td>
</tr>
<tr>
<td>Hazard Statement:</td>
<td>May cause allergic skin reaction. May cause damage to organs (or state all organs affected (blood systems)).</td>
</tr>
</tbody>
</table>
| Precautionary Statements: Prevention | ・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. |
| 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. |