While the speed reduction mechanisms in geared motors can be lubricated with either oil or grease, in recent years the use of grease lubrication has become more common even in high-output geared motors so that the motors can be installed in a greater variety of orientations. As a result, greases with better lubrication performance and durability have become essential. **Pyronoc Universal 00 and 000** were developed specifically to meet these grease requirements of geared motors.

### Special Features

1. **Outstanding Heat Resistance**
   
   **Pyronoc Universal 00 and 000** have a dropping point of over 250°C, so they resist softening at high temperatures and continue to provide very good lubrication even in hot environments.

2. **Excellent Load-Bearing Performance**
   
   **Pyronoc Universal 00 and 000** have excellent load-bearing performance, so they provide superb lubrication even at points that are exposed to high loads, such as in geared motors.

3. **Superb Oxidation Stability**
   
   The thickeners in **Pyronoc Universal 00 and 000** are urea-type organic compounds that contain no metal, so they have extremely good oxidation stability without the oxidative degradation that can be caused by metallic ingredients. Their base oils are highly refined mineral oils and they also contain high-performance oxidation inhibitors, so these greases are very resistant to oxidation.

4. **Excellent Shear Stability**
   
   Thanks to their outstanding shear stability, **Pyronoc Universal 00 and 000** resist softening and can be used continuously for long periods when exposed to the strong shear forces in geared motors.

5. **Very Little Leaking of Grease**
   
   The grease used in geared motors must provide lubrication while sealed inside the motor case for long periods of time. **Pyronoc Universal 00 and 000** resist oil separation, so they provide long-term stable operation with little leakage through seals.

### Applications

- Use **Pyronoc Universal 000** for normal applications in geared motors and machine gears.
- Use **Pyronoc Universal 00** when the prevention of seal leakage is especially important.

### Containers

- 180-kg drums and 16-kg pail cans.
Typical Properties of Pyronoc Universal

<table>
<thead>
<tr>
<th>Grades</th>
<th>000</th>
<th>00</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thickener</td>
<td>Urea-type organic compounds</td>
<td>Urea-type organic compounds</td>
</tr>
<tr>
<td>Kinematic viscosity (40°C) mm²/s</td>
<td>178</td>
<td>178</td>
</tr>
<tr>
<td>of base oil (100°C) mm²/s</td>
<td>16.3</td>
<td>16.3</td>
</tr>
<tr>
<td>Penetration (25°C, 60 strokes)</td>
<td>455</td>
<td>420</td>
</tr>
<tr>
<td>Dropping point °C</td>
<td>245</td>
<td>Over 250</td>
</tr>
<tr>
<td>Oil separation (100°C, 24 h) mass%</td>
<td>9.2</td>
<td>4.9</td>
</tr>
<tr>
<td>Evaporation (99°C, 22 h) mass%</td>
<td>0.53</td>
<td>0.53</td>
</tr>
<tr>
<td>Oxidative stability (99°C, 100 h) kPa</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>Timken number kg</td>
<td>20</td>
<td>20</td>
</tr>
</tbody>
</table>

Note: The typical properties may be changed without notice. (January 2010)

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Handling Precautions

Follow these precautions when handling this product.

Composition: Base Oil, Thickener, Additives

Precautionary pictograms: ![Warning] ![Person]

Signal word: Warning

Hazard Statement: May cause allergic skin reaction
May cause damage to organs (or state all organs affected (blood systems)).

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.