HYRANADO PTF 26
Hydraulic fluid for numerically controlled machinery

HYRANADO PTF 26 is a hydraulic fluid for numerical control (NC) machines. It is formulated with highly refined paraffin base oils and carefully selected additives such as viscosity index improvers, anti-wear agents, antioxidants and rust inhibitors. Many numerical control machines use hydraulic pressure for driving machinery. A highly accurate hydraulic mechanism is required to accurately perform various operations according to command pulses issued from the numerical controller. HYRANADO PTF 26 exerts outstanding performance as hydraulic oil for various numerical control machines as well as electric and hydraulic pulse motors, which are used in many countries in Japan. It is a lubricant that satisfies high precision, labor saving, and efficiency.

● SPECIAL FEATURES

1. Excellent temperature-viscosity characteristics
   HYRANADO PTF 26 has a significantly higher viscosity index than general hydraulic fluid, so viscosity change with temperature change is extremely small, and smooth operation can be obtained over a wide temperature range.

2. Excellent shear stability
   HYRANADO PTF 26 has very low viscosity drop even if it receives large shear force and keeps stable viscosity necessary for operation. Because viscosity index improver added has good shear stability.

3. Excellent anti-wear performance
   HYRANADO PTF 26 prevents wear in the pump and system for a long time due to excellent anti-wear property, and always keeps accurate operation.

4. Less influence on seal material
   HYRANADO PTF 26 has high aniline point due to the combination of carefully selected base oil and additives, and has little influence on rubber seal material.

5. Excellent oxidation stability
   HYRANADO PTF 26 which is formulated with an excellent antioxidant has less oxidation deterioration and it's excellent performance is sustained even if it is used for a long time.

6. Excellent rust prevention
   HYRANADO PTF 26 with excellent rust inhibitor prevents rust from occurring due to moisture mixed in hydraulic system.

● APPLICATIONS

Hydraulic devices such as numerical control (NC) machine tools, drafting machines, welding machines, gas cutting machines.

● CONTAINERS

200-liter drums and 20-liter cans
### Typical Properties of HyRando PTF 26

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Color (ASTM)</strong></td>
<td>L0.5</td>
</tr>
<tr>
<td><strong>Density (15°C)</strong> g/cm³</td>
<td>0.865</td>
</tr>
<tr>
<td><strong>Kinematic Viscosity (40°C)</strong> mm²/s</td>
<td>25.74</td>
</tr>
<tr>
<td><strong>Viscosity Index</strong></td>
<td>244</td>
</tr>
<tr>
<td><strong>Flash Point (COC)</strong> °C</td>
<td>170</td>
</tr>
<tr>
<td><strong>Pour Point</strong> °C</td>
<td>-27.5</td>
</tr>
<tr>
<td><strong>Aniline Point</strong></td>
<td>92</td>
</tr>
<tr>
<td><strong>Acid number</strong> mgKOH/g</td>
<td>0.92</td>
</tr>
<tr>
<td><strong>Copper strip corrosion (100°C, 3 h)</strong></td>
<td>1</td>
</tr>
<tr>
<td><strong>Rust prevention (distilled water, 60°C, 24 h)</strong></td>
<td>No rust</td>
</tr>
<tr>
<td><strong>Foaming</strong></td>
<td></td>
</tr>
<tr>
<td>Seq. I mL/mL</td>
<td>10/0</td>
</tr>
<tr>
<td>Seq. II mL/mL</td>
<td>30/0</td>
</tr>
<tr>
<td>Seq. III mL/mL</td>
<td>30/0</td>
</tr>
</tbody>
</table>

Note: The typical properties may be changed without notice. (January 2018)

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### Handling Precautions

- **Composition:** Base Oil, Additives
- **Precautionary pictograms:** Not applicable
- **Signal word:** Not applicable
- **Hazard Statement:** Not applicable
- **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.
    - 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.
  - 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.
  - 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.