

# UNIWAY D

## A LUBRICANT FOR MACHINE TOOL SLIDEWAYS

**UNIWAY D** is a slideway oil which also serves as a hydraulic fluid. **UNIWAY D** is ideal for machine tools with oil static pressure sliding surfaces and others. **UNIWAY D** with low coefficient of friction prevents stick-slip during low speed feed. In addition, **UNIWAY D** makes high precision machining possible because it keeps the change of the floating up of the table small at high speed feed. **UNIWAY D** is the hydraulic oil or the slideway oil specially designed for the sliding surface of machine tools and can be used under a wide range of conditions.

### ● Special Features

#### 1. Superior lubrication performance

**UNIWAY D** does not cause stick-slip or jump at low speed feed, and it shows excellent lubrication performance. **UNIWAY D** makes high precision machining possible because it reduces the change in the floating up of the table even at high speed feed like a flat mill.

#### 2. Ideal for use in hydraulic power unit

Thanks to its excellent thermal stability and oxidation stability, **UNIWAY D** resists sludge formation. Therefore, **UNIWAY D** can make a smooth operation, even if it is also used as a hydraulic fluid of the machine tool.

#### 3. Can be used for longer periods

**UNIWAY D** occurs easily neither oxidation nor sludge, so it can be used for a long time.

#### 4. Good corrosion protection

**UNIWAY D** is excellent in corrosion resistance of iron and copper alloys and prevents the formation of rust and stain.

### ● Grades and applications

**UNIWAY D** is available in two grades: 32 and 68. **UNIWAY D** can be used for lubricating oil on sliding surfaces in a wide range of conditions from low speed to high speed. **UNIWAY D** can also be used as a hydraulic fluid for machine tools.

### ● Containers

200-liter drums and 20-liter cans

### ● Typical properties of UNIWAY D

| Grade   |          |                    | 32      | 68      |
|---|----------|--------------------|---------|---------|
| Color   | (ASTM)   |                    | L6.5    | L6.5    |
| Density   | (15 °C)  | g/cm <sup>3</sup>  | 0.874   | 0.888   |
| Kinematic viscosity                             | (40 °C)  | mm <sup>2</sup> /s | 31.6    | 68.5    |
|   | (100 °C) | mm <sup>2</sup> /s | 5.52    | 8.92    |
| Viscosity index                                 |          |                    | 110     | 103     |
| Acid number                                     |          | mgKOH/g            | 0.32    | 0.32    |
| Flash point                                     | (COC)    | °C                 | 212     | 230     |
| Pour point                                      |          | °C                 | - 15    | - 15    |
| Rust prevention ( Distilled water , 60 °C, 24h) |          |                    | No rust | No rust |
| Copper strip corrosion (100 °C, 3h)             |          |                    | 1       | 1       |
| Friction coefficient (Pendulum type II)         |          |                    | 0.12    | 0.12    |

Note: The typical properties may be changed without notice. (June 2011)



## Handling Precautions

▼ Follow these precautions when handling this product.

|                                  |  |
|----------------------------------|--|
| <b>Composition :</b>             | Base Oil, Additives  |
| <b>Precautionary pictograms:</b> | Not applicable   |
| <b>Signal word:</b>              | Not applicable   |
| <b>Hazard Statement:</b>         | Not applicable   |
| <b>Precautionary Statements:</b> |  |
| <b>Prevention</b>                | <ul style="list-style-type: none"><li>• Do not handle until all safety precautions have been read and understood.</li><li>• Wear protective gloves/protective clothing/eye protection/face protection.</li><li>• Do not allow the eyes to become exposed to the product. Do not swallow the product.</li><li>• Wash hands thoroughly after handling.</li><li>• Do not eat, drink or smoke when using this product.</li></ul> |
| <b>Response</b>                  | <ul style="list-style-type: none"><li>• IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.</li><li>• IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.</li><li>• If the eyes are exposed to the product: Rinse the eyes with plenty of running water and immediately contact a physician.</li><li>• IF ON SKIN: Wash with plenty of soap and water.</li></ul>  |
| <b>Storage</b>                   | <ul style="list-style-type: none"><li>• The product must be stored in a cool, well-ventilated location where it will not be exposed to direct sunlight.</li><li>• Containers that have been opened must be tightly sealed.</li></ul>   |
| <b>Disposal</b>                  | <ul style="list-style-type: none"><li>• Dispose of contents/container in accordance with local/regional/national/international regulations.</li><li>• If there are any doubts about proper methods of handling the product, contact the point of purchase before proceeding with usage.</li></ul>  |