IND-2509-2007E

## **Uniway XS**

### High Performance Slideway Oil

Uniway XS slideway oil is proud of the world top-level friction characteristics. It was developed for high efficiency machine tools, which operate with greater precision and at higher speeds. Uniway XS dramatically reduces sliding friction and has excellent start-up properties. It reduces stick-slip motion at slow feed speeds and table float at high speeds to enable more precise control of the machine. Uniway XS also separates readily from water soluble cutting fluids, which is beneficial in preventing decomposition of water soluble cutting fluids. Uniway XS is specialized oil designed for slideway lubrication in high precision machine tools, and performs well in all machining conditions.

#### Special Features

#### 1. Excellent friction properties

**Uniway XS** with a low coefficient of friction is superior at start-up. **Uniway XS** also helps prevent stick-slip at slow feed speeds for more accurate machining.

#### 2. Superior oil film strength

Uniway XS which has good oil stickiness property to sliding surfaces forms thick oil films even when working under high load conditions. This helps prevent table lift at high feed speeds, contributing to high machining accuracy. Even on columns and other vertical slideways, an adequate oil film is maintained to provide smooth lubrication.

3. Guaranteed Flash Points above 250 °C Uniway XS (ISO VG 68 or 220) has a guaranteed flash point above 250 °C.

## Rapid separation from water soluble cutting fluids

**Uniway XS** separates readily from water soluble cutting fluids. This helps prevent decomposition of the cutting fluid so it can be used for longer periods.

#### 5. Protects against corrosion

**Uniway XS** is low corrosive to iron and copper alloys and cast iron, so it prevents rust and staining. It also helps prevent corrosion of slideways, whether made of bare metal or coated with special polymers.

#### Grades and applications

**Uniway XS** is available in three grades: 32, 68 and 220. **Uniway XS** is designed for lubrication of slideways under most any conditions for speeds from low to high.

#### Containers

200 liter drums & 20 liter pails

#### Typical properties of Uniway XS

| Grade                  |                               |                   | 32      | 68      | 220     |
|------------------------|-------------------------------|-------------------|---------|---------|---------|
| Color                  | (ASTM)                        |                   | L1.5    | L2.0    | L2.5    |
| Density                | (15 °C)                       | g/cm <sup>3</sup> | 0.874   | 0.874   | 0.894   |
| Kinematic viscosity    | (40 °C)                       | $mm^2/s$          | 33.6    | 69.3    | 215.5   |
|                        | (100 °C)                      | $mm^2/s$          | 5.69    | 9.29    | 19.1    |
| Viscosity index        |                               |                   | 109     | 113     | 99      |
| Acid number            |                               | mgKOH/g           | 0.17    | 0.16    | 0.15    |
| Flash point            | (COC)                         | °C                | 224     | 268     | 294     |
| Pour point             |                               | °C                | -37.5   | -27.5   | -17.5   |
| Rust prevention        | (Distilled water, 60 °C, 24h) |                   | No rust | No rust | No rust |
| Copper strip corrosion | (100 °C, 3h)                  |                   | 1       | 1       | 1       |

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



# Handling Precautions

#### lacksquare Follow these precautions when handling this product.

| Composition:              | Base Oil, Additives   |  |  |
|---------------------------|---|--|--|
| Precautionary pictograms: | Not applicable  |  |  |
| Signal word:              | Not applicable  |  |  |
| Hazard Statement:         | Not applicable  |  |  |
| Precautionary Statements: | • Do not handle until all safety precautions have been read and understood.                   |  |  |
| Prevention                | • 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.  |  |  |