

UNIWAY SF

A LUBRICANT FOR MACHINE TOOL SLIDEWAYS

UNIWAY SF is a slideway oil which also serves as a hydraulic fluid. **UNIWAY SF** is the best to use for machine tool where water soluble cutting fluid is used or machine tool which is provided with fluid static guiding device. In particular, **UNIWAY SF** is excellent for the separation of the water-soluble cutting fluid. Therefore, the floated sliding surface oil can be easily recovered or separated. This leads to prevention of corruption of the water-soluble cutting fluid. **UNIWAY SF** shows good sliding property in the general sliding conditions, since it is formulated with the extreme pressure agents which are carefully selected by our own additive formulation techniques. **UNIWAY SF** can be used in a wide variety of sliding conditions as hydraulic oil or slideway oil for carrying out the process with an emphasis on production efficiency.

● Special Features

1. Rapid separation from water soluble cutting fluids

UNIWAY SF separates readily from water soluble cutting fluids in comparison with conventional slideway oils. This helps prevent corruption of the cutting fluid so it can be used for longer periods.

2. Good friction properties

UNIWAY SF is formulated with carefully selected extreme pressure agents by our own additive formulation techniques. Therefore, **UNIWAY SF** shows good sliding property in the general sliding conditions.

3. Good corrosion protection

UNIWAY SF will not corrode either iron or copper alloys, and it prevents the formation of rust and stain.

4. Ideal for use in hydraulic power unit

* Excellent thermal stability

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

* Can be used for longer periods

UNIWAY SF can withstand repeated long-term use because its separation property with the water-soluble cutting fluid is superior.

● Grades and applications

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

● Containers

200-liter drums and 20-liter cans

● Typical properties of UNIWAY SF

Grade			32	68	220
Color	(ASTM)		L0.5	L1.0	L2.5
Density	(15 °C)	g/cm ³	0.870	0.875	0.891
Kinematic viscosity	(40 °C)	mm ² /s	32.6	66.0	216
	(100 °C)	mm ² /s	5.59	8.82	19.1
Viscosity index			110	108	99
Acid number		mgKOH/g	0.24	0.28	0.28
Flash point	(COC)	°C	230	250	290
Pour point		°C	- 32.5	- 25.0	- 12.5
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

▼ 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:	
Prevention	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• 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.