

UNISOLBLE E-VF

Emulsion Type Cutting Fluid

UNISOLUBLE E-VF is an emulsion-type water-soluble cutting fluid with an excellent balance of machining performance, rust prevention, anti-corrosion characteristics, resistance to decay and foaming prevention. It can be used for cutting a wide range of materials and corresponds to JIS K 2241 Type A1, No.2.

● SPECIAL FEATURES

1. Excellent lubricity to improve machining performance

2. Outstanding rust prevention

Because **UNISOLBLE E-VF** is formulated with high performance anti-rust additives, even in the case of cast iron, it will prevent browning of liquid due to rust.

3. Excellent anti-corrosion characteristics

UNISOLBLE E-VF can be used for a wide range of materials and prevents the color change of the work materials.

4. Superior resistance to decay

UNISOLBLE E-VF can extend the life of fluid due to its original antibacterial substances and base material with excellent resistance to decay.

5. Outstanding foaming prevention

● APPLICATIONS

UNISOLBLE E-VF is suitable for lathe turning, drilling, reaming and end mill processing of ferrous material such as carbon steel and cast iron, and also aluminum alloy.

● DILUTION RATE DURING USE

Cutting of aluminum alloy and ferrous material: 10 to 30 times

The above dilution rates are based on the assumption of standard operating conditions. They should be adjusted depending on the machining conditions and amount of processing.

● CONTAINERS

200-liter drum, 20-liter can

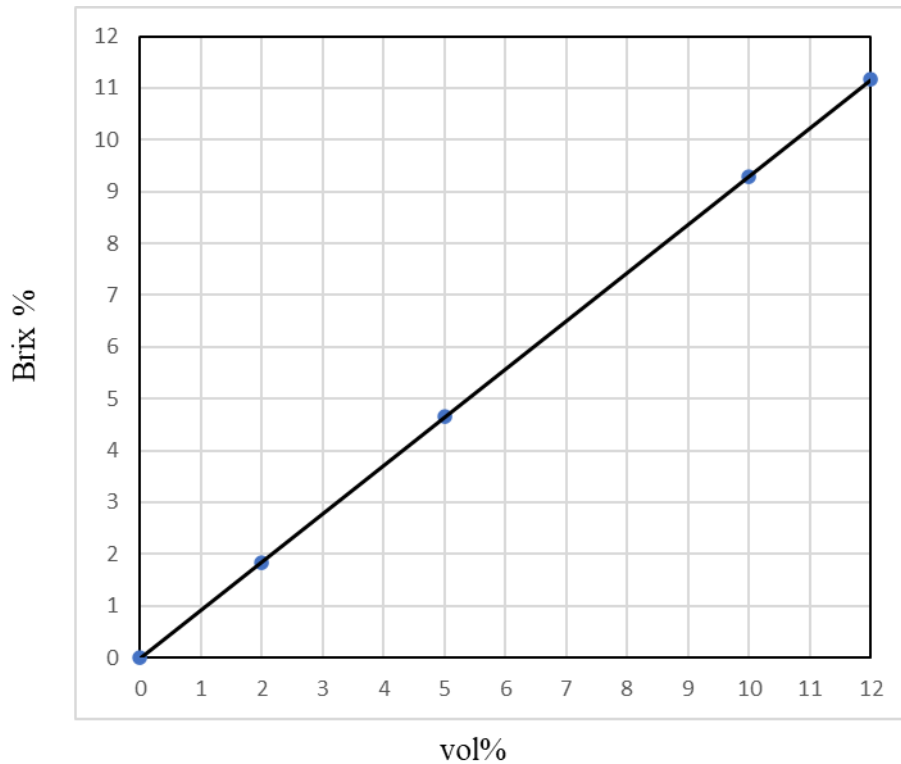
● TYPICAL PROPERTIES OF UNISOLBLE E-VF

Appearance	(original fluid)		Light brown, Liquid
Appearance	(diluted fluid)		White emulsion
Density	(15°C)	g/cm ³	0.886
pH*			8.9
Anticorrosion test*	(RT, 48h)		
Steel sheet			No discoloration
Aluminum sheet			No discoloration
Copper sheet			No discoloration
Foaming*	(24°C)	ml	0
Emulsifying stability*	(RT, 24h)		
Oil layer	(distilled water)	ml	0
cream layer	(distilled water)	ml	0
Oil layer	(hard water)	ml	0
cream layer	(hard water)	ml	2.5

*Measured with 10x diluted fluid (based on JIS K 2241).

Note: The typical properties may be changed without notice. (October 2024)

Concentration Conversion Graph for UNISOLBLE E-VF (Atago Digital Refractometer PR-101)





Handling Precautions

▼ Follow these precautions when handling this product.

Composition :	Water-soluble processing oil; Mixture (Base Oil(s), Additives)
Hazard pictograms:	
Signal word:	Warning
Hazard Statement:	Causes serious eye irritation May cause an allergic skin reaction Harmful to aquatic life Harmful to aquatic life with long lasting effects
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.• Avoid release to the environment.• Contaminated work clothing should not be allowed out of the workplace.• Avoid breathing dust/fume/gas/mist/vapours/spray.• 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/doctor.• 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 skin irritation or a rash occurs: Get medical advice/attention.• IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.• If eye irritation persists: Get medical advice/attention.• Take off contaminated clothing and wash before reuse.
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.