

UNISOLBLE E-VF

Emulsion Type Cutting Fluid

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

● Special Features

1. **Excellent lubrication property to improve the cutting 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 decay resistance**

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

5. **Outstanding foaming prevention**

● Applications

UNISOLBLE E-VF is suitable for lathe turning, drilling, reamer 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 intended for typical operating conditions. The rates must be adjusted depending on the processing conditions and amount of processing.

● Containers

200-liter drum, 20-liter can

● Typical Properties of UNISOLBLE E-VF

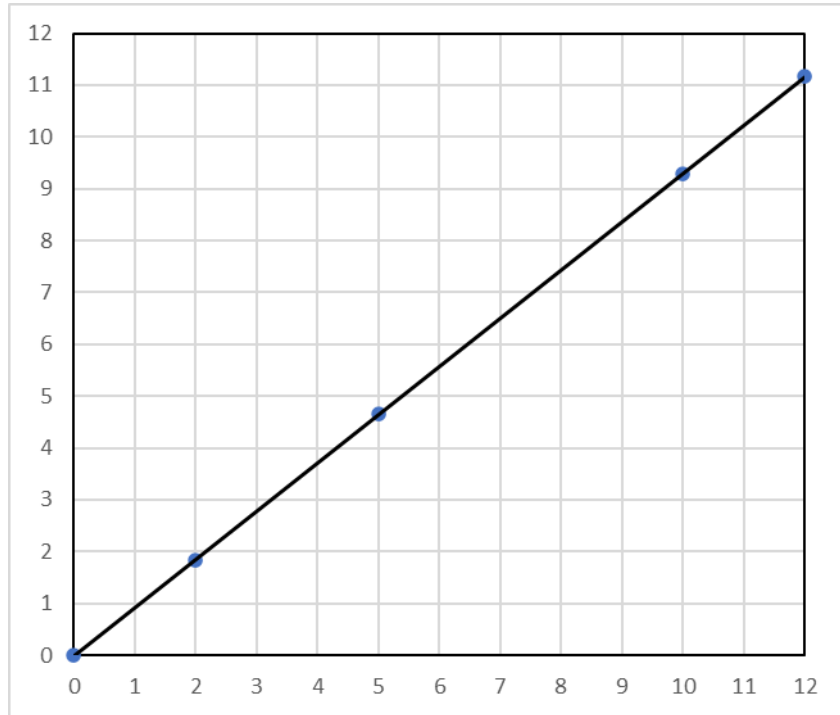
Appearance (original fluid)	Brown
(diluted fluid)	White emulsion
Density (15 °C) , g/cm ³	0.8868
pH *	8.6
Anticorrosion test(RT,48h)*	
Steel sheet	No discoloration
Aluminum sheet	No discoloration
Copper sheet	No discoloration
Foaming* (24°C), ml	0
Emulsifying stability* (RT:24°C)	
Distilled water, ml oil	0
Distilled water, ml creamy	0
Hard water, ml oil	0
Hard water, ml creamy	2.5

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

Note: The typical properties may be changed without notice. (September 2022)

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

Brix%



vol%



Handling Precautions

▼ Follow these precautions when handling this product.

Composition :	Water-soluble processing oil; Mixtures(Base Oil(s), Additives)
Hazard pictograms:	
Signal word:	Warning
Hazard Statement:	Causes serious eye irritation. May cause an allergic skin reaction.
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.• Contaminated work clothing should not be allowed out of the workplace.• Do not allow the eyes to become exposed to the product. Do not swallow the product.
Response	<ul style="list-style-type: none">• IF SWALLOWED: Immediately call a POISON CENTER/doctor.• 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.• IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.• Take off contaminated clothing and wash it before reuse.• 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.