

# RELIACUT FM10

## Non-chlorine Fat-based Anti-mist-reinforced Non-water-soluble Cutting and Grinding Fluid

**RELIACUT FM10** is a chlorine-free fat-based anti-mist-reinforced type non-water-soluble cutting fluid blended with the new oiliness agent and mist inhibitor. **RELIACUT FM10** is the fluid in consideration of the work environment and workability such as odor and color, which can be used for light cutting and grinding of a wide range of materials such as non-ferrous metal, low-carbon steel and low-alloy steel.

### ● Special Features

#### 1. Excellent Cutting and Grinding Performance

Because **RELIACUT FM10** is formulated with highly refined low viscosity base oil and special oiliness agent, it can improve the accuracy in finishing process by the well balanced cooling performance, permeability and processing performance.

#### 2. Excellent Anti-mist Performance

**RELIACUT FM10** contains special mist inhibitor that suppresses oil mist generated during the machining, thus improves the working environment.

#### 3. Low Odor

Since the additives of **RELIACUT FM10** are low odor, the work environment is improved.

#### 4. Visualization of the Machining Point

The machining point can be seen easily, because of the reduced floating mist and thin fluid color on the machining point.

#### 5. Superior in Economy

Since the amount of fluid consumed by adhering to the work-pieces and chips is reduced, **RELIACUT FM10** is economically advantageous due to its low viscosity.

### ● Applications

General cutting\*: non-ferrous metal

\* Lathing, drilling, milling

Light-cutting: cast iron, low carbon steel,  
low-alloy steel, etc.

### ● Containers

200-liter drum, 20-liter can

### ● Typical Properties of RELIACUT FM10

Appearance		Light yellow
Color(ASTM)		L0.5
Density(15°C)	g/cm <sup>3</sup>	0.845
Kinematic viscosity(40°C)	mm <sup>2</sup> /s	7.98
Kinematic viscosity(100°C)	mm <sup>2</sup> /s	2.40
Flash point(COC)	°C	164
Pour point	°C	-25
Acid number	mgKOH/g	0.03
Copper corrosion(100°C, 1h)		1
Fatty content	mass%	5
Sulfur content	mass%	0.12

Note: The typical properties may be changed without notice. (February 2012)



## Handling Precautions

▼ Follow these precautions when handling this product.

<b>! CAUTION</b>  <b>Handling Precautions</b>	<ul style="list-style-type: none"><li>● <u>Inflammation can occur if oil enters the eyes.</u> When handling this oil, wear <u>protective goggles</u> or take other measures to <u>prevent eye contact</u>.</li><li>● <u>Inflammation can occur if oil comes into contact with skin.</u> When handling this oil, wear <u>protective gloves</u> or take other measures to <u>prevent skin contact</u>.</li><li>● <u>The inhalation of mist may cause discomfort.</u> When handling this oil, wear a <u>respirator</u> or take other measures to <u>prevent mist inhalation</u>.</li><li>● Do not drink this oil. (Swallowing this oil can cause diarrhea and nausea.)</li><li>● <u>Keep out of reach of children.</u></li><li>● Read the Safety Data Sheet (SDS) for this product before using the product. Obtain the SDS from where you purchased the product.</li></ul>
<b>First Aid</b>	<ul style="list-style-type: none"><li>● In case of eye contact, rinse eyes thoroughly with clean water and consult with a physician.</li><li>● In case of skin contact, wash skin thoroughly with soap and water.</li><li>● If mist is inhaled, move the person to a location with fresh air, wrap the person in a blanket, keep the person warm and quiet, and consult with a physician.</li><li>● If this oil is swallowed, do not induce vomiting. Consult with a physician immediately.</li></ul>
<b>Disposal of Used Oil and Containers</b>	<ul style="list-style-type: none"><li>● Do not apply pressure to empty containers. The containers may burst if pressure is applied.</li><li>● Do not weld, heat, drill, or cut the containers. The remaining oil may ignite and the containers may explode.</li><li>● Follow all applicable laws and regulations when disposing of used oil or containers. If you are unsure of the proper disposal methods, consult first with the seller of the oil.</li></ul>
<b>Storage Method</b>	Seal the container tightly after use in order to prevent dirt, moisture, etc., from entering the oil. Store in a dark location. Avoid direct sunlight.