PRODUCT BULLETIN

IND-6082-2104E



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# **RELIACUT FM 10**

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

**RELIACUT FM 10** 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 FM 10** 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 FM 10** 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 FM 10** 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 FM 10** 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 FM 10** 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

Appearance		Light yellow
Color(ASTM)		L0.5
Density(15°C)	g/cm <sup>3</sup>	0.845
Kinematic viscosity(40°C)	mm²/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

#### Typical Properties of RELIACUT FM 10

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



## Handling Precautions

▼ Follow these precautions when handling this product.

Composition :	Base Oil, Additives	
Precautionary pictograms:		
Signal word:	Danger	
Hazard Statement:	May be fatal if swallowed and enters airways	
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.	
	• Do NOT induce vomiting.	
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.	
	• Store locked up.	
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.	