

# RELIACUT DM 10

## Inactive Sulfur Type, Non-chlorinated Anti-mist Cutting and Grinding Fluid

**RELIACUT DM 10** is a chlorine-free anti-mist type cutting and grinding fluid formulated with new unique inactive sulfurized extreme-pressure agents and friction modifiers. **RELIACUT DM 10** is a general-purpose product that increased fat and sulfur content to **RELIACUT DS 10** in order to improve the workability. **RELIACUT DM 10** is an oil agent that balances workability, cooling performance and permeability (cleanliness), and is suitable for general machining using a machining center aiming for high efficiency. It is suitable for general processing requiring lubricity such as tapping and automatic lathing. **RELIACUT DM 10** can be used for a wide range of materials from nonferrous metals such as copper materials to carbon steel and alloy steel. **RELIACUT DM 10** corresponds to JIS K 2241 Type N3, No.8.

### ●Special Features

#### 1. Excellent Cutting and Grinding Performance

**RELIACUT DM 10** provides excellent machining performance and longer tool life in general cutting and grinding, because it is blended with highly refined low viscosity base oils, new special inactive sulfurized extreme-pressure agents and friction modifiers.

#### 2. Excellent Anti-mist Performance

**RELIACUT DM 10** contains special mist prevention agents that reduce the amount of oil mist formed during machining. The result is an improved working environment.

#### 3. Low Odor

Since the additives of **RELIACUT DM 10** are low odor, the work environment is improved.

#### 4. Contribution to the viewing of the processing point

**RELIACUT DM 10** also contributes to make a readily visible cutting position since it is light-colored and decreasing oil mist.

#### 5. Economical

Its low viscosity formula means reduced fluid consumption, since less fluid sticks to the workpiece and chips. **RELIACUT DM 10** is a good economic choice.

### ●Applications

- \* General cutting such as lathe manufacturing, drilling and milling for non-ferrous metals and steel materials such as carbon steel and alloy steel
- \* Machining center processing for various materials

### ●Containers

200-liter drums and 20-liter cans

### ●Typical Properties of RELIACUT DM 10

Appearance		yellow liquid
Color(ASTM)		L2.0
Density		0.863
Kinematic viscosity(40°C)	mm <sup>2</sup> /s	10.3
Kinematic viscosity(100°C)	mm <sup>2</sup> /s	2.90
Flash point(COC)	°C	166
Pour point	°C	-22.5
Acid number	mgKOH/g	1.83
Copper corrosion(100°C, 1h)		1
Fatty content	mass%	10
Sulfur content	mass%	1.25

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



## Handling Precautions

▼ Follow these precautions when handling this product.

<b>Composition :</b>	Base Oil, Additives
<b>Precautionary pictograms:</b>	
<b>Signal word:</b>	Danger
<b>Hazard Statement:</b>	Causes serious eye irritation May be fatal if swallowed and enters airways
<b>Precautionary Statements:</b>	
<b>Prevention</b>	<ul style="list-style-type: none"><li>• Do not handle until all safety precautions have been read and understood.</li><li>• Wear protective gloves/protective clothing/eye protection/face protection.</li><li>• Do not allow the eyes to become exposed to the product. Do not swallow the product.</li><li>• Wash hands thoroughly after handling.</li><li>• Do not eat, drink or smoke when using this product.</li></ul>
<b>Response</b>	<ul style="list-style-type: none"><li>• IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.</li><li>• IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.</li><li>• If the eyes are exposed to the product: Rinse the eyes with plenty of running water and immediately contact a physician.</li><li>• IF ON SKIN: Wash with plenty of soap and water.</li><li>• IF IN EYES: Rinse continuously with water for several minutes.</li><li>• Remove contact lenses if present and easy to do. Continue rinsing.</li></ul>
<b>Storage</b>	<ul style="list-style-type: none"><li>• The product must be stored in a cool, well-ventilated location where it will not be exposed to direct sunlight.</li><li>• Containers that have been opened must be tightly sealed.</li><li>• Store locked up.</li></ul>
<b>Disposal</b>	<ul style="list-style-type: none"><li>• Dispose of contents/container in accordance with local/regional/national/international regulations.</li><li>• If there are any doubts about proper methods of handling the product, contact the point of purchase before proceeding with usage.</li></ul>