

# RELIACUT DS 10

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

**RELIACUT DS 10** is a chlorine-free anti-mist type cutting and grinding fluid blended with inactive sulfurized extreme-pressure agents and newly developed friction modifiers. **RELIACUT DS 10**, which has the good balance of cutting performance, cooling performance and permeability(detergency) is suitable for general cutting using a machining center.

### ● Special Features

#### 1. Excellent Cutting and Grinding Performance

Because **RELIACUT DS 10** is blended with highly refined low viscosity base oils, inactive sulfurized extreme-pressure agents and special friction modifiers, it delivers excellent processing performance in general cutting and grinding.

#### 2. Excellent Anti-mist Performance

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

#### 3. Low odor

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

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

**RELIACUT DS 10** enables workers to watch the processing point easily because of the reduced floating mist and light oil color.

#### 5. Superior Cost Performance

**RELIACUT DS 10** is superior in cost performance because it can reduce oil consumption which is removed by attaching on the work piece and cutting powder due to its low viscosity.

### ● Applications

General lathing and processing at machining center of non-ferrous metals and steel materials such as cast iron, low-carbon steel and low-alloy steel.

Suited for the general cutting (lathing, drilling and milling) of non-ferrous metals and steel materials.

### ● Containers

200-liter drums and 20-liter cans

### ● Typical Properties of RELIACUT DS 10

Appearance		light yellow
Color(ASTM)		L1.0
Density(15°C)	g/cm <sup>3</sup>	0.857
Kinematic viscosity(40°C)	mm <sup>2</sup> /s	11.8
Kinematic viscosity(100°C)	mm <sup>2</sup> /s	3.13
Flash point(COC)	°C	178
Pour point	°C	-22.5
Acid number	mgKOH/g	0.22
Copper corrosion(100°C, 1h)		1
Fatty content	mass%	5
Sulfur content	mass%	0.61

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>	May be fatal if swallowed and enters airways
<b>Precautionary Statements:</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>• Do NOT induce vomiting.</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>