

# RELIACUT AS Series

## Active Sulfur Type, Chlorine-free Anti-mist Cutting and Grinding Fluid

**RELIACUT AS series** is a chlorine-free anti-mist type cutting fluid blended with properly-selected active sulfurized extreme-pressure agents combined with new friction modifiers. **RELIACUT AS series** is an oil agent that is well-balanced between processability, cooling performance and permeability (cleanliness), and is suitable for general machining using machining centers and lathes. It is suitable for processing various steel materials such as carbon steel and alloy steel. **RELIACUT AS5** corresponds to JIS K 2241 Type N4, No.5. **RELIACUT AS10** and **RELIACUT AS30** correspond to JIS K 2241 Type N4, No.7.

### ● Special Features

#### 1. Excellent cutting and grinding performances

**RELIACUT AS Series** exhibits excellent machining performance in cutting and grinding processing where machinability is required, because it contains new special active sulfur type extreme pressure agents and friction modifiers in highly refined base oil.

#### 2. Excellent Anti-mist Performance

**RELIACUT AS Series** 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 AS Series** are low odor, the work environment is improved.

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

**RELIACUT AS Series** enables users to observe the processing point easily because of the light color and reduced floating mist.

### ● Applications

#### RELIACUT AS5

Cutting processing (such as fine hole drilling) and honing processing that require permeability to common steel materials

#### RELIACUT AS10

General-purpose cutting such as lathe, drill and milling, and machining center processing for general steel materials

#### RELIACUT AS30

General-purpose cutting such as lathe and milling, and machining center processing for general steel materials

### ● Containers

200-liter drums and 20-liter cans

## ● Typical Properties of RELIACUT AS Series

		AS 5	AS10	AS30
Appearance		Light brown, Liquid	Yellow, Liquid	Yellow, Liquid
Color(ASTM)		L1.5	L2.5	L1.5
Density		0.832	0.862	0.882
Kinematic viscosity(40°C)	mm <sup>2</sup> /s	4.65	11.9	32.0
Kinematic viscosity(100°C)	mm <sup>2</sup> /s	1.69	3.08	5.49
Flash point(COC)	°C	138	174	214
Pour point	°C	-25	-15	-15
Acid number	mgKOH/g	0.32	0.30	0.31
Copper corrosion(100°C, 1h)		4	4	4
Fatty content	mass%	4	4	5
Sulfur content	mass%	0.93	1.13	126


Note: The typical properties may be changed without notice.(July 2016)



## Handling Precautions

▼ Follow these precautions when handling this product.

### RELIACUT AS5, RELIACUT AS10

<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>

RELIACUT AS30

<b>Composition :</b>	Base Oil, Additives
<b>Precautionary pictograms:</b>	Not applicable
<b>Signal word:</b>	Not applicable
<b>Hazard Statement:</b>	Not applicable
<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>
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