IND-6088-2301E

RELIACUT AS Series

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

RELIACUT AS series are chlorine-free anti-mist type cutting fluid blended with properly-selected active sulfurized extreme-pressure agents combined with new friction modifiers. **RELIACUT AS series** are well-balanced among processability, cooling performance and permeability (cleanliness), and are suitable for general machining using machining centers and lathes. They are 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 provide excellent machining performance in cutting and grinding processing where machinability is required, because they contain new special active sulfurized extreme pressure agents and friction modifiers in highly refined base oil.

2. Excellent Anti-mist Performance

RELIACUT AS Series contain special mist inhibitor that suppresses oil mist generated during machining, thus can improve working environment.

3. Low odor

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

4. Visualization of the Machining Point

RELIACUT AS Series enable users to observe the machining 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 turning, drilling and milling, and machining center processing of general steel materials

RELIACUT AS30

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

Containers

200-liter drum and 20-liter can

• Typical Properties of RELIACUT AS Series

| | | AS 5 | AS10 | AS30 |
|------------------------------------|-------------------|----------------------|----------------|----------------|
| Appearance | | Light yellow, Liquid | Yellow, Liquid | Yellow, Liquid |
| Color (ASTM) | | L1.5 | L1.5 | L1.5 |
| Density (15°C) | g/cm ³ | 0.837 | 0.860 | 0.883 |
| Kinematic viscosity (40°C) | mm^2/s | 4.71 | 11.9 | 32.0 |
| Flash point (COC) | °C | 134 | 176 | 214 |
| Pour point | °C | -32.5 | -15.0 | -15.0 |
| Acid number | mgKOH/g | 0.32 | 0.29 | 0.31 |
| Copper strip corrosion (100°C, 1h) | | 4 | 4 | 4 |
| Fatty oil content | mass% | 3.2 | 4.3 | 5 |
| Sulfur content | mass% | 1.11 | 1.15 | 1.29 |

Note: The typical properties may be changed without notice.(January 2023)



Handling **Precautions**

lacktriangledown Follow these precautions when handling this product.

RELIACUT AS5, RELIACUT AS10

| Composition: | Base Oil(s), Additives | | | |
|---------------------------|---|--|--|--|
| Hazard 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/doctor. | | | |
| | • 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. | | | |

RELIACUT AS30

| Composition: | Base Oil(s), Additives | | |
|----------------------------------|--|--|--|
| Hazard pictograms: | Not applicable | | |
| Signal word: | Not applicable | | |
| Hazard Statement: | Not applicable | | |
| 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/doctor. | | |
| | 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. | | |
| 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. | | |
| 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. | | |