

# RELIASOL S-BA(N)

## Water-Soluble Type Cutting Fluid with Excellent Resistance to Decay

**RELIASOL S-BA(N)** is a water-soluble type cutting fluid which is formulated with antibacterial substances and lubricity improver. **RELIASOL S-BA(N)** is excellent in resistance to decay, cutting performance, aluminum discoloration resistance and antifoaming property. **RELIASOL S-BA(N)** does not contain candidate chemical substances subject to the Poisonous and Deleterious Substances Control Law, and is considered for its effects on the human body. Also, it does not contain sulfur, phosphorus and chlorine type extreme pressure agents. **RELIASOL S-BA(N)** is a high performance fluid suitable for metalworking of aluminum alloy, carbon steel, etc. It corresponds to JIS K2241 A 2 type 2.

### ● Special Features

#### 1. Superior Decay Resistance

**RELIASOL S-BA(N)** maintains decay resistance for a long time, because it contains antibacterial substances. Since **RELIASOL S-BA(N)** is also excellent in separability from slideway oil, it is possible to extend the life of the fluid.

#### 2. Good Machining Performance

Because **RELIASOL S-BA(N)** contains lubricity improver, it has good cutting performance.

#### 3. Superior resistance in aluminum discoloration

Because **RELIASOL S-BA(N)** has a composition that prevents discoloration of aluminum alloy, it is suitable for processing aluminum alloy that is easy to discolor, such as die-casting material and duralumin.

#### 4. Outstanding Foaming Prevention

**RELIASOL S-BA(N)** has low foaming property and excellent anti-foaming property.

#### 5. High human safety

**RELIASOL S-BA (N)** is a product that does not contain candidate chemical substances subject to the Poisonous and Deleterious Substances Control Law and takes into consideration the effects on the human body.

### ● Applications

**RELIASOL S-BA(N)** is suitable for lathe turning, drilling, reaming, etc. of ferrous materials such as carbon steel and aluminum alloys.

### ● Dilution Rate During Use

Cutting: 10 to 30 times

The above dilution rates are based on the assumption of standard operating conditions. They should be adjusted depending on the machining conditions and amount of processing.

### ● Containers

200-liter drums, 20-liter cans.

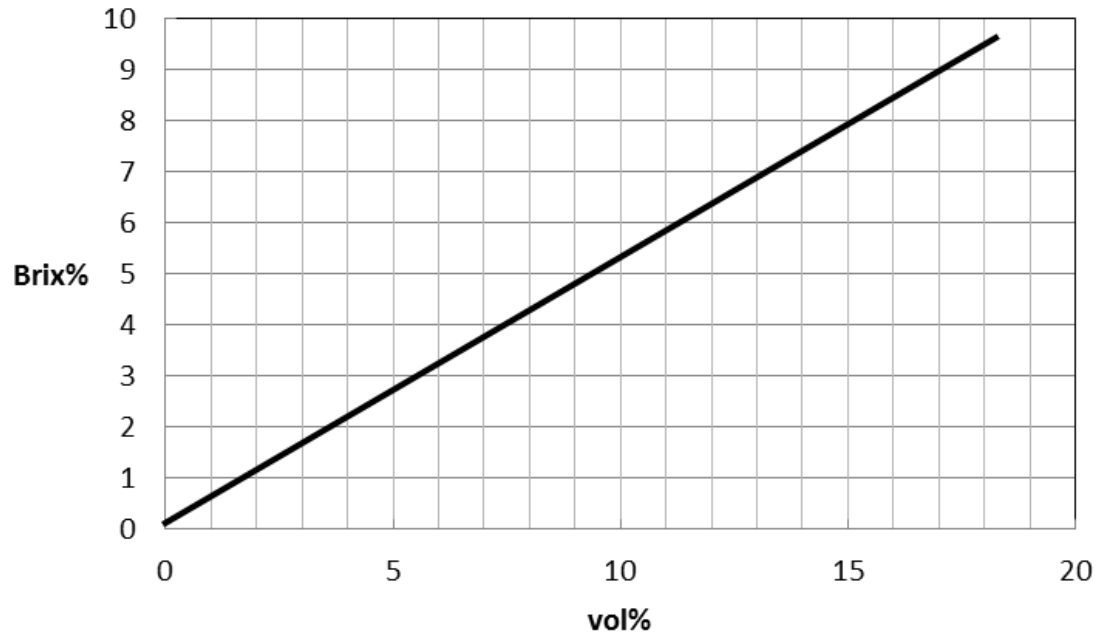
### ● Typical Properties of RELIASOL S-BA(N)

Appearance (original fluid)	Light yellow
(diluted fluid)	Light white transparent
Density (15°C), g/cm <sup>3</sup>	0.989
Surface tension* (25°C), mN/m	35.6
pH*	9.3
Anticorrosion test (RT, 48h)*	
Steel sheet	No discoloration
Aluminum sheet	No discoloration
Copper sheet	No discoloration
Foaming* (24°C), ml	0
Emulsifying stability* (RT, 24°C)	
Distilled water, ml oil	0
Distilled water, ml creamy	0
Hard water, ml oil	0
Hard water, ml creamy	0

\*Measured with 10x diluted fluid

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



**Concentration Conversion Graph for RELIASOL S-BA(N)**  
**(Atago Digital Refractometer PR-101)**





## Handling Precautions

▼ Follow these precautions when handling this product.

<b>Composition :</b>	Water-soluble processing oil; Mixtures
<b>Hazard pictograms:</b>	 
<b>Signal word:</b>	Warning
<b>Hazard Statement:</b>	May cause an allergic skin reaction May cause damage to organs (central nerve system,kidney) May cause damage to organs (central nerve system) through prolonged or repeated exposure Harmful to aquatic life Harmful to aquatic life with long lasting effects
<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>• Avoid release to the environment.</li><li>• Contaminated work clothing should not be allowed out of the workplace.</li><li>• Do not breathe dust/fume/gas/mist/vapours/spray.</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/doctor.</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>• Get medical advice/attention if you feel unwell.</li><li>• If skin irritation or a rash occurs: Get medical advice/attention.</li><li>• Take off contaminated clothing and wash it before reuse.</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>