

RELIASOL S-N(N)

Water-Soluble Type Cutting and Grinding Fluid for General Purpose

RELIASOL S-N(N) is a water-soluble type cutting and grinding fluid that is superior in workability and rust prevention characteristics. **RELIASOL S-N(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-N(N)** corresponds to JIS K2241 Type A2, No. 1.

● Special Features

1. **Excellent lubricity and improved machining performance**

2. **Superior in rust prevention characteristics**

3. **Excellent washability**

Since **RELIASOL S-N (N)** has excellent washability, it contributes to improving the working environment without stickiness..

4. **Superior decay resistance**

5. **High human safety**

RELIASOL S-N (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 SN(N) is suitable for lathe turning, drilling, reaming, etc. of ferrous materials such as carbon steel and cast iron.

● Dilution Rate During Use

Cutting of ferrous materials:10 to 30 times

Grinding of ferrous materials:30 to 50 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 drum, 20-liter can

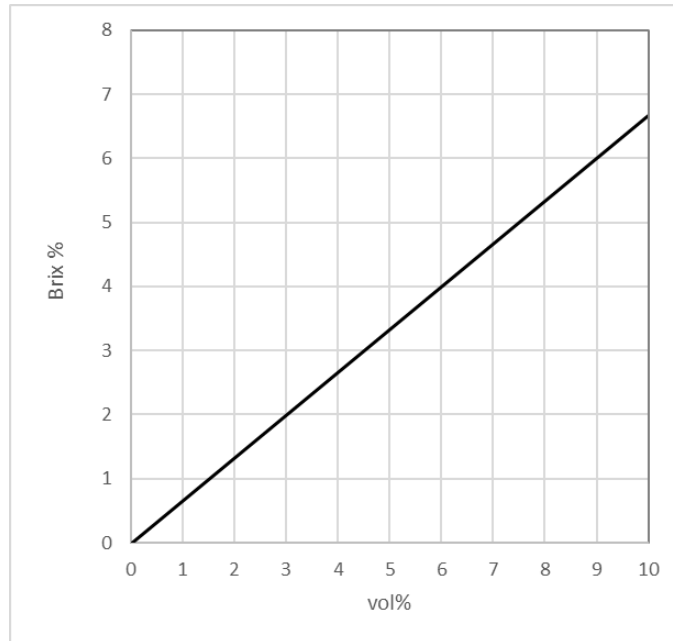
● Typical Properties of RELIASOL S-N(N)

Appearance	(original fluid)	Brown
	(diluted fluid)	Light yellow transparent
Density (15°C) , g/cm ³		1.07
Surface tension* (25°C), mN/m		39
pH*		9.0
Anticorrosion test (RT, 48h)*		
Steel sheet		No discoloration
Foaming* (24°C), ml		0

*Measured with 30x diluted fluid

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



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





Handling Precautions

▼ Follow these precautions when handling this product.

Composition :	Water-soluble processing oil; Mixtures(Water,Triethanolamine)
Hazard pictograms:	 
Signal word:	Warning
Hazard Statement:	Causes skin irritation Causes serious eye irritation May cause an allergic skin reaction. Suspected of damaging fertility or the unborn child May cause respiratory irritation, or May cause drowsiness or dizziness
Precautionary Statements: Prevention	<ul style="list-style-type: none">• Do not handle until all safety precautions have been read and understood.• 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.• Use only outdoors or in a well-ventilated area.• Contaminated work clothing should not be allowed out of the workplace.• Obtain special instructions before use.• Avoid breathing dust/fume/gas/mist/vapours/spray.• Wash hands thoroughly after handling.• Do not eat, drink or smoke when using this product.
Response	<ul style="list-style-type: none">• 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.• IF exposed or concerned: Get medical advice/attention.• IF INHALED: Remove person to fresh air and keep comfortable for breathing.• If skin irritation or a rash occurs: Get medical advice/attention.• IF IN EYES: Rinse cautiously with water for several minutes.• Remove contact lenses, if present and easy to do. Continue rinsing.• If eye irritation persists: Get medical advice/attention.• Take off contaminated clothing and wash it before reuse.
Storage	<ul style="list-style-type: none">• 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 in a well ventilated place. Keep container tightly closed.• Store locked up
Disposal	<ul style="list-style-type: none">• 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.