

RELIACUT AE Series

Active sulfur type, chlorine-free cutting fluid with high flash point

RELIACUT AE series are chlorine-free type high flash point cutting oils using special high flash point synthetic oils as base oils and properly-selected active sulfurized extreme-pressure agents combined with friction modifiers. Since **RELIACUT AE Series** use special synthetic oils, they have excellent processing performance and achieve high flash point while they are low viscosities. **RELIACUT AE Series** can be applied to a wide range of machining such as flame cutting and flame grinding process of alloy steel or stainless steel.

● Special Features

1. High flash point

RELIACUT AE-P 20 and **AE-P 25** which are low viscosities, have guaranteed flash points above 250 °C since they are formulated with a special high flash point synthetic oil as a base oil and an additive with a high flash point.

2. Excellent cutting and grinding performances

RELIACUT AE Series aims at improving processing accuracy and extension of tool life, etc., through the use of carefully selected additives in addition to the excellent oiliness of the base oil itself.

3. Excellent Lubricity

RELIACUT AE Series are blended with special sulfurized extreme-pressure agents and they feature excellent load carrying capacity.

4. High Viscosity Index and Low Pour Point

Because of the use of special synthetic oils as base oils, **RELIACUT AE Series** have high viscosity index and low pour point. Therefore, they can be used in a wide range of temperatures.

5. Excellent Oxidation Stability

RELIACUT AE Series use synthetic oils which are superior in chemical stability. **RELIACUT AE Series** can be used for a longer term than vegetable oil-based cutting oils.

● Applications

RELIACUT AE 10 and RELIACUT AE-P 20

Suited for automatic lathe processing, grinding process, deep hole processing such as BTA processing and gun drill and various processing such as drilling, reaming and thread cutting with the machining center of steel materials such as alloy steel and stainless steel

RELIACUT AE-P 25

Suited for lathing process, automatic lathe processing and grinding process of steel materials such as alloy steel and stainless steel

● Containers

200-liter drums and 20-liter cans

● Typical Properties of RELIACUT AE Series

		AE 10	AE-P 20	AE-P 25
Appearance		Yellow, Liquid	Light yellow, Liquid	Yellow, Liquid
Color(ASTM)		L3.0	L1.0	L2.0
Density		0.893	0.894	0.909
Kinematic viscosity(40°C)	mm ² /s	11.2	20.6	26.5
Flash point(COC)	°C	222	256	256
Pour point	°C	-17.5	-27.5	-20.0
Acid number	mgKOH/g	0.66	0.77	0.98
Copper corrosion(100°C, 1h)		4	4	4
Fatty content	mass%	>70	>70	>70
Sulfur content	mass%	2.79	0.84	1.87

Note: The typical properties may be changed without notice.(January 2017)



Handling Precautions

▼ Follow these precautions when handling this product.

RELIACUT AE 10, RELIACUT AE-P 20

Composition :	Base Oil, Additives
Precautionary pictograms:	
Signal word:	Danger
Hazard Statement:	Suspected of damaging fertility or the unborn child May be fatal if swallowed and enters airways
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. • Obtain special instructions before use. • 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 or doctor/physician. • 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. • Do NOT induce vomiting.
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 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.

RELIACUT AE-P 25

Composition :	Base Oil, Additives
Precautionary pictograms:	Not applicable
Signal word:	Not applicable
Hazard Statement:	Not applicable
Precautionary Statements:	<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. • Wash hands thoroughly after handling. • Do not eat, drink or smoke when using this product.
Prevention	
Response	<ul style="list-style-type: none"> • IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. • 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	<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.
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.

RELIACUT AE-P 25

Composition :	Base Oil, Additives
Precautionary pictograms:	
Signal word:	Warning
Hazard Statement:	Suspected of damaging fertility or the unborn child Harmful to aquatic life Harmful to aquatic life with long lasting effects
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. • Obtain special instructions before use. • 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 or doctor/physician. • 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. • Avoid release to the environment.
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 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.