

RELIACUT DE, DE-P Series

Chlorine-free anti-mist cutting fluid with high flash point

RELIACUT DE, DE-P Series are chlorine-free anti-mist type cutting fluids blended with properly-selected inactive sulfurized extreme-pressure agents and friction modifiers. Since special synthetic oils are used as base oils, **RELIACUT DE, DE-P Series** feature superior processing performance, high flash point and low viscosity.

RELIACUT DE, DE-P Series are suitable for general lathing and processing, gear cutting and other demanding operations of non-ferrous metals and steel materials such as carbon steel and alloy steel.

● Special Features

1. Excellent Cutting and Grinding Performance

Since **RELIACUT DE, DE-P Series** are blended with synthetic oils which have superior oiliness effect, inactive sulfurized extreme-pressure agents and special friction modifiers, they provide improved finished surface roughness and longer tool life in the general machining of ferric metals.

2. Excellent Lubricity

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

3. High Viscosity Index and Low Pour Point

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

4. Excellent Oxidation Stability

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

● Applications

RELIACUT DE 10, RELIACUT DE-P 15

* Suited for drilling, reaming, threading, deep hole drilling and various processing at machining center of non-ferrous metals and steel materials such as carbon steel and alloy steel

RELIACUT DE-P 20

* Suited for drilling, reaming, threading, deep hole drilling and various processing such as machining center, lathe, automatic plate processing of non-ferrous metals and steel materials such as carbon steel and alloy steel

RELIACUT DE-P 25

* Suited for general lathing and processing, gear cutting and automatic lathe processing of non-ferrous metals and steel materials such as carbon steel and alloy steel

● Containers

200-liter drums and 20-liter cans

● Typical Properties of RELIACUT DE, DE-P Series

		DE 10	DE-P 15	DE-P 20	DE-P 25
Appearance		Light yellow, Liquid	Light yellow, Liquid	Light yellow, Liquid	Light yellow, Liquid
Color(ASTM)		L1.0	L1.0	L1.5	L1.5
Density		0.865	0.953	0.893	0.904
Kinematic viscosity(40°C)	mm ² /s	10.0	16.8	19.7	24.5
Kinematic viscosity(100°C)	mm ² /s	2.95	4.01	5.49	5.79
Viscosity index		160	141	244	193
Flash point(COC)	°C	230	256	256	256
Pour point	°C	-25	-17.5	-27.5	-25
Acid number	mgKOH/g	0.15	0.07	0.31	0.13
Copper corrosion(100°C, 1h)		1	1	1	1
Fatty content	mass%	>70	>70	>70	>70
Sulfur content	mass%	0.31	0.51	0.50	0.50

Note: The typical properties may be changed without notice. (March 2020)



Handling Precautions

▼ Follow these precautions when handling this product.

RELIACUT DE 10

Composition :	Base Oil(s), Additives
Precautionary pictograms:	
Signal word:	Danger
Hazard Statement:	May be fatal if swallowed and enters airways 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. • Avoid release to the environment. • 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. • 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 DE-P 15

Composition :	Base Oil, Additives
Precautionary pictograms:	Not applicable
Signal word:	Not applicable
Hazard Statement:	Harmful to aquatic life
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. • 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.
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 DE-P 20

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 DE-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.