

RELIACUT DE, DE-P Series

Chlorine-Free, Anti-Mist Cutting Oils with High Flash Point

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

RELIACUT DE and **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. High Flash Point

RELIACUT DE and **DE-P Series** use special high flash point synthetic base oils and high flash point additives. Despite their low viscosity, these products are classified as flammable liquids (**RELIACUT DE-P15(N)**, **20**, **25**) and Class 4 Petroleum Products (**RELIACUT DE10**).

2. Excellent Cutting and Grinding Performance

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

3. Excellent Lubricity

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

4. High Viscosity Index and Low Pour Point

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

5. Excellent Oxidation Stability

Since **RELIACUT DE** and **DE-P Series** use synthetic oils that are superior in chemical stability, they can be used for a longer term than vegetable oil-based cutting

oils.

● Applications

RELIACUT DE 10, RELIACUT DE-P 15(N)

* 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 drum and 20-liter pail can

● Typical Properties of RELIACUT DE, DE-P Series

		DE 10	DE-P 15(N)	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 (15°C)	g/cm ³	0.866	0.876	0.893	0.905
Kinematic viscosity (40°C)	mm ² /s	10.3	16.1	20.2	25.1
Flash point (COC)	°C	230	270	258	272
Pour point	°C	-25.0	-40.0	-30.0	-22.5
Acid number	mgKOH/g	0.06	0.33	0.25	0.43
Copper strip corrosion (100°C, 1h)		1	1	1	1
Fatty oil content	mass%	> 70	> 70	> 70	> 70
Sulfur content	mass%	0.31	0.51	0.50	0.51

Note: The typical properties may be changed without notice. (July 2026)

● Handling Precautions

- **For the handling of this product:** Please read the Safety Data Sheet (SDS) for this oil and the handling precautions listed on the product container carefully before use.
- **Regarding obtaining the SDS:** Please note that Safety Data Sheets (SDS) should be obtained via commercial channels and cannot be provided by the ENEOS Customer Center.
- The properties and performance listed are based on measurements and insights from our testing methods and do not guarantee accuracy or completeness. The typical properties may be changed without notice.