RELIACUT DM 10

Inactive Sulfur Type, Non-chlorinated Anti-mist Cutting and Grinding Fluid

RELIACUT DM 10 is a chlorine-free anti-mist type cutting and grinding fluid formulated with new unique inactive sulfurized extreme-pressure agents and friction modifiers. **RELIACUT DM 10** is a general-purpose product that increased fat and sulfur content to **RELIACUT DS 10** in order to improve the workability. **RELIACUT DM 10** is an oil agent that balances workability, cooling performance and permeability (cleanliness), and is suitable for general machining using a machining center aiming for high efficiency. It is suitable for general processing requiring lubricity such as tapping and automatic lathing. **RELIACUT DM 10** can be used for a wide range of materials from nonferrous metals such as copper materials to carbon steel and alloy steel. **RELIACUT DM 10** corresponds to JIS K 2241 Type N3, No.8.

●Special Features

1. Excellent Cutting and Grinding Performance

RELIACUT DM 10 provides excellent machining performance and longer tool life in general cutting and grinding, because it is blended with highly refined low viscosity base oils, new special inactive sulfurized extreme-pressure agents and friction modifiers.

2. Excellent Anti-mist Performance

RELIACUT DM 10 contains special mist prevention agents that reduce the amount of oil mist formed during machining. The result is an improved working environment.

3. Low Odor

Since the additives of **RELIACUT DM 10** are low odor, the work environment is improved.

4. Contribution to the viewing of the processing point

RELIACUT DM 10 also contributes to make a readily visible cutting position since it is light-colored and decreasing oil mist.

5. Economical

Its low viscosity formula means reduced fluid consumption, since less fluid sticks to the workpiece and chips. **RELIACUT DM 10** is a good economic choice.

●Applications

＊ General cutting such as lathe manufacturing, drilling and milling for non-ferrous metals and steel materials such as carbon steel and alloy steel

＊Machining center processing for various materials

●Containers

200-liter drums and 20-liter cans

●Typical Properties of RELIACUT DM 10

Appearance		yellow liquid
Color(ASTM)		L2.0
Density		0.863
Kinematic viscosity(40°C)	mm^2/s	10.3
Kinematic viscosity(100°C)	mm^2/s	2.90
Flash point(COC)	°C	166
Pour point	°C	-22.5
Acid number	mgKOH/g	1.83
Copper corrosion(100°C, 1h)		1
Fatty content	mass%	10
Sulfur content	mass%	1.25

Note: The typical properties may be changed without notice. (February 2012)

Handling Precautions

▼ **Follow these precautions when handling this product.**

Composition：	Base Oil, Additives
Precautionary pictograms:	
Signal word:	Danger
Hazard Statement:	Causes serious eye irritation May be fatal if swallowed and enters airways
Precautionary Statements: **Prevention**	・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.
Response	・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 IN EYES: Rinse continuously with water for several minutes. ・Remove contact lenses if present and easy to do. Continue rinsing.
Storage	・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	・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.