

## Water Soluble Cutting Fluid

Product Name	JIS	Dilute Concentration	Appearance	pH	Resistance to Septicity	Anti-Foaming Performance	Applicable Materials			Characteristic · Application
	Classification						Steel	Al	Cu	
RIS CUT SX-B	A1-1	Cutting 5 ~ 10 Grinding 2 ~ 5	Milky Emulsion	10.2						Excellent anticorrosive performance for copper alloy. For general cutting purpose. Amine free.
RIS CUT SX-10	A1-1	5 ~ 10	Milky Emulsion	10.3						Soluble cutting fluid of excellent performance. For wide range of general cutting purpose. Amine free.
RIS CUT SX-30	A1-1	5 ~ 10	Milky Emulsion	9.6						Copper pipe extending emulsion fluid. Amine free.
RIS CUT SX-17	A1-2	5 ~ 10	Milky Emulsion	9.5						For a wide range of materials such as carbon steel, steel alloy, stainless steel. Compatible with oils for Al alloy.
RIS CUT SX-21	A1-2	5 ~ 10	Milky Emulsion	9.7						Stable emulsion type cutting fluid for Al, Mg alloy.
RIS CUT SX-22M	A1-2	5 ~ 10	Milky Emulsion	9.9						Ideal for Mg alloy cutting. Shows good emulsion stability
RIS CUT SX-23A	A1-2	5 ~ 10	Milky Emulsion	9.4						Excellent anticorrosive performance for Al alloy. Lubricity and septicity resistant performances are quite good.
RIS CUT SX-24A	A1-2	5 ~ 10	Milky Emulsion	9.4						Excellent anticorrosive performance for Al alloy. Low viscosity. Handling of fluid is easy.
RIS CUT SX-25A	A1-2	5 ~ 10	Milky Emulsion	10.3						Excellent anticorrosive performance for Al alloy and copper alloy. Amine free.
RIS CUT SX-27A	A1-2	5 ~ 10	Milky Emulsion	9.1						Soluble cutting fluid for Al alloy, castiron, carbon steel, steel alloy and stainless steel materials.
RIS CUT SY-61	A2-1	3 ~ 10	Slightly translucent solution	9.3						Soluble cutting fluid for castiron, carbon steel, steel alloy materials. Excellent septicity resistant performance.
RIS CUT SY-63	A2-1	3 ~ 10	Slightly milky solution	9.3						Soluble cutting fluid for steel alloy and stainless steel materials. Excellent septicity resistant performance.
RIS CUT SY-65	A2-1	Cutting 3 ~ 10 Grinding 3 ~ 5	Slightly blue solution	9.5						Synthetic soluble fluid for cutting or grinding on castiron, carbon steel. Shows good septicity resistant and anti-foaming performance.
RIS CUT SY-66	A2-1	Cutting 3 ~ 10 Grinding 3 ~ 5	Clear solution	9.6						Synthetic soluble fluid for cutting or grinding on carbon steel, steel alloy, stainless steel. Shows good septicity resistant and anti-foaming performance.
RIS CUT SY-71	A2-1	Cutting 5 ~ 10 Grinding 3 ~ 5	Clear solution	9.0						Synthetic type of soluble fluid for cutting or grinding on carbon steel, steel alloy.

JIS classifies A1 as dilution solution, 10%(v/v),  
A2/A3 as dilution solution, 3.3%(v/v).

Optimum performance or application  
Suitable performance or application

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RIS CUT SY-GC	A2-2	3 ~ 5	Slightly milky solution	8.5						Semi-synthetic fluid, suitable for Al alloy, copper alloy cutting.
RIS CUT SY-GR	A2-2	Grinding 2 ~ 5	Clear solution	8.7						Soluble fluid designed for grinding. Shows good anti-foaming performance. For grinding on Al or copper alloy.
RIS CUT SZ-80	A3-1	Grinding 2 ~ 5	Clear solution	9.1						Shows good grinding performance with anti-foaming and anti-rust capabilities, For cast iron, carbon steel, sapphire glass, ceramics.
RIS CUT SZ-81	A3-1	Grinding 2 ~ 5	Slightly blue solution	9.5						Shows good grinding performance with good septicity resistant and anti-foaming capabilities. Quite low odor.

JIS classifies A1 as dilution solution, 10%(v/v),  
A2/A3 as dilution solution, 3.3%(v/v).

Optimum performance or application  
Suitable performance or application