

YUMATE® EC-63

Premium Quality
Machine and Grinding Fluid

PRODUCT DATA SHEET

GENERAL DESCRIPTION:

YUMATE® EC-63 is a non-extreme pressure type water soluble oil metalworking fluid, specifically formulated for medium duty machining and surface finish grinding. **YUMATE® EC-63** is excellent for machining and grinding aluminum alloys, cast iron and steel. **YUMATE® EC-63** has excellent anti-corrosion properties, good detergency and stable performance characteristics yielding a longer sump life. **YUMATE® EC-63** has excellent grinding and machining capability in hard water. With normal care, **YUMATE® EC-63** resists rancidity and does not present any abnormal disposal problems. **YUMATE® EC-63** does NOT contain DEA, nitrites, halogens, mercury or phenols.

BENEFITS:

- **EXCELLENT FOR GRINDING AND MACHINING OF ALUMINUM AND STEEL**
- **EXCELLENT FOR USE IN HARD WATER**
- **EXCELLENT BIO-RESISTANCE**
- **FORMULATED FOR LONG SUMP LIFE**
- **DEA FREE FORMULATION**

PROPERTIES:

Color (ASTM).....	2.0
Appearance (Concentrate).....	Light Brown Liquid
Appearance (Diluted).....	White Emulsion
Specific Gravity (20 °C).....	0.91
pH (Concentrate).....	10.1
(3% Concentration).....	9.7

USING PROCEDURES:

Cast Iron and Aluminum Alloys

General Machining and Grinding:.....	Use at 3%to 5%
Reaming, Tapping:.....	Use at 5%
Gun Drilling.....	Use at 5%-10%

Steel Alloys:

General Machining and Grinding:.....	Use at 3% to 5%
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MATERIAL SAFETY:

YUMATE® EC-63 contains no active sulfur or chlorine. It is especially effective on aluminum. Do not use on magnesium. Safe on most ferrous and non-ferrous metals.

Rust Protection:

YUMATE® EC-63 is not designed as a rust protective coating after the machining process and grinding process. Should parts require short term indoor storage corrosion protection, a supplementary rust preventative product such as YUMAGE® WSW-280 should be used.

STORAGE:

Keep in a cool, dry area. Does not freeze in concentrated form.

PRECAUTIONS:

Please refer to the label and Material Safety Data Sheet for all warnings, recommendations for safety equipment, and other regulatory information.

CONCENTRATION CONTROL:

Refractometer: Brix Index 3.0 at 3% concentration.

AVAILABILITY:

Pails, Drums, Totes, Bulk

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PRODUCT USE REFERENCE GUIDE

YUMATE® EC-61 EC-61 @ 3-10%									
Work Material			Carbon Steel C=0.3% up & Soft Alloy	Carbon Steel C=0.3% less	High Alloy Steel	SU3 Heat resisting & Steel Titan Alloys	Al Al Alloys	Cast Iron	Copper Bronze Brass
Machining Method and Tool									
Turning	Single Point Bite	Carbide	x	x			x	x	
		HSS	x	x	x		x	x	
	Cut-Off Bite	Carbide	x	x			x	x	
		HSS	x	x	x		x	x	
	Formed Bite	Carbide	x	x			x		
		HSS	x	x	x		x		
Milling	Facing Mill	Carbide	x	x			x		
		HSS	x	x			x	x	
	Side Cutter	Carbide	x	x			x	x	
		HSS	x	x	x		x	x	
	End Mill	Carbide							
		HSS			x		x		
Drilling	Twist Drill	Carbide			x			x	
		HSS	x	x	x		x	x	
	Gun Drilling	Carbide					x	x	
Boring	Single Point Bite	Carbide					x		
		HSS					x	x	

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Machining Method and Tool									
	Reamer	Carbide					x	x	
		HSS					x	x	
Broaching		HSS							
Threading	Tap	HSS					x	x	
	Chaser	HSS					x	x	
	Bite	HSS					x	x	