

Emulsified oil

● Performance Overview

Maxtop Emulsified oil is a product made by adding appropriate amounts of rust inhibitors, emulsifiers, anti-wear agents, etc. to base oil. The oil-based appearance is a uniform, semi-transparent oil body ranging from brownish yellow to light brown at normal temperature. Cooling and temperature reduction: Rapidly lower the temperature in the cutting area to prevent workpiece deformation. Lubrication protection: Reduce the friction between the tool and the workpiece, and extend the tool life. Anti-rust and anti-corrosion: Protect the metal surface during processing and storage. Cleaning and chip removal: Keep the machined surface clean and improve machining accuracy.



● Features

01

Excellent rust prevention and emulsification properties, stable performance, able to meet the rust prevention requirements between processing procedures; - wheels.

02

Good cooling and cleaning properties can quickly cool the tool and workpiece surface and increase processing speed.

03

Excellent extreme pressure properties effectively improve processing efficiency and protect processing tools.

04

Cleaning property: helps remove grinding chips and impurities, keeps the grinding area clean, and improves processing accuracy.

● Application Scenario

- 1: Metal cutting processing
Turning/drilling: Efficient cooling and lubrication to enhance surface finish.
Grinding process: Reduce the wear of grinding wheels and prevent the workpiece from burning.
- 2: Special processing
Wire cutting: The pH value of the emulsion is 8-10, with moderate electrical conductivity, which enhances the cutting efficiency.
Electrical discharge machining: Good ionization elimination performance to prevent electrode wire breakage.
- 3: Forming and Stamping
High lubricity reduces mold wear and is suitable for the forming of automotive body panels and precision parts.
- 4: Material compatibility
It is applicable to the processing of materials such as carbon steel, silicon steel, stainless steel, cast iron and aluminum alloy.

Emulsified oil performance indicators

Project		Quality indicators		
		No. 1	No. 2	No. 3
Oil-based appearance, 15~35 °C		Brown to light brown translucent uniform oil		
Emulsion pH		8.0~10.0		
Emulsion stability (15~35 °C , 24h), ml	soap	0.5	0.5	0.5
	Oil	none	none	none
Emulsion rust prevention test (35±2°C, first-grade cast iron sheet),h	Monolithic	48	24	24
	Lamination	8	4	4
Allowable amount of salt (15~35°C, 4h)		No phase separation		
Emulsion corrosion test(55±2°C full immersion), h	45 steel	24	24	24
	62 Brass	6	1	4
	LY16 Aluminum	4	1	4
Maximum no-seizure load PB value , N (kgf) not less than		-	-	686 (70)



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