

# Microemulsion cutting fluid

## ● Performance Overview

Maxtop Microemulsion cutting fluid (MTMCF968) is a highly lubricating and biologically stable water-soluble microemulsion cutting fluid, synthesized by the latest blending process. Rapid cooling performance and heat dissipation: Quickly reduce the processing temperature to prevent the workpiece and tool from deforming due to overheating. Enhance stability: Control the fluctuation of processing temperature to improve processing accuracy and quality. Reduce friction and wear: Form a fine lubricating film, lower cutting force, and extend tool life. Improve processing efficiency: Make the cutting process smoother, and increase processing speed and efficiency.

## ● Features

### 01

**Cleaning performance:** Reduces the adhesion between chips and powder, keeps the processing environment clean, and improves processing quality.

### 02

Is suitable for non-ferrous and non-ferrous metals such as aluminum alloy, copper, stainless steel, alloy steel, and mold steel.

### 03

**Cleaning performance:** Reduces the adhesion between chips and powder, keeps the processing environment clean, and improves processing quality.

### 04

**Long service life:** High stability, not prone to deterioration or odor, reduced replacement frequency, and lower usage costs.



## ● Application Scenario

**1: Metal processing operations**  
Turning, milling and drilling: Provide efficient cooling and lubrication to ensure processing accuracy.

Grinding, reaming and tapping: Prevent tool wear and improve processing quality.

**2: Metal materials**

Aluminum alloy, iron, stainless steel, alloy steel and die steel provide long-lasting anti-rust protection to extend the service life of workpieces.

**3: Industry applications**

Automobile and motorcycle manufacturing: Enhance the processing accuracy of engines and reduce the scrap rate.

Electronic component production: Meeting the demands of high-precision processing and enhancing product quality.

# Microemulsion cutting fluid performance

Project			Quality indicators
Concentrates	Appearance		Orange transparent
	Storage stability		No stratification, no precipitation
5% dilution	Appearance		Transparent and translucent
	pH		8.0~10.0
	Emulsion stability	soap Oil	none none
	Rust resistance test (35°C±2°C)	Single chip, 24h Lamination, 8h Iron filings, 2h	qualified qualified qualified
	Corrosion test b(55 °C±2 °C),h	Steel sheet Copper Sheet Aluminum sheet	qualified qualified qualified
	Defoaming property, mL/10min not more than		2
	Extreme pressure performance (four-ball method)		
	Maximum no-seizure load (PB), N not less than		500
	Tapping efficiency, %		Report
	Antimicrobial		pass
	Paint adaptability		pass
	Water quality adaptability, ug/mL not more than		500
	Toxicity test		pass

