

## 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 Storage stability	Orange transparent 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 Tapping efficiency, % Antimicrobial Paint adaptability Water quality adaptability, ug/mL not more than Toxicity test	500 Report pass pass 500 pass

