



## Semi Synthetic Water Soluble Metal Cutting Fluid Concentrate

### Product Introduction:

T3093 is a kind of low oil containing semi synthetic cutting fluid specially developed for high light aluminum and magnesium processing. It doesn't contain chlorine, phenols and nitrates. It contains special anti-hardening agent, can be suitable for high hardness 6000-8000ppm hard water caused by magnesium ion.

Metal Working Fluid can be classified in four types: Oil Soluble Metal Working Fluid, Water Soluble Semi Synthetic Cutting Fluid, Water Soluble Fully Synthetic Cutting Fluid and Emulsion Metal Working Fluid by different application. T3093 is one type of Water Soluble Semi Synthetic Cutting Fluid.



### Application:

Suitable for aluminium and magnesium alloy processing, also can be used for carbon steel and stainless steel processing.

### Processing Method :

Suitable for various processing methods, such as turning, milling, drilling, ect. This product can be widely used for sole machine and central cooling system.

### Features:

Biological stable formula, long life.

In high hardness 6000-8000ppm hard water caused by magnesium ion, the emulsion still has excellent stability.

Good lubricity, it can reduce coolant spring out amount, meanwhile keep tools and parts clean. Excellent washing and cooling performance, effectively improve processing quality.

It contains particular additives, to avoid rust spot for magnesium and aluminium.

Friendly to operator and environment, low odor.

### Recommended used concentration:

Process Material	Aluminium	Magnesium	Carbon
Process Method	Alloy	Alloy	Steel
Turning	4%	4%	5%
Milling	4%	4%	5%
Drilling	5%	5%	5.5%
Tapping	5%	5%	5.5%



Grinding	2%	2%	3%
Sawing	4.5%	4.5%	5%

**Note:** For excellent antibacterial ability, the recommended used concentration is not less than 4%; when processing magnesium, to avoid electrochemical corrosion, the tools can not put in fixture for long time.

**Typical Data:**

Item	Test Method	Unit	Typical Data
<b>Concentration Fluid</b>			
Appearance	BAM 300	-	Transparent light yellow liquid
Density(20°C)	IP365	g/ml	0.96
<b>5% Dilution Solution</b>			
Appearance	BAM 189	-	Translucent milk white
PH value	BS1647	-	9.8±0.2
Antirust: Magnesium Aluminium	-	-	No rust spot No rust spot
Foam Performance	IP312	s	10
Refractive meter reading	-	-	47±2

**Note:** Above are typical data, not represent specifications. If in need, MSDS is available, you can obtain information about storage, safety operation and handling. The data above is as accurate as possible, but may change based on future formula change.