

# TRIM™ MicroSol™ 530

## High-lubricity Semisynthetic

TRIM MicroSol 530 is an environmentally-friendly semisynthetic, microemulsion coolant formulated especially for the machining of aluminium alloys. It utilises the newest technology to provide long-life and excellent protection of sensitive alloys. The outstanding lubrication properties of MicroSol 530 provide surface finish levels on aluminium components normally only seen with very high oil containing milky emulsions. Unlike those emulsions, MicroSol 530 is very clean running and keeps machine tools clear of unsightly residue build-up as well as reducing concentrate consumption.

### MicroSol



#### For ultimate performance:

TRIM™ MicroSol™ semisynthetic microemulsion coolants deliver high-performance lubricity and ultimately lower costs. Achieve precision parts, exceptional tool life, extended sump life, assured regulatory compliance and greater profitability with the MicroSol product just right for your production.

Designed to meet the rigorous demands of the aerospace, medical, automotive and high-production precision parts manufacturing industries, there's a MicroSol to answer your concerns, ramp up your production, and boost your bottom line.



#### Choose MicroSol 530:

- Lubrication package gives excellent performance for aluminium machining
- Excellent choice for aluminium alloy wheel machining applications
- Optimised combination of cooling and lubricity for aluminium, titanium, steel, stainless steel, and Inconel® machining applications
- Protects and prevents corrosion on sensitive alloys, including aerospace and nuclear materials
- Dramatically extends useful life without the need for tank-side biocides or fungicides
- Low foaming for today's demanding high-pressure, high-volume applications
- Excellent alternative to milky soluble oils on aluminium alloys
- Provides superior corrosion inhibition on all ferrous and nonferrous metals
- Keeps parts and machines very clean to reduce maintenance and coolant carry-off

#### MicroSol 530 especially for:

**Applications** — aluminum wheel machining, drilling, high-pressure, high-volume, reaming, roll threading, surface grinding, surface milling, tapping, thread forming, through-feed centreless grinding and turning

**Metals** — aluminium alloys, Inconel®, nuclear-material alloys, stainless steels, steels and titanium

**Industries** — aerospace, automotive and general industry

MicroSol 530 is free of — boron, chlorine, formaldehyde releasers and phenols

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### Application Guidelines

- MicroSol 530 performs well where traditional soluble oils may not cool sufficiently.
- In mixed-metal situations, concentration control is critical to fight galvanic corrosion (7.5% plus).
- Running at or above 7.5% offers the best sump life and corrosion inhibition on ferrous components.
- MicroSol 530 is not recommended for use on very reactive metals such as magnesium.
- For additional product application information, including performance optimisation, please contact your Master Fluid Solutions' Authorised Distributor at <https://www.masterfluids.com/eu/en/distributors/index.php>, your District Sales Manager, or call our Tech Line at +49 211 41 72 8 -900.

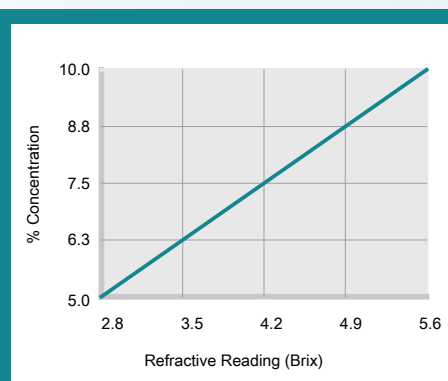
### Physical Properties Typical Data

Colour (Concentrate)	Light brown
Colour (Working Solution)	Translucent
Odour (Concentrate)	Bland
Form (Concentrate)	Liquid
Flash Point (Concentrate) (ASTM D93-08)	> 160°C
pH (Concentrate as Range)	9.3 - 9.6
pH (Typical Operating as Range)	8.5 - 9.5
Coolant Refractometer Factor	1.8
Titration Factor (CGF-1 Titration Kit)	0.92
Digital Titration Factor	0.0266

### Recommended Metalworking Concentrations

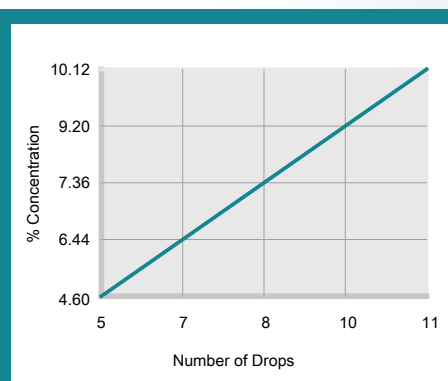
Light Duty	5.0% - 7.0%
Moderate Duty	7.0% - 9.0%
Heavy Duty	9.0% - 10.0%
Design Concentration Range	5.0% - 10.0%

### Concentration by % Brix



% Concentration = Refractive Reading x Refractive Factor  
Coolant Refractometer Factor % Brix = 1.8

### Concentration by Titration



% Concentration = No. of Drops x Titration Factor  
Titration Factor = 0.92

### Health and Safety

Request SDS



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### Mixing Instructions

- Recommended usage concentration in water: 5.0% - 10.0%.
- To help ensure the best possible working solution, add the required amount of concentrate to the required amount of water (never the reverse) and stir until uniformly mixed.
- Use premixed coolant as makeup to improve coolant performance and reduce coolant purchases. The makeup you select should balance the water evaporation rate with the coolant carryout rate. Use our Coolant Makeup Calculator to find the best ratio for your machine: [apps.masterfluids.com/makeup/](https://apps.masterfluids.com/makeup/).
- Use mineral-free water to improve sump life and corrosion inhibition while reducing carryoff and concentrate usage.

### Ordering Information

20-litre pail

204-litre drum

1000-litre IBC

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### Additional Information

- Use Master STAGES™ Whamex™ for a quick and thorough precleaning of your machine tool and coolant system.
- Consult Master Fluid Solutions before using on any metals or applications not specifically recommended.
- This product should not be mixed with other metalworking fluids or metalworking fluid additives, except as recommended by Master Fluid Solutions, as this may reduce overall performance, result in adverse health effects, or damage the machine tool and parts. If contamination occurs, please contact Master Fluid Solutions for recommended action.
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[https://2trim.us/di/?i=eu\\_en\\_MS530](https://2trim.us/di/?i=eu_en_MS530)



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