TRIM® MicroSol® 465

Low-foam Semisynthetic

TRIM MicroSol 465 low-foam semisynthetic microemulsion coolant is optimized for high-volume cast iron, ferrous, and some aluminum and nonferrous metalworking operations. MicroSol 465 prevents leaching of elemental iron and eliminates clinkering and oxidation of ferrous micro fines.

Delivering extended sump life, machine-friendly MicroSol 465 provides excellent, cost-effective cooling. Make a difference to your bottom line with MicroSol 465.

Arkansas Automotive Products Facility Cuts Costs by 30% with Master Fluid Solutions®



A Heber Springs, Arkansas facility, as part of a global company, focuses on suspension products for the automotive industry using COBAPRESS™, gravity die casting, low-pressure casting, machining, and assembly. The facility works with aluminum alloy.

Choose MicroSol 465:

- Easy to maintain and hard water stable
- Low foaming for today's demanding high-pressure, high-volume applications
- Also for machining some aluminum alloys and nonferrous metals
- Provides superior corrosion inhibition on cast iron and eliminates "hot chip" and clinkering problems
- Keeps machines very clean while leaving a soft fluid film for ease of cleaning and reduced maintenance
- Requires no special disposal or recycling

MicroSol 465 especially for:

Applications — grinding, high-pressure, high-volume, machining, milling, slab milling, and turning

Metals — aluminum, cast iron, and ferrous metals

Industries — automotive and general industry

MicroSol 465 is free of — boron, chlorine, DEA, and sulfur

Master Fluid SOLUTIONS®

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Application Guidelines

- Running at or above 7.5% offers the best sump life and corrosion inhibition on cast iron chips.
- Check for Compatibility with Reactive materials such as Magnesium before use.
- For additional product application information, including performance optimization, please contact your Master Fluid Solutions' Authorized Distributor at https://www.masterfluids.com/na/en-us/distributors/index.php, your District Sales Manager, or call our Tech Line at 1-800-537-3365.

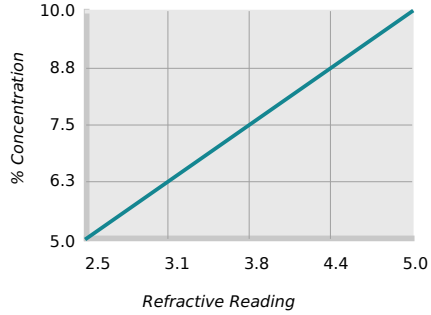
Physical Properties Typical Data

Color (Concentrate)	Light yellow to amber
Color (Working Solution)	Translucent
Odor (Concentrate)	Mild
Form (Concentrate)	Liquid
Flash Point (Concentrate) (ASTM D93-08)	> 212°F
pH (Concentrate as Range)	9.9 - 10.9
pH (Typical Operating as Range)	8.9 - 10.4
Coolant Refractometer Factor	2.0
Titration Factor (CGF-1 Titration Kit)	0.92
Digital Titration Factor	0.0400
V.O.C. Content (ASTM E1868-10)	107 g/l

Recommended Metalworking Concentrations

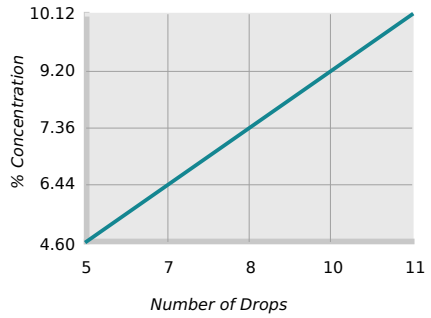
Light Duty	5.0% - 6.5%
Moderate Duty	6.5% - 8.5%
Heavy Duty	8.5% - 10.0%
Design Concentration Range	5.0% - 10.0%

Concentration by % Brix



% Concentration = Refractive Reading x Refractive Factor
Coolant Refractometer Factor % Brix = 2.0

Concentration by Titration



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

Health and Safety

Request SDS

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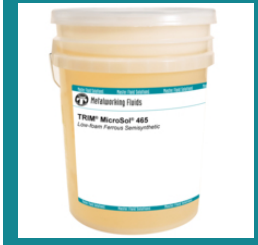
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Mixing Instructions

- 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/.
- Use mineral-free water to improve sump life and corrosion inhibition while reducing carryoff and concentrate usage.



1-gallon jug
SKU: MS465-1G
UPC-12: 641238082675



5-gallon pail
SKU: MS465-5G
UPC-12: 641238082699



54-gallon drum
SKU: MS465-54G
UPC-12: 641238082705



270-gallon tote
SKU: MS465-270G
UPC-12: 641238082712

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=na_en-us_MS465

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