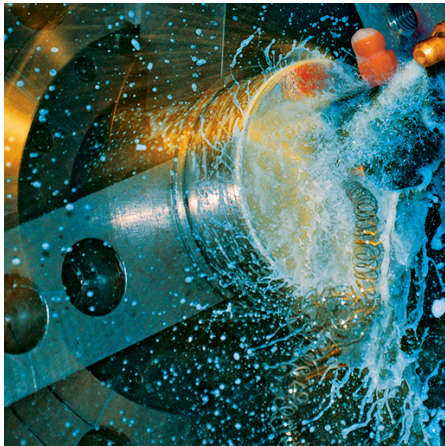


# TRIM® MicroSol® 485

## Long-life Ferrous Semisynthetic

TRIM MicroSol 485 is a long life semisynthetic, microemulsion coolant designed for ferrous metalworking operations and optimized for difficult working environments associated with cast iron. MicroSol 485 prevents leaching of elemental iron and thus eliminates clinkering and oxidation of ferrous micro fines. Formula delivers extended sump life versus previous generation semisynthetics. It provides excellent cooling along with the machine-friendly characteristics you expect from TRIM coolants. MicroSol 485 is value-priced and specifically designed for use on ferrous metals.

### 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 485:

- The most cost conscience MicroSol offering
- Dramatically extends useful life without the need for tank-side biocides or fungicides
- 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
- Uses standard metalworking recycling and disposal techniques

#### MicroSol 485 especially for:

**Applications** — band sawing, cutting, cylindrical form grinding, drilling, grinding, plain grinding, reaming, roll threading, surface grinding, surface milling, tapping, thread forming, through-feed centerless grinding, and turning

**Metals** — cast iron, ferrous metals, steels, and tool steels

**Industries** — automotive, compressor, diecast, and job shop

**MicroSol 485 is free of** — chlorinated EP additives, nitrites, phenols, sulfurized EP additives, and triazine

# TRIM<sup>®</sup> MicroSol<sup>®</sup> 485

## Long-life Ferrous Semisynthetic



### Application Guidelines

- MicroSol 485 is designed for moderate to light-duty machining on ferrous metals.
- Running at or above 6%; offers the best sump life and corrosion inhibition on cast iron chips.
- Not recommended for use on very reactive metals, such as magnesium.
- 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.

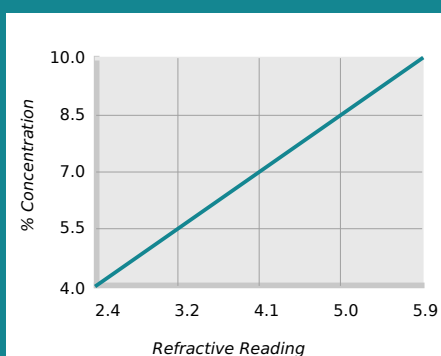
### Physical Properties Typical Data

Color (Concentrate)	Amber
Color (Working Solution)	Light amber
Odor (Concentrate)	Mild
Form (Concentrate)	Liquid
Flash Point (Concentrate) (ASTM D93-08)	> 199°F
pH (Concentrate as Range)	10.2 - 10.6
pH (Typical Operating as Range)	9.6 - 10.2
Coolant Refractometer Factor	1.7
Titration Factor (CGF-1 Titration Kit)	0.55
Digital Titration Factor	0.0160
V.O.C. Content (ASTM E1868-10)	183 g/l

### Recommended Metalworking Concentrations

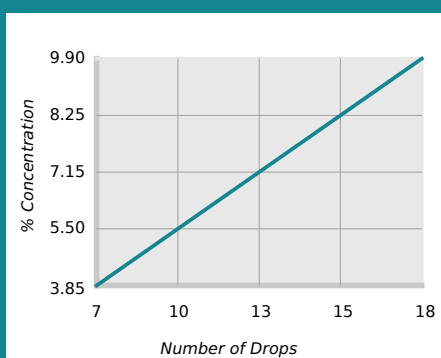
Light Duty	4.0% - 6.5%
Moderate Duty	6.5% - 8.5%
Heavy Duty	8.5% - 10.0%
Design Concentration Range	4.0% - 10.0%

### Concentration by % Brix



% Concentration = Refractive Reading x Refractive Factor  
Coolant Refractometer Factor % Brix = 1.7

### Concentration by Titration



% Concentration = No. of Drops x Titration Factor  
Titration Factor = 0.55

### Health and Safety

Request SDS



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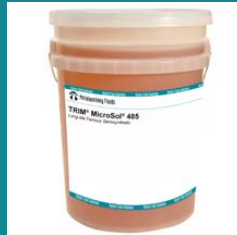


### Mixing Instructions

- Recommended usage concentration in water: 4.0% - 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.



1-gallon jug  
SKU: MS485-1G  
UPC-12: 641238066378



5-gallon pail  
SKU: MS485-5G  
UPC-12: 641238066354



54-gallon drum  
SKU: MS485-54G  
UPC-12: 641238066347



270-gallon tote  
SKU: MS485-270G  
UPC-12: 641238066552

### 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.
- TRIM® and MicroSol® are registered trademarks of Master Chemical Corporation d/b/a Master Fluid Solutions.
- Master STAGES™ and Whamex™ are trademarks of Master Chemical Corporation d/b/a Master Fluid Solutions.
- The information herein is given in good faith and believed current as of the date of publication and should apply to the current formula version. Because conditions of use are beyond our control, no guarantee, representation, or warranty expressed or implied is made. Consult Master Fluid Solutions for further information. For the most recent version of this document, please go to this URL:

[https://2trim.us/di/?i=na\\_en-us\\_MS485](https://2trim.us/di/?i=na_en-us_MS485)

