

# TRIM™ MicroSol™ 692XT

**Premium, High-lubricity, Low-foam Microemulsion**



TRIM MicroSol 692XT is a high-lubricity, semisynthetic, microemulsion coolant. This formula delivers extended sump life, greater bio stability, and better foam control versus previous generation semisynthetic Microemulsions. It does very well in mixed metal situations and is compatible with a very wide range of materials including titanium, high nickel alloys, steels, copper, and aluminum alloys. Improved tramp oil rejection keeps your production running smoothly. Increase your profitability and production with TRIM MicroSol 692XT!

## **A Semiconductor Equipment Manufacturer's Switch to TRIM® MicroSol® 692XT Resulted in a 25% Coolant Usage Reduction**



*Using excess amounts of metalworking fluid to achieve the desired results, a semiconductor equipment manufacturer's metalworking fluid had a number of inefficiencies. Choosing to switch to TRIM® MicroSol® 692XT resulted in a 25% reduction in coolant usage as well as a drastic foam reduction.*

## **Aerospace Approvals**

Company	Specification
Bombardier Aerospace	BAMS 569-001
Raytheon Technologies/Collins Aerospace/Pratt & Whitney	PMC 9471
Safran Group	PCS-4001/4002, PR6300

## **Choose MicroSol 692XT:**

- Improved lubricity for longer tool life
- Dramatically extends useful life without the need for tank-side biocides or fungicides
- Halogen free
- Low foaming for today's demanding high-pressure, high-volume applications
- Excellent alternative to chlorinated soluble oils on high-silica aluminum alloys
- Provides superior corrosion inhibition on all ferrous and nonferrous metals
- Keeps machines very clean while leaving a soft fluid film for ease of cleaning and reduced maintenance
- Requires no special disposal or recycling techniques

## **MicroSol 692XT especially for:**

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

**Metals** — 6000 series aluminum, aerospace aluminum alloys, aluminum alloys, brass, bronze, cast aluminum, cast iron, composites, copper, copper alloys, exotic alloys, glass, heat-treated steel, high-carbon steel, high-nickel alloys, high-silica aluminum alloys, nonferrous metals, plastics, stainless steels, steels, titanium, and wrought aluminum

**Industries** — aerospace, automotive, bearing, compressor, diecast, energy, firearms, green, job shop, machine tool, medical, and semiconductor equipment

**MicroSol 692XT is free of** — chlorine, NPEs, and sulfonates

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## Application Guidelines

- 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 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/ap/en-ap/distributors/index.php>, your District Sales Manager, or email us at [info@masterfluids.com](mailto:info@masterfluids.com).

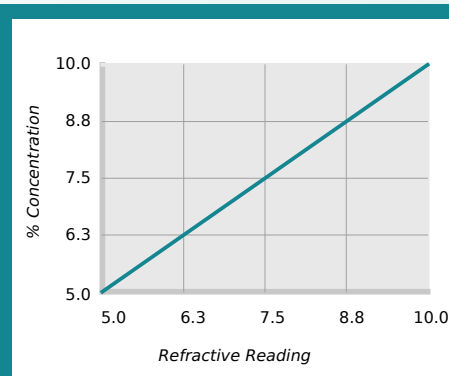
## Physical Properties Typical Data

Color (Concentrate)	Straw yellow to amber
Color (Working Solution)	White microemulsion
Odor (Concentrate)	Mild amine
Form (Concentrate)	Liquid
Flash Point (Concentrate) (ASTM D93-08)	> 107°C
pH (Concentrate as Range)	9.6 - 10.0
pH (Typical Operating as Range)	8.8 - 9.6
Coolant Refractometer Factor	1.0
Titration Factor (CGF-1 Titration Kit)	0.63
Digital Titration Factor	0.0173

## Recommended Metalworking Concentrations

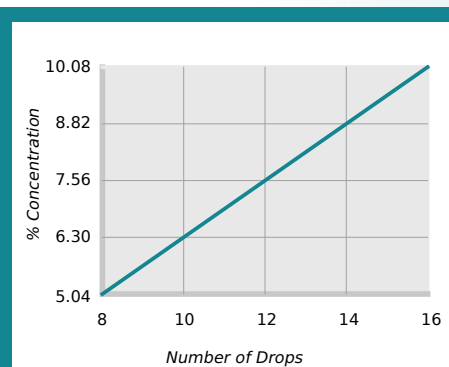
Light Duty	5.0% - 6.5%
Moderate Duty	6.5% - 8.5%
Heavy Duty	8.5% - 10.0%
Design Concentration Range	5.0% - 10.0%

## Concentration by % Brix



% Concentration = Refractive Reading x Refractive Factor  
Coolant Refractometer Factor % Brix = 1.0

## Concentration by Titration



% Concentration = No. of Drops x Titration Factor  
Titration Factor = 0.63

## 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-liter pail

204-liter drum

1000-liter tote

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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.
- 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:

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