

TRIM® MicroSol® 585XT

Extended-life, Nonchlorinated Semisynthetic

TRIM MicroSol 585XT is a high-lubricity, semisynthetic, microemulsion coolant. The formula delivers extended sump life and better foam control versus previous generation semisynthetics. It provides excellent cooling and mechanical lubricity, along with the machine-friendly characteristics you expect from a premium TRIM coolant. While it is particularly well suited for machining and grinding gray iron, it does very well in mixed metal situations. MicroSol 585XT has proven to be an exceptional machining fluid for titanium alloys.

A Semiconductor Equipment Manufacturer Reduces Coolant Consumption by 50% with TRIM® MicroSol® 585XT



Due to odor and rancidity issues, a semiconductor equipment manufacturer was using up to 40 drums of coolant per month. After switching to TRIM® MicroSol® 585XT, coolant consumption dropped by 50% in the first year.

Aerospace Approvals

Company	Specification
Aerojet	ASTM F 945
Airbus	AIPS00-00-010
Airbus	A2MS 569-001
Applied Materials	UHV
Boeing	BAC5008
Bombardier Aerospace	BAMS 569-001
Fokker	No specification available
GE Aerospace	SDS# EVEN-11232
Lockheed Martin/Sikorsky	G34.62, G74.0051, F74.0051
Lord Corporation	MTL-S-0136
Raytheon Technologies/Collins Aerospace/Pratt & Whitney	PMC 9362
Rolls-Royce	CSS 127
Safran Group	PCS-4001/4002, PR6300



Choose MicroSol 585XT:

- Dramatically extends useful life without the need for tank-side biocides or fungicides
- Low foaming for todays demanding high-pressure, high-volume applications
- Compatible with a very wide range of material including cast iron, steels, copper, titanium, and aluminum alloys, and many plastics and composites
- Optimized combination of cooling and lubricity for titanium machining applications
- Provides superior corrosion inhibition on cast iron and eliminates "hot chip" and clinkering problems
- Excellent alternative to chlorinated soluble oils on high-silica aluminum alloys
- Contains no nitrites, triazines, phenols, and chlorinated or sulfurized EP additives
- 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
- Uses standard metalworking recycling and disposal techniques

MicroSol 585XT especially for:

Applications — band sawing, belt grinding, Blanchard grinding, corrosion inhibition, cutting, cylindrical form grinding, double disc grinding, drilling, grinding, high-pressure, high-volume, in-feed centerless grinding, 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, exotic alloys, ferrous metals, glass, gray cast iron, heat-treated steel, high-carbon steel, high-nickel alloys, nonferrous metals, plastics, stainless steels, steels, titanium, titanium alloys, tool steels, wrought aluminum, and yellow metals

Industries — aerospace, compressor, energy, firearms, machine tool, medical, and semiconductor equipment

MicroSol 585XT is free of — chlorinated EP additives, formaldehyde releasers, nitrites, phenols, and sulfurized EP additives



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Application Guidelines

- MicroSol 585XT 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.
- MicroSol 585XT is 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.

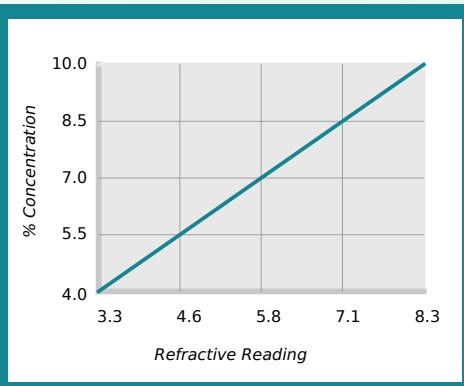
Physical Properties Typical Data

Color (Concentrate)	Amber
Color (Working Solution)	White microemulsion
Odor (Concentrate)	Mild amine
Form (Concentrate)	Liquid
Flash Point (Concentrate) (ASTM D93-08)	> 214°F
pH (Concentrate as Range)	9.6 - 10.0
pH (Typical Operating as Range)	9.3 - 9.6
Coolant Refractometer Factor	1.2
Titration Factor (CGF-1 Titration Kit)	0.69
Digital Titration Factor	0.0213
V.O.C. Content (ASTM E1868-10)	193 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%

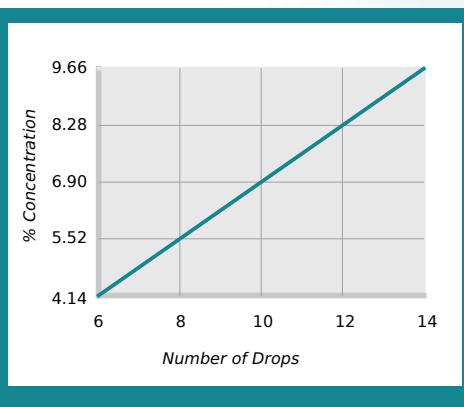
Concentration by % Brix



% Concentration = Refractive Reading x Refractive Factor

Coolant Refractometer Factor % Brix = 1.2

Concentration by Titration



% Concentration = No. of Drops x Titration Factor
Titration Factor = 0.69

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



1-gallon jug
SKU: MS585XT-1G
UPC-12: 641238065838



5-gallon pail
SKU: MS585XT-5G
UPC-12: 641238065821



54-gallon drum
SKU: MS585XT-54G
UPC-12: 641238065814



270-gallon tote
SKU: MS585XT-270G
UPC-12: 641238065852

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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- Master STAGES™ and Whamex™ are trademarks of Master Chemical Corporation d/b/a Master Fluid Solutions.
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501 West Boundary Street
Perrysburg, OH 43551-1200
United States
+1 419-874-7902

info@masterfluids.com

masterfluids.com/na/en-us/

