# 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.

# TRIM® MicroSol® 585XT Saves Aerospace Manufacturer 30% on Coolant per Year



The customer is a well-established aerospace parts manufacturer that machines aluminum, titanium, stainless steels, and other advanced metals and alloys. After using their previous cutting fluid for more than eight years, management decided to begin looking for a better solution.

# Aerospace Approvals

Company	Specification
Aerojet	ASTM F 945
Airbus	AIPS00-00-010
Applied Materials	UHV
Boeing	BAC5008
Bombardier Aerospace	BAMS 569-001
Fokker	No specification available
GE Aviation	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 Index A



#### **Choose MicroSol 585XT:**

- Dramatically extends useful life without the need for tank-side biocides or fungicides
- Low foaming for todays demanding highpressure, 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, and medical MicroSol 585XT is free of — chlorinated EP additives, nitrites, phenols, sulfurized EP additives, and triazine



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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**

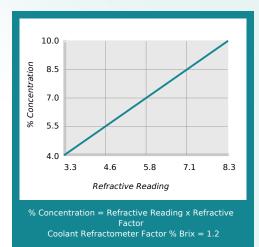
Color (Concentrate)	Amber
Color (Working Solution)	White microemulsion
Odor (Concentrate)	Mild Amine
Form (Concentrate)	Liquid
Flash Point (Concentrate) (ASTM D93-08)	> 212°F
pH (Concentrate as Range)	9.6 - 10.0
pH (Typical Operating as Range)	9.3 - 9.6
Coolant Refractometer Factor	1.2
Titration Factor (CGF-1 Titration Kit)	0.69
Digital Titration Factor	0.0213
V.O.C. Content (ASTM E1868-10)	193 a/l

# **Recommended Metalworking Concentrations**

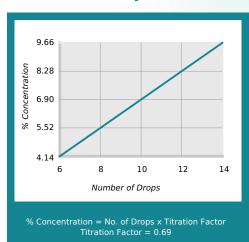
Light Duty	4.0% - 6.5%
Moderate Duty	6.5% - 8.5%
Heavy Duty	8.5% - 10.0%
Design Concentration Range	4.0% - 10.0%



### **Concentration by % Brix**



### **Concentration by Titration**



#### **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: <a href="mailto:apps.masterfluids.com/makeup/">apps.masterfluids.com/makeup/</a>.
- Use mineral-free water to improve sump life and corrosion inhibition while reducing carryoff and concentrate usage.









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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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