TRIM® MicroSol® 685XT

High-lubricity, Low-foam Semisynthetic

TRIM MicroSol 685XT is a high-lubricity, low-foaming, extended sump life semisynthetic microemulsion coolant. The formula offers the performance of a heavy-duty soluble oil with the cleanliness of a semisynthetic. It provides superior cooling and mechanical lubricity, along with the machine friendly characteristics you expect from a premium TRIM coolant. An excellent alternative to soluble oils on high-silica aluminum alloys, Microsol 685XT is compatible with a wide range of materials.

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.

Aerospace Approvals

Company	Specification
GE Aerospace	EVEN-15660

Choose MicroSol 685XT:

- High lubricity for extended tool life
- Low foaming for today's high-pressure, high-volume coolant delivery systems
- Excellent sump life without the use of tank side additives
- Provides superior corrosion inhibition on all ferrous and nonferrous metals
- Extremely hard water stable
- Forms a tight microemulsion for low carryoff
- Uses standard metalworking recycling and disposal techniques

MicroSol 685XT especially for:

Applications — band sawing, boring, drilling, grinding, high-pressure, high-volume, machining, milling, reaming, thread forming, and turning

Materials — aluminum, cast iron, composites, copper alloys, ferrous metals, magnesium alloys, nonferrous metals, plastics, stainless steels, and steels

Industries — agriculture, automotive, energy, general machining, job shop, naval, oil & gas, and tool

MicroSol 685XT is free of — formaldehyde releasers, nitrites, phenols, and sulfurized EP additives

Master Fluid SOLUTIONS®

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Application Guidelines

- MicroSol 685XT performs well where traditional soluble oils may not cool sufficiently.
- Running at or above 7.5% offers the best sump life and corrosion inhibition.
- 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.

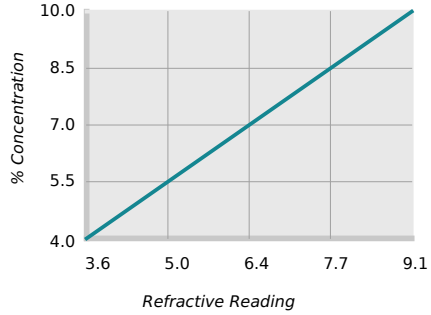
Physical Properties Typical Data

Color (Concentrate)	Amber
Color (Working Solution)	Opaque white
Odor (Concentrate)	Mild
Form (Concentrate)	Liquid
Flash Point (Concentrate) (ASTM D92-90)	> 212°F
pH (Concentrate as Range)	10.0 - 11.0
pH (Typical Operating as Range)	9.0 - 10.5
Coolant Refractometer Factor	1.1
V.O.C. Content (ASTM E1868-10)	118 g/l

Recommended Metalworking Concentrations

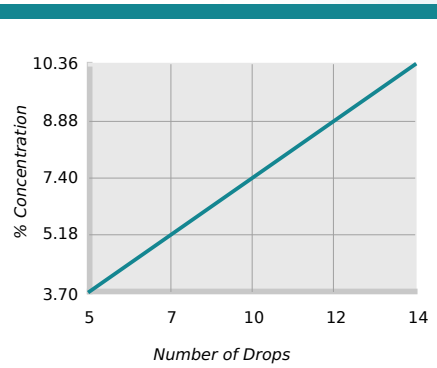
Light Duty	4.0% - 6.5%
Moderate Duty	6.5% - 8.5%
Heavy Duty	8.5% - 10.0%
Design Concentration Range	4.0% - 10.0%

Concentration by % Brix



% Concentration = Refractive Reading x Refractive Factor
Coolant Refractometer Factor % Brix = 1.1

Concentration by Titration



% Concentration = No. of Drops x Titration Factor
Titration Factor = 0.74

Request SDS

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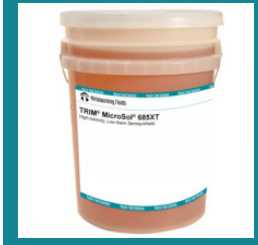
Mixing Instructions

- 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: MS685XT-1G
UPC-12: 641238082408



5-gallon pail
SKU: MS685XT-5G
UPC-12: 641238082422



54-gallon drum
SKU: MS685XT-54G
UPC-12: 641238082439



270-gallon tote
SKU: MS685XT-270G
UPC-12: 641238082446

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_MS685XT

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