

# TRIM<sup>®</sup> MicroSol<sup>™</sup> 687NXT

## Premium High-lube PRTR Microemulsion



TRIM MicroSol 687NXT is a translucent, premium high-lube, PRTR compliant microemulsion. The product is low foaming in soft water but is also stable in hard water. The product is designed to machine difficult to machine metals, such as stainless steel and Inconel

### *Thai Aerospace Manufacturer Reduces Tool Wear by 60% with TRIM<sup>®</sup> MicroSol<sup>®</sup> 687NXT*



*Established in 2005, the customer is a Thailand-based aerospace manufacturer that designs, produces, and markets high-tech aerospace parts and components. The international company specializes in hard metal and aluminum structural parts, aerofoils, and premium seat structures for aircrafts and other vehicles.*

### Choose MicroSol 687NXT:

- Keeps machines very clean while leaving a soft fluid film for ease of cleaning and reduced maintenance
- Excellent compatibility with a very wide range of material including stainless steel, nickel alloys, titanium, and aluminum alloys
- Greatly extends useful life without the need for tank side biocides or fungicides
- Low foaming for modern high-pressure, high-volume applications
- Uses standard metalworking recycling and disposal techniques
- Does not contain any chemical listed under Japan PRTR regulation
- Provides superior corrosion inhibition on all ferrous metals

### MicroSol 687NXT especially for:

**Applications** — general purpose and high-pressure, high-volume

**Metals** — aluminum alloys, nickel alloys, plastics, steels, and titanium

**Industries** — aerospace, energy, and general industry

**MicroSol 687NXT is free of** — boron, chlorinated EP additives, formaldehyde releasers, mineral oils, nitrites, phenols, PRTR materials, secondary amines, and sulfurized EP additives

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## Application Guidelines

- Running at or above 7.0% offers the best sump life and corrosion inhibition to protect machine tools and parts.
- Performs well where traditional soluble oils may not cool sufficiently.
- Not recommended for use for 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/in/en-in/distributors/index.php>, your District Sales Manager, or email us at [india-info@masterfluids.com](mailto:india-info@masterfluids.com).

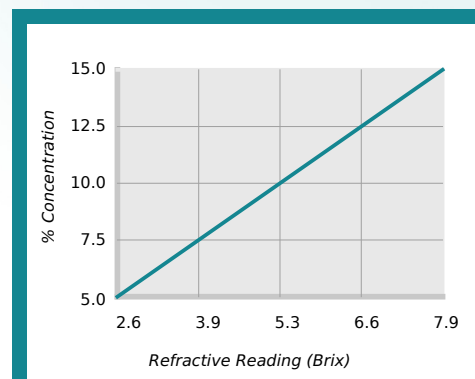
## Physical Properties Typical Data

Color (Concentrate)	Light yellow to amber
Color (Working Solution)	Yellow translucent
Odor (Concentrate)	Mild
Form (Concentrate)	Liquid
pH (Concentrate as Range)	9.5 - 9.9
pH (Typical Operating as Range)	9.2 - 9.8
Coolant Refractometer Factor	1.9

## Recommended Metalworking Concentrations

Light Duty	5.0% - 6.5%
Moderate Duty	6.5% - 8.5%
Heavy Duty	8.5% - 15.0%
Design Concentration Range	5.0% - 15.0%

## Concentration by % Brix



$\% \text{ Concentration} = \text{Refractive Reading} \times \text{Refractive Factor}$   
Coolant Refractometer Factor % Brix = 1.9

## Health and Safety

Request SDS



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## Mixing Instructions

- Recommended usage concentration in water: 5.0% - 15.0%.
- 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-litre pail

204-liter drum

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## Additional Information

- Use Master STAGES<sup>™</sup> Whamex<sup>™</sup> 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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