

# TRIM SOL<sup>®</sup> LC sf

*General-purpose Emulsion, Nonchlorinated, Siloxane Free*



TRIM SOL LC sf is a siloxane-free chemical emulsion or soluble oil coolant concentrate designed for light and moderate machining and grinding. This product is designed for a wide variety of metal removal operations on most ferrous metals and many nonferrous metals, such as brass, copper, and aluminum. This product is particularly effective in situations where reactive alloying agents like lead (Pb) are present.

## **Emulsions**



### **Geared up for production:**

*With superior lubricity and a higher oil content, TRIM emulsions provide a greater boundary layer between the tool and the material, and are ideal for heavy-duty applications such as broaching, reaming, deep hole drilling, drilling, tapping, and centerless grinding.*

*TRIM emulsions work well for machining copper, yellow metals, steel alloys, cast aluminums, wrought aluminums, and tough-to-machine titanium and nickel-based alloys.*

### **Choose SOL LC sf:**

- For wide range job applications (from tough assignments such as gear hobbing and broaching to lighter duties like turning) TRIM SOL LC sf has proven equally effective
- Easily adaptable to nonferrous and ferrous metals
- Stability - TRIM SOL LC sf forms an extremely tight emulsion of fine particle size and can be run for extended periods without pumpouts
- Machine stays clean with TRIM SOL LC sf's built-in cleaning action - metal chips and dirt will not build up
- Fluid residue prohibits sticky ways and slides which is a very important consideration in the operation of automatic and numerically controlled machines
- Coolant residue is easily removed with either water, working solution, or aqueous cleaners
- Easy recycling or disposal with conventional techniques and equipment

### **SOL LC sf especially for:**

**Applications** — broaching, gear hobbing, grinding, machining, sawing, and turning

**Metals** — aluminum, brass, copper, ferrous metals, gray cast iron, lead, and nonferrous metals

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

**SOL LC sf is free of** — chlorinated EP additives, NPEs, and siloxane

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## Application Guidelines

- Runs effectively for long periods without the need for costly additives.
- Compatible with all ferrous and nonferrous materials, but not normally intended for use on long runs of gray cast iron or grades 40 or 60 nodular iron.
- Can run at lower concentrations for higher speed operations where heat removal is the key issue.
- Higher concentrations are recommended on soft, gummy materials and for lower speed operations where friction reduction and control of the BUE are critical.
- Concentrations of 7% and higher provide the best sump life with this product.
- 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.

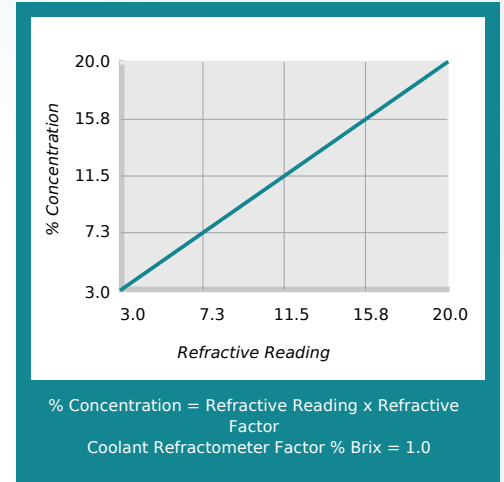
## Physical Properties Typical Data

Color (Concentrate)	Dark green
Color (Working Solution)	Blue
Odor (Concentrate)	Mild, sweet
Form (Concentrate)	Liquid
Flash Point (Concentrate) (ASTM D93-08)	> 212°F
pH (Typical Operating as Range)	8.0 - 9.0
Coolant Refractometer Factor	1.0
V.O.C. Content (ASTM E1868-10)	71 g/l

## Recommended Metalworking Concentrations

Light Duty	3.0% - 6.5%
Moderate Duty	6.5% - 8.5%
Heavy Duty	8.5% - 20.0%
Design Concentration Range	3.0% - 20.0%

## Concentration by % Brix



## Health and Safety

Request SDS



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## Mixing Instructions

- Recommended usage concentration in water: 3.0% - 20.0%.
- 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.



1-gallon jug  
SKU: SOLLCSF-1G  
UPC-12: 641238008651



5-gallon pail  
SKU: SOLLCSF-5G  
UPC-12: 641238008668



54-gallon drum  
SKU: SOLLCSF-54G  
UPC-12: 641238008675



270-gallon tote  
SKU: SOLLCSF-270G  
UPC-12: 641238036234

## 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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