TRIM® E850

Premium Emulsion

TRIM E850 is a proprietary blend of new "green" vegetable-based technology and premium traditional lubricity additives to yield a very high-performance, easy-to-maintain metal removal fluid. This premium emulsion is operator friendly because of its mild contact nature and low chemical initial-charge odor. E850 is robust enough to deliver extended useful life and avoid rancid odors normally associated with traditional emulsions. The unparalleled physical lubricity delivers exceptional surface finish on difficult-to-machine aluminum alloys, exotics, stainless, and high-tensile strength steels.





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. TRIM Emulsions are ideal for lower, less than 600 SFPM, applications such as broaching, reaming, deep hole drilling, drilling, tapping, and centerless grinding.

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

Aerospace Approvals

Company	Specification
Raytheon Technologies/Collins Aerospace/Pratt & Whitney	PMC 9371
Safran Group	PCS-4001/4002, PR6300 Index A



Choose E850:

- Delivers unparalleled lubricity
- Very long sump life and low carryoff rates result in low operating cost
- · Low product odor
- Mild operator contact properties
- Provides superior results in a wide range of operations
- Excellent corrosion resistance on both nonferrous and ferrous materials
- Superior wetting and penetration to the point of cut
- Soft fluid film protects ways, chucks, and tool holders
- Easily removed from parts for easy cleanup before assembly, painting, or plating operations
- High performance without the use of chlorinated paraffins

E850 especially for:

Applications — boring, centerless grinding, cutting, deep hole drilling, drilling, grinding, heavy-duty machining center work, high-pressure, high-volume, high-speed milling, high-speed turning, milling, reaming, roll threading, sawing, tapping, thread forming, thread rolling, and turning

Metals — aerospace aluminum alloys, brass, bronze, cast aluminum, composites, copper, exotic alloys, heat-treated steel, high tensilestrength steel, high-carbon steel, nickel alloys, nonferrous metals, plastics, stainless steels, steels, and titanium

Industries — aerospace, automotive, and energy

E850 is free of — boron, chlorine, copper, halogens, nitrites, phenols, and triazine



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Application Guidelines

- Maintaining concentration from 7.5% 10% provides the best sump life and corrosion inhibition.
- E850 is not recommended on magnesium or other reactive materials
- 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

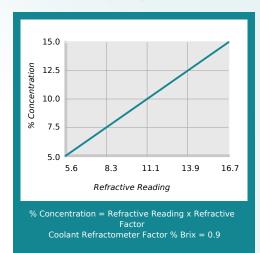
Color (Concentrate)	Amber
Color (Working Solution)	White
Odor (Concentrate)	Mild
Form (Concentrate)	Liquid
Flash Point (Concentrate) (ASTM D93-08)	> 199°F
pH (Typical Operating as Range)	8.8 - 9.8
Coolant Refractometer Factor	0.9
Titration Factor (CGF-1 Titration Kit)	0.97
Digital Titration Factor	0.0294
V.O.C. Content (ASTM E1868-10)	197 g/l

Recommended Metalworking Concentrations

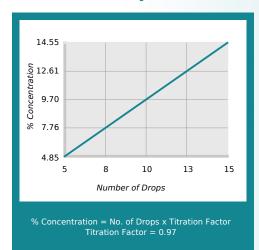
Light Duty	5.0% - 8.0%
Moderate Duty	8.0% - 10.0%
Heavy Duty	10.0% - 15.0%
Design Concentration Range	5.0% - 15.0%



Concentration by % Brix



Concentration by Titration



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/.
- 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.
- TRIM® is a registered trademark of Master Chemical Corporation d/b/a Master Fluid Solutions.
- Master STAGES[™] and Whamex[™] are trademarks of Master Chemical Corporation d/b/a Master Fluid Solutions.
- The information herein is given in good faith and believed current as of the date of publication and should apply to the current formula version. Because conditions of use are beyond our control, no guarantee, representation, or warranty expressed or implied is made. Consult Master Fluid Solutions for further information. For the most recent version of this document, please go to this URL:

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501 West Boundary Street Perrysburg, OH 43551-1200 USA

+1 419-874-7902

info@masterfluids.com

masterfluids.com/na/en-us/