## TRIM<sup>®</sup> E923

## Chlorine-free, Extreme-lubricity Emulsion

TRIM E923 is a proprietary blend of new vegetable-based technology and very high levels of chlorine-free extremepressure (EP) additives to yield an extreme performance, low management metal removal fluid. This premium emulsion product is robust enough to deliver unparalleled tool life in some of the most difficult metal cutting operations while still providing the excellent non-cutting characteristics normally associated with traditional, high-quality emulsions from Master Fluid Solutions. The extreme lubricity and extreme pressure package matches heavy-duty neat oils on difficult-to-machine materials such as Inconel<sup>®</sup>, titanium, stainless steel, and high tensile strength steels.

Injection Mold Manufacturer Improves Productivity and Tool Life with TRIM<sup>®</sup> E923



One of North America's leading mold builders creates high-quality, precision plastic injection molds for automotive original equipment manufacturers (OEMs). Globally recognized for their high-tech tool production capabilities, the company has maintained a strong reputation of quality and precision for more than 30 years.



#### Choose E923:

- Delivers exceptional lubricity and EP performance
- Has the necessary performance to replace neat oils in certain applications
- Very long sump life
- Low foam even in soft water areas
- Hard water tolerant
- Compatible with all materials excluding magnesium
- Easily recycled or disposed of without special handling or equipment
- Will run effectively for long periods without the need for costly additives

#### E923 especially for:

Applications — boring, broaching, deep hole drilling, down the hole work, drilling, Ejector<sup>®</sup> drilling, gear cutting, gear shaping, gun drilling, heavy-duty machining center work, high-pressure, high-volume, honing, lubricity additive, milling, reaming, roll threading, screw machine operations, tapping, thread forming, thread rolling, and turning

**Metals** — aluminum alloys, nickel alloys, nonferrous metals, stainless steels, steel alloys, steels, and titanium

Industries — automotive and energy

**E923 is free of** — boron, chlorine, formaldehyde releasers, nitrites, and phenolic compounds



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### **Application Guidelines**

• For additional product application information, including performance optimization, please contact your Master Fluid Solutions' Authorized Distributor at <u>https://www.masterfluids.com/na/en-us/distributors/index.php</u>, your District Sales Manager, or call our Tech Line at 1-800-537-3365.

### **Physical Properties Typical Data**

Color (Concentrate)
Color (Working Solution)
Odor (Concentrate)
Form (Concentrate)
Flash Point (Concentrate) (ASTM D93-08)
pH (Concentrate as Range)
pH (Typical Operating as Range)
Coolant Refractometer Factor
Titration Factor (CGF-1 Titration Kit)
Digital Titration Factor
V.O.C. Content (ASTM E1868-10)

#### **Recommended Metalworking Concentrations**

Light Duty
Moderate Duty
Heavy Duty
Design Concentration Range

5.0% - 8.0% 8.0% - 10.0% 10.0% - 15.0% 5.0% - 15.0%

Amber

Liquid

> 212°F

White emulsion

Mild amine

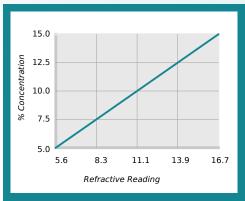
10.2 - 10.5

9.7 - 10.1 0.9 0.62

0.0192 115 g/l

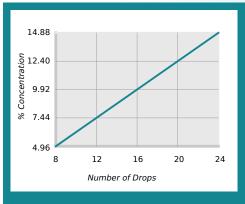


#### Concentration by % Brix



% Concentration = Refractive Reading x Refractive Factor Coolant Refractometer Factor % Brix = 0.9

#### **Concentration by Titration**



% Concentration = No. of Drops x Titration Factor Titration Factor = 0.62

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



 $\mathsf{TRIM}^{\circledast}$  E923 | @2018-2025 Master Fluid Solutions^{\circledast} | 2025-04-04



#### **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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