

TRIM® E715

Multi-metal Machining Emulsion

TRIM E715 is a high quality, universal, soluble oil which requires minimal maintenance in even the most demanding fluid management systems. It has broad application in machining and grinding on a wide range of materials. The high levels of both chemical and mechanical lubricity in this product handle the medium to high duty machining and grinding jobs very well. The stable and predictable performance of TRIM E715 makes it a first choice for high-quality, consistent parts manufacturing.

Aerospace Components Supplier Resolves Contamination Using Master Fluid Solutions



As a leading supplier of aerospace components, contamination is a serious problem. One UK-based supplier that performs milling, turning, drilling, and tapping operations at its facility facing such an issue. This supplier machines aerospace-grade aluminum, with 19 machines in total consisting of mills, machining centers, and lathes. The aerospace industry requires a precision operation, while also minimizing downtime for the machines.

Aerospace Approvals

Company	Specification
Safran Group	PCS-4001/4002



Choose E715:

- Very stable formula provides long operational life with consistent performance
- Extremely hard water tolerant
- Non-chlorinated and non-sulphurized extreme pressure (EP) additives control built-up edge (BUE)
- Extremely fine soluble oil emulsion reduces carryoff for low total operating cost
- Fast wetting to get the fluid to the point of cut and fully coat the work piece and chips for superior corrosion prevention
- Suitable for machining aluminum alloys, steel alloys, nickel alloys, cast iron, and yellow metals
- Easily recycled or disposed of without special handling or equipment
- Will run effectively for long periods without the need for costly additives

E715 especially for:

Applications — boring, centerless grinding, deep hole drilling, drilling, high-pressure, high-volume, high-speed milling, high-speed turning, milling, reaming, roll threading, sawing, tapping, thread forming, and turning

Metals — aluminum alloys, cast iron, copper, exotic alloys, Inconel®, nonferrous metals, steel alloys, steels, and yellow metals

Industries — aerospace, automotive, energy, and semiconductor equipment

E715 is free of — chlorine, formaldehyde releasers, nitrites, phenolic compounds, and sulfurized EP additives

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Application Guidelines

- Use higher concentrations for lower speed metal cutting operations where maximum lubricity is required and lower concentrations for operations requiring more cooling.
- Running at concentrations between 7.0% - 10.0% 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.

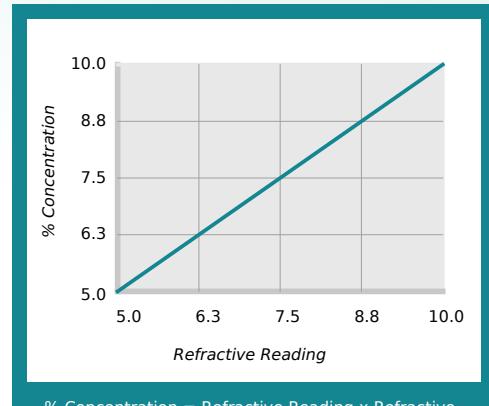
Physical Properties Typical Data

Color (Concentrate)	Amber
Color (Working Solution)	Milky white
Odor (Concentrate)	Mild amine
Form (Concentrate)	Liquid
Flash Point (Concentrate) (ASTM D93-08)	> 320°F
pH (Concentrate as Range)	9.0 - 10.0
pH (Typical Operating as Range)	8.7 - 9.7
Coolant Refractometer Factor	1.0
Titration Factor (CGF-1 Titration Kit)	0.98
Digital Titration Factor	0.0271
V.O.C. Content (ASTM E1868-10)	145 g/l

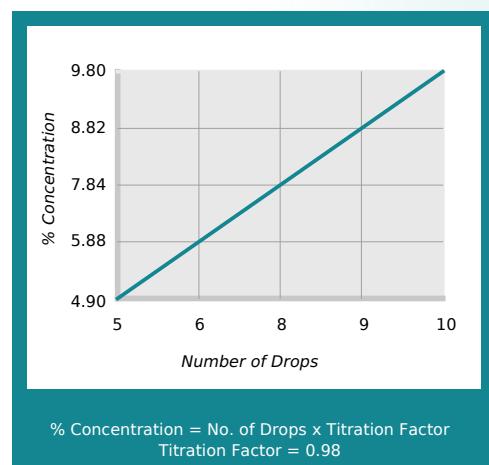
Recommended Metalworking Concentrations

Light Duty	5.0% - 6.5%
Moderate Duty	6.5% - 8.5%
Heavy Duty	8.5% - 10.0%
Design Concentration Range	5.0% - 10.0%

Concentration by % Brix



Concentration by Titration



Health and Safety

Request SDS



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Mixing Instructions

- Recommended usage concentration in water: 5.0% - 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: E715-1G
UPC-12: 641238081791



5-gallon pail
SKU: E715-5G
UPC-12: 641238081814



54-gallon drum
SKU: E715-54G
UPC-12: 641238081821



270-gallon tote
SKU: E715-270G
UPC-12: 641238081838

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:

https://2trim.us/di/?i=na_en-us_E715

