# E715

## **Multi-metal Machining Emulsion**

TRIM<sup>®</sup> 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. The stable and predictable performance of TRIM E715 makes it a first choice for high-quality, consistent parts manufacturing.

## Soluble Oils



#### Geared up for production:

With superior mechanical lubricity and a higher oil content, TRIM® emulsions provide a greater boundary layer between the tool and the material. 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 aluminiums, wrought aluminiums and tough-to-machine titanium and nickel-based alloys.

Gear up with the TRIM emulsion designed to meet your production needs.



#### Choose E715:

- Very stable formula provides long operational life with consistent performance
- Extremely hard water tolerant
- Non-chlorinated and non-sulphurised 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 aluminium alloys, steel alloys, nickel alloys, cast iron and vellow 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 — cast iron, copper, exotic alloys, Inconel®, steel alloys and yellow metals

**Industries** — aerospace, automotive, energy and medical

**E715** is free of — chlorine, formaldehyde releasers, nitrites, phenolic compounds and sulphurised 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 10% offers the best sump life and corrosion inhibition.
- For additional product application information, including performance optimisation, please contact your Master Fluid Solutions Authorised Distributor at <a href="https://www.2trim.us/distributors.php">https://www.2trim.us/distributors.php</a>, your District Sales Manager, or call our Tech Line at +44 (0)1449 726808.

### **Physical Properties Typical Data**

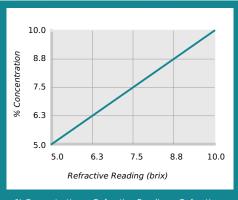
Colour (Concentrate)	Amber
Odour (Concentrate)	Mild amine
Form (Concentrate)	Liquid
Flash Point (Concentrate) (ASTM D93-08)	> 160°C
pH (Concentrate as Range)	9.0 - 10.0
pH (Typical Operating as Range)	8.7 - 9.7
Coolant Refractometer Factor	1.0

### **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 = Refractive Reading x Refractive Factor Coolant Refractometer Factor % Brix = 1.0

### **Health and Safety**

For further information, see the most recent SDS, which is available directly from Master Fluid Solutions or from your Master Fluid Solutions Authorised Distributor.



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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.masterfluidsolutions.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-litre drum 1000-litre IBC

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#### **Additional Information**

- Use Master STAGES™ Whamex™ for a quick and thorough precleaning of your machine tool and coolant system.
- Before using on any metals or applications not specifically recommended, consult Master Fluid Solutions.
- 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

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https://2trim.us/di/?plr=E715\*en\*eu



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