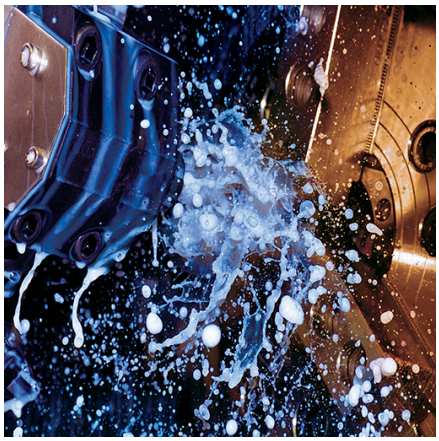
TRIM™ E712

Low Maintenance, General Purpose Emulsion

TRIM™ E712 is 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 tough machining and grinding jobs. It leaves a very easy to clean protection film on the work piece and machine parts to prevent corrosion on metal surface including the machine tool. The stable and predictable performance of TRIM E712 makes it a first choice for high-quality, consistent parts manufacturing.

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 E712:

- Very stable formula provides long operational life with consistent performance
- Extremely hard water tolerant
- Very wide application range. Suitable for both grinding and machining
- Fine particle size emulsion reduces carry-off and facilitates getting the fluid to the point of cut
- In high-speed turning and milling, provides good tool life and surface finishes
- Protects machine and tool surfaces while also preventing sticky ways, chucks, tool holders and fixtures
- Coolant is easily removed with water, working solution or aqueous cleaners
- Easy recycling or disposal with conventional techniques and equipment
- Will run effectively for long periods without the need for costly additives. Easily recyclable and/or dispose with conventional recycling and/or disposal techniques

E712 especially for:

Applications — drilling, machining, milling, reaming, tapping, and turning

Metals — aluminum alloys, cast iron, steel alloys, and yellow metals

Industries — automotive, general engineering, and job shop

E712 is free of — phenols

Master Fluid SOLUTIONS™

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Application Guidelines

- Works very well in general machining where traditional soluble oil may not cool sufficiently.
- In mixed metal situations, keep concentration above 7.5% to minimize galvanic corrosion.
- If foam appears, diagnose the cause of foaming before adding antifoam — E712 does not foam easily. I.e. foam can be caused by mechanical reasons.
- Running at or above 7.5% 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/ap/en-ap/distributors/index.php, your District Sales Manager, or email us at apac-info@masterfluids.com.

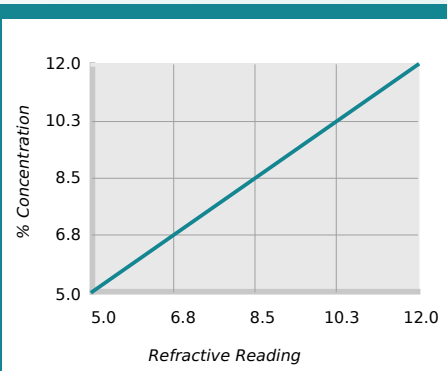
Physical Properties Typical Data

Color (Concentrate)	Blue
Color (Working Solution)	Blue
Odor (Concentrate)	Mild, pleasant
Form (Concentrate)	Liquid
Flash Point (Concentrate) (ASTM D92-90)	> 100°C
pH (Concentrate as Range)	9.5 - 9.9
pH (Typical Operating as Range)	9.0 - 10.0
Coolant Refractometer Factor	1.0

Recommended Metalworking Concentrations

Light Duty	5.0% - 7.0%
Moderate Duty	7.0% - 9.0%
Heavy Duty	9.0% - 12.0%
Design Concentration Range	5.0% - 12.0%

Concentration by % Brix



% Concentration = Refractive Reading x Refractive Factor
Coolant Refractometer Factor % Brix = 1.0

Health and Safety

Request SDS

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Mixing Instructions

- Recommended usage concentration in water: 5.0% - 12.0%.
- 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.

Ordering Information

20-liter pail

204-liter drum

1000-liter tote

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 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=ap_en-ap_E712

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