# TRIM™ E709QNI

## Long-life Emulsion

TRIM E709QNI is a high-quality universal emulsion coolant concentrate. It has been designed for a broad range of metals allowing its effective use in most cutting and grinding operations. The stable and predictable performance of E709QNI 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 E709QNI:

- Very stable formula provides good operational life with consistent performance
- Has a very wide application range allowing its effective use on cutting and grinding
- Good hard water tolerance
- Works very well in general machining where traditional soluble oil may not cool sufficiently.
- Extremely stable fine particle size emulsion allows for reduced carry-off and super-high penetrability to get the fluid to the point of cut
- Good balance of cooling and lubrication to provide good tool life and surface finishes
- Compatible with most aluminum, steel, cast iron and brass material
- High tramp oil resistance for easy oil removal, longer coolant life, and more opportunities to be recycled
- Leaves a very light oily, non-gumming residue to prevent sticky ways, chucks, tool holders and fixtures
- Good cleaning performance keeps machine tools clean
- Easy recycling or disposal by using conventional techniques and equipment

#### **■ E709QNI especially for:**

**Applications** — boring, centerless grinding, deep hole drilling, drilling, high-speed milling, high-speed turning, machining, milling, reaming, sawing, tapping, and turning

Metals — aluminum alloys, brass, bronze, cast aluminum, exotic alloys, ferrous metals, nickel alloys, stainless steels, steels, and titanium

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

**E709QNI** is free of — active sulfur, alkylphenol ethoxylates, ammonia, animal fats, barium, caustic, copper, DEA, EDTA, heavy metals, kerosene, nitrates, nitride, nitrites, NPEs, petroleum solvents, phenolic compounds, phenols, silicates, sulfonates, sulfur-based additives, sulfurized EP additives, and zinc



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### **Application Guidelines**

- In mixed metal situations, keep concentration above 7.5% to minimize galvanic corrosion.
- Foam can be caused due to mechanical reasons. If foam appears, diagnose the cause of foaming before adding antifoam.
- 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 <a href="https://www.masterfluids.com/ap/en-ap/distributors/index.php">https://www.masterfluids.com/ap/en-ap/distributors/index.php</a>, your District Sales Manager, or email us at apacinfo@masterfluids.com.

## Physical Properties Typical Data

Color (Concentrate)
Color (Working Solution)

Blue

Odor (Concentrate) Form (Concentrate)

Liquid > 100°C

Flash Point (Concentrate) (ASTM D92-90) pH (Typical Operating as Range)

9.0 - 10.0

Coolant Refractometer Factor

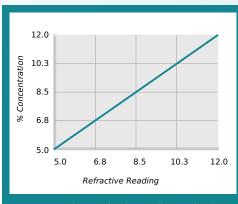
1.0

### 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: <a href="mailto:apps.masterfluids.com/makeup/">apps.masterfluids.com/makeup/</a>.
- 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

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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 trademark of Master Chemical Corporation d/b/a Master Fluid Solutions.
- Master STAGES<sup>™</sup> and Whamex<sup>™</sup> 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\_E709QNI



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