**E906**

*Premium, Low-foaming Emulsion*

TRIM® E906 is a premium, low-foaming formula combining the newest available technology with our proven emulsion-based cutting platform. E906 delivers consistent machining and grinding performance on a wide range of materials and applications. The stable and predictable performance of E906 makes it a first choice for manufacturers doing work for industries as diverse as aerospace, automotive, energy, and specialty job shops. E906 offers a unique blend of both mechanical and extreme pressure lubricity agents.

**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. Emulsions are ideal for lower, less than 600 SPM, applications such as broaching, reaming, deep hole drilling, drilling, tapping, and centerless grinding.

Emulsions work well for machining copper, yellow metals, steel alloys, cast aluminums, wrought aluminums, and tough-to-machine titanium and nickel-based alloys.

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

**Choose E906:**

- Longer operational life than competitive fluids
- Highly effective, extreme pressure additives control built-up edge
- E906 is effective in a wide range of operations from production surface and centerless grinding to heavy-duty broaching, gear hobbing, surface, pocket, and thread milling
- Low odor for pleasant operating environment
- Tight emulsion reduces carryoff and gets the fluid to the point of cut
- In high-speed turning and milling, E906 has the right balance of cooling and lubrication to provide great tool life and surface finishes
- Low foam and low mist make it a first choice for high-pressure, high-volume coolant systems
- Protects the machine tool surfaces while also preventing sticky ways, chucks, tool holders, and fixtures
- Coolant is easily removed with water, working solution, or Master STAGES™ aqueous cleaners
- Easy recycling or disposal with conventional techniques and equipment
- Will run effectively for long periods without the need for costly additives

**E906 especially for:**

**Applications** — band sawing, centerless grinding, cutting, drilling, gear hobbing, grinding, heavy-duty broaching, high-speed turning, in-feed centerless grinding, internal grinding, milling, plain grinding, pocket milling, reaming, surface grinding, surface milling, tapping, thread milling, through-feed centerless grinding, and turning

**Metals** — 6000 series aluminum, aerospace aluminum alloys, brass, bronze, cast aluminum, copper, exotic alloys, ferrous metals, heat-treated steel, high-carbon steel, high-nickel alloys, nonferrous metals, stainless steels, steels, titanium, tool steels, wrought aluminum, and yellow metals

**Industries** — aerospace, automotive, energy, and job shop

E906 is free of — phenols
E906

**Premium, Low-foaming Emulsion**

**Application Guidelines**
- Can run at lower concentrations for higher speed operations where heat removal is the key issue.
- Higher concentrations are recommended on soft, gummy materials and for lower speed operations where friction reduction and control of the BUE are critical.
- Concentrations of 7% - 10% provide the best sump life and most predictable performance.
- For additional product application information, including performance optimization, please contact your Master Fluid Solutions' Authorized Distributor at https://www.2trim.us/distributors.php, your District Sales Manager, or call our Tech Line at 1-800-537-3365.

**Physical Properties Typical Data**
- Color (Concentrate): Brown
- Color (Working Solution): Milky white
- Odor (Concentrate): Mild amine
- Form (Concentrate): Liquid
- Flash Point (Concentrate (ASTM D93-08)): > 219°F
- pH (Concentrate as Range): 9.0 - 9.8
- pH (Typical Operating as Range): 8.8 - 9.8
- Coolant Refractometer Factor: 0.9
- Titration Factor (CGF-1 Titration Kit): 0.94
- Digital Titration Factor: 0.0246
- V.O.C. Content (ASTM E1868-10): 154 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**

<table>
<thead>
<tr>
<th>Refractive Reading</th>
<th>% Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>10.0</td>
<td>11.1</td>
</tr>
<tr>
<td>9.0</td>
<td>10.0</td>
</tr>
<tr>
<td>8.3</td>
<td>9.7</td>
</tr>
<tr>
<td>7.5</td>
<td>8.3</td>
</tr>
<tr>
<td>6.3</td>
<td>7.5</td>
</tr>
<tr>
<td>5.6</td>
<td>6.3</td>
</tr>
</tbody>
</table>

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

**Concentration by Titration**

<table>
<thead>
<tr>
<th>Number of Drops</th>
<th>% Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
<td>10.34</td>
</tr>
<tr>
<td>10</td>
<td>9.40</td>
</tr>
<tr>
<td>9</td>
<td>8.58</td>
</tr>
<tr>
<td>8</td>
<td>7.52</td>
</tr>
<tr>
<td>7</td>
<td>6.58</td>
</tr>
<tr>
<td>6</td>
<td>5.68</td>
</tr>
<tr>
<td>5</td>
<td>4.70</td>
</tr>
</tbody>
</table>

% Concentration = No. of Drops x Titration Factor
Titration Factor = 0.94

**Health and Safety**
See the most recent SDS at https://2trim.us/s/?i=1040-0-en-US-US
**E906**

*Premium, Low-foaming Emulsion*

**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/](apps.masterfluidsolutions.com/makeup/).
- Use mineral-free water to improve sump life and corrosion inhibition while reducing carryoff and concentrate usage.

---

**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/?plp=E906*en-us*na](https://2trim.us/di/?plp=E906*en-us*na)

---

Master Fluid Solutions
501 West Boundary Street
Perrysburg, OH 43551-1200
USA
+1 419-874-7902
info@masterchemical.com
masterfluidsolutions.com/na/en-us/