TRIM® E206 nd is a soluble oil (emulsion) coolant that performs extremely well in a wide range of machining operations on both ferrous and nonferrous materials. It has the lubricity and "guts" necessary for heavy-duty machining center work and still provide the wetting and cooling necessary for high-speed turning and grinding operations.

**Emulsions**

A high-production manufacturer of aluminum parts in Detroit, MI, needed an emulsion that would run cleaner and save costs without sacrificing their high standard of surface finish and parts quality. In addition, they were having problems with dermatitis and sticky residue on machines. Consulting with their Master Fluid Solutions representative, they replaced the other brand with long-life E206. They have been running strong with E206 for more than five years seeing a sump life increase several times that of the former fluid, tool life significantly improved, operator dermatitis problems gone, and the workplace is far cleaner. E206 has saved downtime and material costs and increased profitability while producing excellent surface finish and parts quality.

**A case for E206:**

A very versatile product which works in a wide range of operations such as heavy-duty broaching, gear hobbing, surface and centerless grinding, and replacing straight oil on some types of screw machines

- Contains highly effective extreme-pressure additives to control built-up edge
- Compatible with all ferrous and nonferrous materials
- Extremely stable emulsion to reduce carryoff and to facilitate getting the fluid to the point of cut
- Rejects tramp oil to help extend sump life and increase recycling options
- Leaves a soft fluid film to prevent sticky ways, chucks, tool holders, and fixtures
- Coolant residue is easily removed with water, working solution, or aqueous cleaners
- Easy recycling or disposal with conventional techniques and equipment

**E206 nd especially for:**

**Applications** — band sawing, centerless grinding, drilling, gear hobbing, heavy-duty broaching, heavy-duty machining center work, high-speed turning, in-feed centerless grinding, internal grinding, plain grinding, production grinding, reaming, roll threading, surface grinding, surface milling, tapping, thread forming, 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, diecast, energy, general fabrication, and medical

**E206 nd is free of** — NPEs and triazine
E206 nd

Long-life Emulsion - No Dye

Application Guidelines

- E206 nd is designed to run effectively for long periods without the need for costly additives.
- It 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 built-up edge are critical.
- Concentrations of 7% or higher provide the best sump life.
- 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

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color (Concentrate)</td>
<td>Greenish-brown</td>
</tr>
<tr>
<td>Color (Working Solution)</td>
<td>Light Green</td>
</tr>
<tr>
<td>Odor (Concentrate)</td>
<td>Mild</td>
</tr>
<tr>
<td>Form (Concentrate)</td>
<td>Liquid</td>
</tr>
<tr>
<td>Flash Point (Concentrate) (ASTM D93-08)</td>
<td>&gt; 210°F</td>
</tr>
<tr>
<td>pH (Typical Operating as Range)</td>
<td>8.8 - 9.2</td>
</tr>
<tr>
<td>Coolant Refractometer Factor</td>
<td>1.0</td>
</tr>
<tr>
<td>Titration Factor (CGF-1 Titration Kit)</td>
<td>2.00</td>
</tr>
<tr>
<td>Digital Titration Factor</td>
<td>0.0582</td>
</tr>
<tr>
<td>V.O.C. Content (ASTM E1868-10)</td>
<td>95 g/l</td>
</tr>
</tbody>
</table>

Recommended Metalworking Concentrations

- Light duty: 3.0% - 6.0%
- Moderate duty: 6.0% - 8.0%
- Heavy duty: 8.0% - 10.0%
- Design Concentration Range: 3.0% - 10.0%

Concentration by % Brix

\[ \% \text{ Concentration} = \text{Refractive Reading} \times \text{Refractive Factor} \]

Concentration by Titration

\[ \% \text{ Concentration} = \text{No. of Drops} \times \text{Titration Factor} \]

Health and Safety

See the most recent SDS at https://2trim.us/s/?i=1023-0-en-US-US
Mixing Instructions

- Recommended usage concentration in water: 3.0% - 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/](http://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/?plr=E206NDN*en-us*na](https://2trim.us/di/?plr=E206NDN*en-us*na)