TRIM® C380 is a premium, synthetic, metalworking fluid optimized for high-tech ferrous materials including stainless steel and Inconel® which are widely used in aerospace, medical, and the electronics industries. C380 uses the best of the new ester technology to yield a very-high performance metal removal fluid that is easy-to-use and maintain. The combination of the proven synthetic ester technology and nonhalogenated EP package produce very high levels of usable lubricity at the point of cut. C380 utilizes unique low-foam detergents to keep process soils from redepositing on machines and parts.

**Synthetics**

**Peak your performance:**

TRIM® clean-running synthetics contain little-to-no oil. They are hard-water tolerant with good corrosion protection. Plus, synthetics leave very low residue for easy cleaning. Paired with extremely low carryoff, synthetics translate to less maintenance and lower operational costs, saving you time and money.

Run clean and long with TRIM synthetics.

**Choose C380:**

- Ease of maintenance, low carryoff, and long sump life result in low operating cost
- Clear, low foaming, low odor, and low mist create a clean manufacturing environment
- High performance in a wide range of operations from general grinding to heavy-duty machining
- Superior resistance to corrosion on ferrous materials including; titanium, Inconel, and high strength alloy steels
- Easily removed from parts before assembly, painting, or plating operations
- Product readily rejects process oils such as hydraulic and way oils
- Excellent surface finish in finish-grinding operations
- PRTR compliant

**C380 especially for:**

**Applications** — band sawing, creep-feed grinding, cutting, cylindrical grinding, drilling, form cylindrical grinding, form grinding, grinding, heavy-duty machining center work, internal grinding, plain grinding, reaming, surface grinding, surface milling, tapping, through-feed centerless grinding, and turning

**Metals** — cast iron, composites, exotic alloys, ferrous metals, glass, heat-treated steel, high-carbon steel, high-nickel alloys, high-strength alloy steels, Inconel®, plastics, stainless steels, steels, titanium, and tool steels

**Industries** — aerospace, electronics, and medical

**C380 is free of** — chlorine, copper, nitrites, phenols, phosphorous, SARA 313 listed ingredients, silicone, and triazine
C380

Premium Ferrous Machining Synthetic

Application Guidelines

- Verify compatibility with specific nonferrous alloys before use.
- A higher concentration of C380 increases boundary lubrication.
- Operates with very low foam at working temperatures above 80°F.
- Maintaining concentration from 7.5%-10% provides the best sump life and corrosion inhibition.
- C380 should not be used on magnesium or other reactive metals without special precautions.
- 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>Light yellow</td>
</tr>
<tr>
<td>Color (Working Solution)</td>
<td>Clear</td>
</tr>
<tr>
<td>Odor (Concentrate)</td>
<td>Mild amine</td>
</tr>
<tr>
<td>Form (Concentrate)</td>
<td>Liquid</td>
</tr>
<tr>
<td>Flash Point (Concentrate) (ASTM D92-90)</td>
<td>&gt; 199°F</td>
</tr>
<tr>
<td>pH (Concentrate as Range)</td>
<td>9.0 - 10.0</td>
</tr>
<tr>
<td>pH (Typical Operating as Range)</td>
<td>8.5 - 9.0</td>
</tr>
<tr>
<td>Coolant Refractometer Factor</td>
<td>1.7</td>
</tr>
<tr>
<td>Titration Factor (CGF-1 Titration Kit)</td>
<td>0.60</td>
</tr>
<tr>
<td>Digital Titration Factor</td>
<td>0.0200</td>
</tr>
<tr>
<td>V.O.C. Content (ASTM E1868-10)</td>
<td>94 g/l</td>
</tr>
</tbody>
</table>

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

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

Coolant Refractometer Factor % Brix = 1.7

Concentration by Titration

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

Titration Factor = 0.60

Health and Safety

See the most recent SDS at https://2trim.us/s/?i=1067-0-en-US-US
C380
Premium Ferrous Machining Synthetic

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.

Additional Information

- Use Master STAGES™ Whamex XT™ 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.
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- 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=C380*en-us*na

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