C270CG

High-performance Synthetic

TRIM® C270CG is a state-of-the-art synthetic coolant. C270CG provides excellent cooling and chip settling, good tramp oil rejection and machine cleanliness and meets the need of the modern job shop for a single premium synthetic coolant for virtually all machining operations.

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 C270CG:
- Provides excellent corrosion inhibition on all common ferrous alloys
- Does a great job in form grinding, drilling, tapping, and reaming operations without chlorine or sulfur-based EP additives
- Extremely low carryoff for very low total operation costs
- Very low foam and mist
- Keeps your machines clean while leaving a soft, fluid film that protects the bare metal parts. This residual film is easily resoluble in coolant working solution to facilitate easy machine cleaning and minimize the buildup of sticky residues that can hold machine-destroying chips
- Exceptional sump life and very good tramp oil rejection
- A very low initial odor which usually disappears after one to two days

C270CG especially for:
Applications — band sawing, belt grinding, Blanchard grinding, corrosion inhibition, creep-feed grinding, cylindrical grinding, double disc grinding, drilling, form cylindrical grinding, form grinding, internal grinding, plain grinding, reaming, surface grinding, surface milling, tapping, and turning
Metals — cast iron, composites, copper alloys, exotic alloys, glass, heat-treated steel, high-carbon steel, plastics, stainless steels, steels, and tool steels
Industries — aerospace, automotive, compressor, energy, and machine tool manufacturers
C270CG is free of — chlorine and sulfurized EP additives
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Application Guidelines
- The harder you work this product the better the results will be.
- C270CG is not recommended in machine tools that rely on the splash of the coolant to lubricate the mechanical portions of the machine tool, e.g. older screw machines, etc.
- C270CG is not recommended for materials like magnesium, zirconium, or some aluminum alloys without special precautions.
- This product is a superior cleaning agent so it may "wash out" dirt and residues when a machine is first charged; a thorough cleaning of older machines is required when installing this product for the first time.
- 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>Clear, light yellow</td>
</tr>
<tr>
<td>Color (Working Solution)</td>
<td>Water white</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 D93-08)</td>
<td>&gt; 212°F</td>
</tr>
<tr>
<td>pH (Concentrate as Range)</td>
<td>9.6 - 9.9</td>
</tr>
<tr>
<td>pH (Typical Operating as Range)</td>
<td>9.0 - 9.5</td>
</tr>
<tr>
<td>Coolant Refractometer Factor</td>
<td>3.3</td>
</tr>
<tr>
<td>Titration Factor (CGF-1 Titration Kit)</td>
<td>0.84</td>
</tr>
<tr>
<td>Digital Titration Factor</td>
<td>0.0201</td>
</tr>
<tr>
<td>V.O.C. Content (ASTM E1868-10)</td>
<td>77 g/l</td>
</tr>
</tbody>
</table>

Recommended Metalworking Concentrations
- Light duty                                    | 4.0% - 6.5%        |
- Moderate duty                                 | 6.5% - 8.5%        |
- Heavy duty                                    | 8.5% - 10.0%       |
- Design Concentration Range                    | 4.0% - 10.0%       |

Concentration by % Brix

% Concentration = Refractive Reading x Refractive Factor
Coolant Refractometer Factor % Brix = 3.3

Concentration by Titration

% Concentration = No. of Drops x Titration Factor
Titration Factor = 0.84

Health and Safety
See the most recent SDS at https://2trim.us/s/?i=1061-0-en-US-US
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Mixing Instructions

- Recommended usage concentration in water: 4.0% - 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.
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