SC536

Low-oil Semisynthetic

TRIM® SC536 is a low-oil, semisynthetic coolant that delivers significant performance improvements over previous generations of metalworking fluids. SC536 is a proprietary formula of specially synthesized oil and synthetic technologies blended to deliver unbeatable performance in a variety of machining and grinding operations. This innovative blend keeps machines clean and provides the longest sump life available.

Semisynthetics

Cutting edge solutions:

TRIM® semisynthetics offer the cooling and lubricity of a synthetic without the higher oil content of an emulsion. Designed to operate at higher SFPM, semisynthetics perform well on many operations including face milling, cut-off turning, grinding, tapping, and drilling — depending on the specific product.

Semisynthetics are compatible with alloy steels, tool steels, cast irons, copper alloys, as well as plastics and composites. With less carryoff, semisynthetics use less material — it all adds up to lower costs.

Choose SC536:

- Very low foam and mist
- Provides excellent corrosion inhibition on all common ferrous alloys
- Keeps your machines clean while leaving a soft fluid film that protects the bare metal parts of your machine tools - this film is easily washed off with coolant working solution for easy machine cleaning
- Excellent extreme pressure (EP) lubricity to do many form grinding, drilling, and tapping operations without the need for chlorine or sulfur-based EP additives
- Extremely low carryoff for very low total operating costs
- Exceptional sump life and very good tramp oil rejection
- Very low initial odor level which usually disappears after one-to-two days
- Minimizes the buildup of sticky residues

SC536 especially for:

Applications — band sawing, belt grinding, Blanchard grinding, corrosion inhibition, cutting, cylindrical grinding, double disc grinding, drilling, form cylindrical grinding, form grinding, grinding, internal grinding, machining, plain grinding, reaming, surface grinding, surface milling, tapping, through-feed centerless grinding, and turning

Metals — cast iron, composites, copper alloys, exotic alloys, plastics, steels, and tool steels

Industries — automotive and bearing

SC536 is free of — chlorine, nitrites, phenolic compounds, sulfur-based additives, and triazine
Application Guidelines

- The minimum recommended concentration is 5% on cast iron and 4% on steel. Concentrations in excess of 7.5% typically provide the best corrosion inhibition, tool life, and sump life; however, the optimum concentration for your operation can best be determined by on-site testing.
- Not recommended on magnesium or zirconium without special precautions.
- May "wash out" dirt and residues when a machine is first charged.
- 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>Colorless to pale yellow</td>
</tr>
<tr>
<td>Color (Working Solution)</td>
<td>Colorless to pale yellow</td>
</tr>
<tr>
<td>Odor (Concentrate)</td>
<td>Mild chemical</td>
</tr>
<tr>
<td>Form (Concentrate)</td>
<td>Liquid</td>
</tr>
<tr>
<td>Flash Point (Concentrate) (ASTM D92-90)</td>
<td>&gt; 208°F</td>
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<tr>
<td>pH (Concentrate as Range)</td>
<td>9.5 - 10.5</td>
</tr>
<tr>
<td>pH (Typical Operating as Range)</td>
<td>9.4 - 9.8</td>
</tr>
<tr>
<td>Coolant Refractometer Factor</td>
<td>3.1</td>
</tr>
<tr>
<td>Titration Factor (CGF-1 Titration Kit)</td>
<td>0.66</td>
</tr>
<tr>
<td>Digital Titration Factor</td>
<td>0.0173</td>
</tr>
<tr>
<td>V.O.C. Content (ASTM E1868-10)</td>
<td>119 g/l</td>
</tr>
</tbody>
</table>

Recommended Metalworking Concentrations

<table>
<thead>
<tr>
<th>Duty</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Light duty</td>
<td>4.0% - 6.5%</td>
</tr>
<tr>
<td>Moderate duty</td>
<td>6.5% - 8.5%</td>
</tr>
<tr>
<td>Heavy duty</td>
<td>8.5% - 10.0%</td>
</tr>
<tr>
<td>Design Concentration Range</td>
<td>4.0% - 10.0%</td>
</tr>
</tbody>
</table>

Concentration by % Brix

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

Coolant Refractometer Factor % Brix = 3.1

Concentration by Titration

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

Titration Factor = 0.66

Health and Safety

See the most recent SDS at https://2trim.us/s/?i=
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.
- TRIM® is a registered trademark of Master Chemical Corporation d/b/a Master Fluid Solutions.
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