



# TRIM<sup>®</sup> SC620

## *Premium Low-oil Semisynthetic*

### GENERAL DESCRIPTION

TRIM<sup>®</sup> SC620 is a high-lubricity, low-foam, low-odor, semisynthetic cutting and grinding fluid concentrate for high performance machining and grinding environments. SC620 uses a proprietary blend of mineral oil, EP-additives, and lubricity agents to control built-up edge, improve tool life, and deliver the finishes historically achieved using soluble oils. This unique balance of lubricity, wetting, and cooling characteristics is engineered to improve semisynthetic performance on stainless steel, aluminum alloys, and other high end materials.

### ADVANTAGES

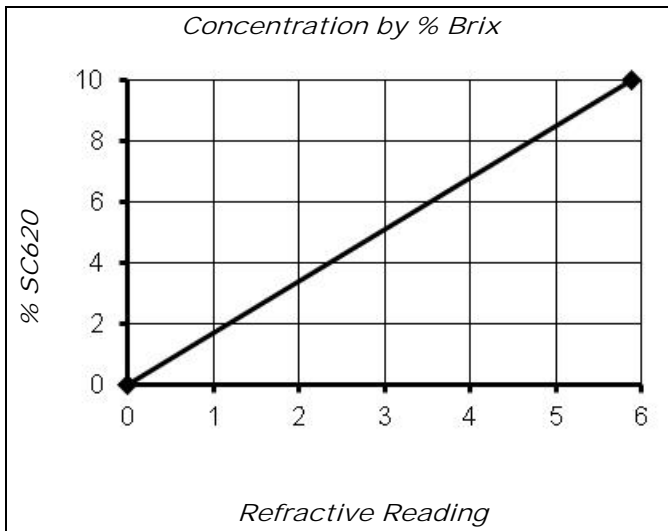
- Excellent sump life
- Eliminates foam problems associated with most semisynthetics
- Low oil content for reduced carry-off and lower residue
- Versatile enough to maximize performance in most grinding, sawing, drilling, turning, and milling operations by simply varying concentrations with operation severity
- Provides excellent lubricity to do tapping and other “down-the-hole” operations in aluminum, and most steels, including many stainless steels
- Compatible with a very wide range of materials including steels, copper, and aluminum alloys as well as most plastics and composites
- Rejects tramp oils rapidly for easy recycling with good sump life
- Easily recycled or disposed of using conventional techniques and equipment

### APPLICATION GUIDELINES

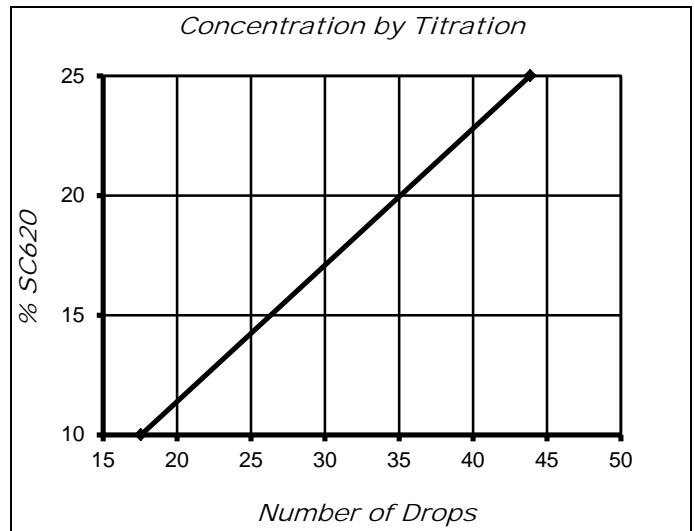
- SC620 is a superior product for surface and cylindrical grinding as well as through-feed centerless grinding.
- High-torque operations or operations on soft material often benefit from higher concentrations.
- Concentrations in excess of 7% typically offer the best sump life and tool life. However, the optimum concentration for your operations is best determined by on-site testing.
- Not recommended for machines dedicated to cast iron due to potential for iron uptake.
- The minimum recommended concentration is 5% on steel.
- Not recommended on materials that chemically react with water (i.e. magnesium and zirconium).
- For additional product applications information including performance optimization, please contact your Master Chemical Authorized Distributor at [2trim.us/distributors.php](http://2trim.us/distributors.php) your District Sales Manager, the Tech Line at 1-800-537-3365, or visit our web site at [www.masterchemical.com](http://www.masterchemical.com).

### PHYSICAL PROPERTIES (TYPICAL DATA)

Color (concentrate).....	Yellow	Flash Point.....	>200°F (93°C) (ASTM D93-08)
Color (working solution).....	Light Yellow	pH (Typical Operating as a range).....	8.8-10.4
Odor.....	Mild Amine	Coolant Refractometer Factor % Brix.....	1.7
Form.....	Liquid	Titration Factor (CGF-1 Titration Kit).....	0.570



$\% \text{ Concentration} = \text{Refractive Reading} \times \text{Refractive Factor}$   
 Coolant Refractometer Factor % Brix = 1.7



$\% \text{ Concentration} = \text{No. of Drops} \times \text{Titration Factor}$   
 Titration Factor = 0.570

**RECOMMENDED METALWORKING CONCENTRATIONS**

- Light-duty machining and grinding ..... 5%-7%
- Moderate- to heavy-duty machining and grinding ..... 7%-10%
- Design concentration range ..... 5%-10%

**MIXING INSTRUCTIONS**

- Using premixed coolant as makeup will substantially improve coolant performance and reduce coolant concentrate purchases. The specific makeup concentration selected for your situation should balance the water evaporation rate with the coolant carryout rate. Adding makeup coolant at 10%-25% of the desired working concentration will generally maintain the proper concentration in the sump.
- The use of DI or mineral-free water to mix this product will improve sump life, reduce concentrate usage, reduce carryoff, improve corrosion inhibition, etc.
- Percent concentration may be calculated by multiplying the refractometer factor by the refractometer reading or by multiplying the number of drops of acid by the titration factor.

**HEALTH & SAFETY**

See the most recent SDS at [2trim.us/s/?i=1029-en-US-US](http://2trim.us/s/?i=1029-en-US-US).



**NOTES**

- Use Master STAGES™ Whamex™ for a quick and thorough pre-cleaning of your machine tool and coolant system.
- Before using on any metals or applications not specifically recommended, consult Master Chemical.
- This product should not be mixed with other metalworking fluids or metalworking fluid additives, except as recommended by Master Chemical Corporation, as this may reduce overall performance, result in adverse health effects, or damage the machine tool and parts. If contamination occurs, please contact Master Chemical Corporation for recommended action.
- Normally a light blue product
- Packaging: North America – 1-gallon jug, 5-gallon pail, 54-gallon drum, and 270-gallon tote bin.

The information herein is given in good faith and believed current as of the date of this Data & Information sheet 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 Chemical Corporation for further information. For the most recent version of this document, please go to this

URL: [2trim.us/di/?i=10217](http://2trim.us/di/?i=10217).

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