

# TRIM™ SC410

## Chlorine-free Semisynthetic Coolant

TRIM SC410 is a chlorine-free, semisynthetic coolant using vegetable-derived and ester lubricants. It is very clean running in moderate-duty machining and grinding of both ferrous and nonferrous materials. In addition to its broad range of machining qualities, it has been specially optimized for machining "gray iron" castings and for surface and cylindrical grinding of ferrous materials.

### 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 aluminum alloys, 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 SC410:

- Based on our exclusive ester lubricant technology, contains no mineral (petroleum) oil
- Low foaming in most operations
- Compatible with a very wide range of materials including ferrous, nonferrous, and nonmetallic material
- Will provide superior sump life and corrosion inhibition for long periods of time without adds
- Prevents chip "clinkering" and "hot" chip hoppers when machining cast iron
- Will keep the machine and work environment clean even when machining or grinding gray iron
- Contains no chlorine or sulfur-based additives
- Contains no nitrites, sulfonates, Alkylphenol Ethoxylates, or phenols and is not SARA 313 reportable
- Very low carryoff and long sump life, delivering low operating costs
- Hard water tolerant up to 30 grains

#### SC410 especially for:

**Applications** — cylindrical grinding, grinding, moderate-duty machining, and surface grinding

**Metals** — cast iron, ferrous metals, gray iron, and most nonferrous metals

**Industries** — automotive and compressor

**SC410 is free of** — alkylphenol ethoxylates, chlorine, nitrites, phenols, SARA 313 listed ingredients, sulfonates, and sulfur-based additives

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### Application Guidelines

- The minimum recommended concentration is 5% on cast iron and 4% on steel.
- Running at or above 5% offers better corrosion inhibition, tool life, and sump life. However, the best concentration for your operation should be determined by on-site testing.
- Not recommended on magnesium or zirconium without special precautions.
- For additional product application information, including performance optimization, please contact your Master Fluid Solutions' Authorized Distributor at <https://www.masterfluids.com/th/en-th/distributors/index.php> or your District Sales Manager, or email us at [thailand-info@masterfluids.com](mailto:thailand-info@masterfluids.com).

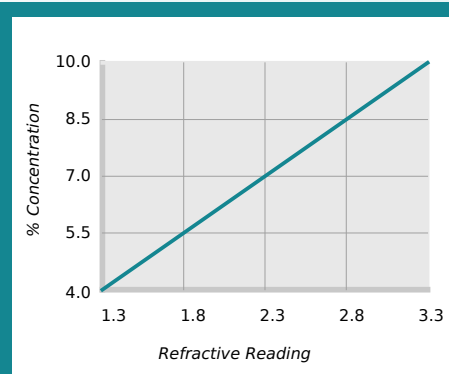
### Physical Properties Typical Data

Color (Concentrate)	Yellow
Color (Working Solution)	Light yellow
Odor (Concentrate)	Mild
Form (Concentrate)	Liquid
Flash Point (Concentrate) (ASTM D93-08)	> 97°C
pH (Concentrate as Range)	9.8 - 10.0
pH (Typical Operating as Range)	8.8 - 9.2
Coolant Refractometer Factor	3.0
Titration Factor (CGF-1 Titration Kit)	0.51
Digital Titration Factor	0.0150
V.O.C. Content (ASTM E1868-10)	169 g/l

### Recommended Metalworking Concentrations

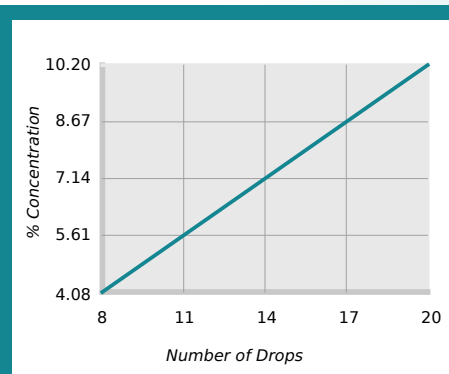
Light Duty	4.0% - 6.5%
Moderate Duty	6.5% - 8.5%
Heavy Duty	8.5% - 10.0%
Design Concentration Range	4.0% - 10.0%

### Concentration by % Brix



% Concentration = Refractive Reading x Refractive Factor  
Coolant Refractometer Factor % Brix = 3.0

### Concentration by Titration



% Concentration = No. of Drops x Titration Factor  
Titration Factor = 0.51

### Health and Safety

Request SDS



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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.masterfluids.com/makeup/](https://apps.masterfluids.com/makeup/).
- Use mineral-free water to improve sump life and corrosion inhibition while reducing carryoff and concentrate usage.

### Ordering Information

20-liter pail

204-liter drum

1000-litre IBC

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### 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 trademark of Master Chemical Corporation d/b/a Master Fluid Solutions.
- Master STAGES™ and Whamex XT™ 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/?i=th\\_en-th\\_SC410](https://2trim.us/di/?i=th_en-th_SC410)



333/8 Moo 9, Bangpla, Bangplee  
Samutprakarn, 10540  
Thailand  
+662 136 6319

[thailand-info@masterfluids.com](mailto:thailand-info@masterfluids.com)

[masterfluids.com/th/en-th/](https://masterfluids.com/th/en-th/)

