

TRIM™ SC639

General Purpose Semisynthetic

TRIM SC639 is a general purpose semisynthetic cutting and grinding fluid concentrate which provides an excellent balance between cooling and lubricity. SC639 has very good corrosion protection for both ferrous and non-ferrous metal, and can be used for a wide range of high-speed turning and grinding operations. SC639 leaves a thin layer of water soluble oil residue that provides extra protection to the machine tools parts while keeping the machine clean.

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 SPPM, 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 SC639:

- Provides excellent lubricity for various machining applications
- Provides excellent corrosion and rust inhibition on ferrous and nonferrous alloys, preventing clinkering problems of cast iron chips in machining
- Keeps machines very clean and leaves a soft fluid film for easy cleaning and less machine maintenance
- Long sump life and low coolant consumption that reduce the cost for user
- Low odor and mist that provides a good working environment
- Good hard water tolerance up to 40 grain
- Easy recycling or disposal with conventional techniques and equipment

SC639 especially for:

Applications — corrosion inhibition and high-speed turning

Metals — aluminum alloys, cast iron, copper alloys, ferrous metals, nonferrous metals, stainless steels, and steels

Industries — general industry and job shop

SC639 is free of — active sulfur, alkylphenol ethoxylates, ammonia, barium, biocides, copper, DEA, EDTA, formaldehyde releasers, heavy metals, kerosene, nitrates, nitride, nitrites, NPEs, phenolic compounds, phenols, sulfurized EP additives, and zinc

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Application Guidelines

- Works well in the general machine shop where soluble oils may smoke or not sufficiently cool under heavy cutting loads.
- In mixed metal situations, concentration control is critical to fight the effects of galvanic corrosion. Concentrations at 7.0% or above offers both the best sump life and corrosion inhibition.
- Not recommended for use on very reactive metals like magnesium and zirconium.
- High temperature or longer storage time might promote darker concentrate color during usage, however this will not affect the cutting and grinding performance of the product.
- 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.

Physical Properties Typical Data

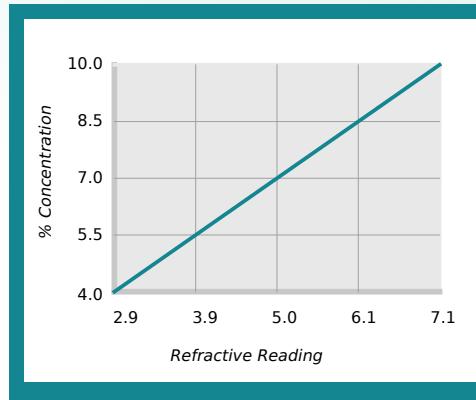
Color (Concentrate)	Light yellow to amber
Color (Working Solution)	White emulsion
Odor (Concentrate)	Mild
Form (Concentrate)	Liquid
Flash Point (Concentrate) (ASTM D93-08)	> 99°C
pH (Concentrate as Range)	9.6 - 10.6
pH (Typical Operating as Range)	9.1 - 10.1
Coolant Refractometer Factor	1.4

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 = 1.4

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/.
- 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

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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.
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https://2trim.us/di/?i=th_en-th_SC639



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

thailand-info@masterfluids.com
masterfluids.com/th/en-th/