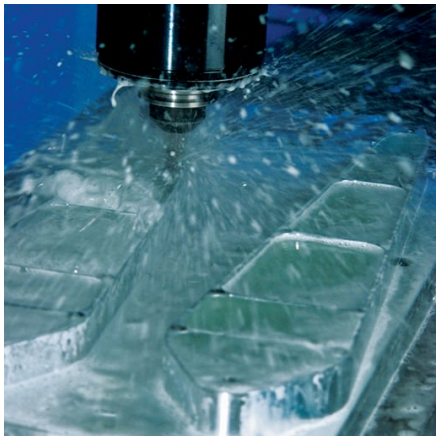
TRIM™ SC445

Low-oil Semisynthetic Coolant

TRIM SC445 is a semichemical cutting and grinding fluid concentrate. SC445 provides excellent cooling and good corrosion protection. This product contains a chemical surface active agent for providing good lubrication. SC445 can be used for a wide range of high-speed turning and grinding operations. SC445 leaves a thin layer of water soluble oil as residue.

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 SC445:

- Compatible with a very wide range of materials including: cast iron, steels, and copper alloys as well as plastics and composites
- Provides excellent corrosion and rust inhibition on ferrous 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 provides a good working environment
- Chlorine-free product
- Easy recycling or disposal with conventional techniques and equipment
- Compatible with the TRIM MicroSol and other high oil semisynthetic products
- Works very well in general machining where a more traditional soluble oil may not cool sufficiently

SC445 especially for:

Applications — grinding and high-speed turning

Materials — cast iron, composites, copper alloys, ferrous metals, plastics, and steels

Industries — general industry

SC445 is free of — chlorine

Master Fluid SOLUTIONS™

TRIM™ SC445

Low-oil Semisynthetic Coolant

Application Guidelines

- In mixed metal situations, keep concentration above 7,5% to minimize galvanic corrosion.
- If foam problem appears, please first investigate and rectify any mechanical reasons which maybe causing foaming, before adding any antifoam agents.
- Running at or above 7,0% offers the best sump life and corrosion inhibition.
- Not recommended for use on reactive metals like magnesium, zirconium or zinc.
- For additional product application information, including performance optimization, please contact your Master Fluid Solutions' Authorized Distributor at https://www.masterfluids.com/vnm/en-vnm/distributors/index.php, your District Sales Manager, or email us at vietnam-info@masterfluids.com.

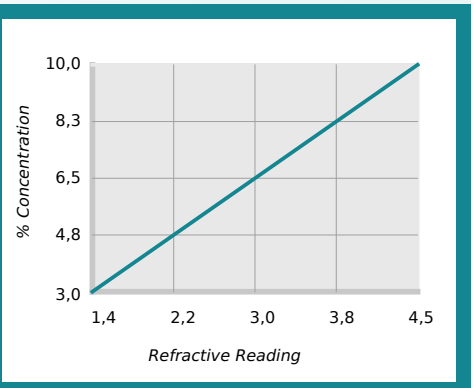
Physical Properties Typical Data

Color (Concentrate)	Yellow-brown
Odor (Concentrate)	Mild
Form (Concentrate)	Liquid
Flash Point (Concentrate) (ASTM D92-90)	> 100°C
pH (Concentrate as Range)	9,9 - 10,3
pH (Typical Operating as Range)	9,2 - 10,2
Coolant Refractometer Factor	2,2

Recommended Metalworking Concentrations

Light Duty	3,0% - 6,0%
Moderate Duty	6,0% - 8,0%
Heavy Duty	8,0% - 10,0%
Design Concentration Range	3,0% - 10,0%

Concentration by % Brix



% Concentration = Refractive Reading x Refractive Factor
Coolant Refractometer Factor % Brix = 2,2

Health and Safety

Request SDS

TRIM™ SC445

Low-oil Semisynthetic Coolant

Mixing Instructions

- Recommended usage concentration in water: 3,0% - 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

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=vnm_en-vnm_SC445

17th Floor, VCCI Tower, 9 Dao Duy Anh Street, Phuong Mai Ward, Dong Da District

Hanoi City, 115500

Vietnam

+84 24-3512-3436

vietnam-info@masterfluids.com

masterfluids.com/vnm/en-vnm/