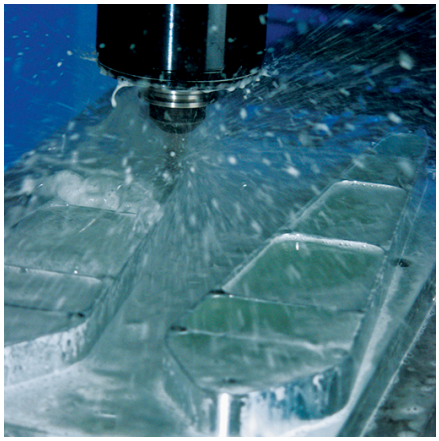
TRIM™ SC538AL

High-performance Semisynthetic Fluid

TRIM SC538AL is a high-performance semisynthetic fluid that provides excellent boundary lubrication characteristics for aluminum alloy machining. Suitable for general cutting of ferrous and non-ferrous metal materials, TRIM SC538AL achieves very satisfactory surface finishes and is widely used in the automotive and general machining industry. TRIM SC538AL complies with environmental protection and safety laws and regulations for automotive metalworking fluids, as well as the relevant element restrictions in Europe, USA, and Japan.

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 SC538AL:

- Excellent cooling and lubrication properties, provides ultra-fine surface finish for aluminum alloy machining
- Provides excellent anti-corrosion protection for non-ferrous metals such as aluminum while avoiding corrosion and discoloration of the workpiece
- Suitable for stainless steel, aluminum alloys, and other non-ferrous and ferrous metals
- Excellent anti-foaming performance
- No sticky residue on the surface of the work piece
- Coolant residues are easily removed with water, working fluid, or water-based cleaning agents
- Good cleaning performance keeps the machines very clean
- Easy recycling and disposal with conventional techniques and equipment
- Provides excellent safety, reducing the risk of allergies for workers
- Meets the requirements of customers with high compliance requirements for metalworking fluids.

SC538AL especially for:

Applications — boring, drilling, milling, reaming, and turning

Metals — aluminum, cast iron, copper alloys, powder metallurgy, steel alloys, and steels

Industries — aerospace, automotive, and general industry

SC538AL is free of — boron, chlorine, and formaldehyde releasers

Master Fluid SOLUTIONS™

TRIM™ SC538AL

High-performance Semisynthetic Fluid

Application Guidelines

- For high-speed machining and high-heat situations, use a lower concentration.
- High concentrations of TRIM SC538AL are suitable for machining soft and tough materials as well as in low-speed operations, in order to reduce friction and control the generation of built-up edge.
- Running at or above 7.0% offers the best sump life and corrosion inhibition.
- For additional product application information, including performance optimization, please contact your Master Fluid Solutions' Authorized Distributor at https://www.masterfluids.com/ap/en-ap/distributors/index.php, your District Sales Manager, or email us at apac-info@masterfluids.com.

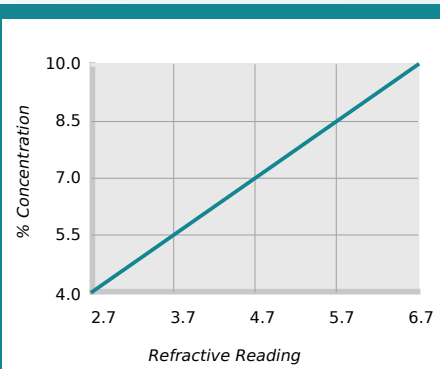
Physical Properties Typical Data

Color (Concentrate)	Light yellow
Color (Working Solution)	White microemulsion
Odor (Concentrate)	Mild amine
Form (Concentrate)	Liquid
Flash Point (Concentrate) (ASTM D93-08)	> 100°C
pH (Concentrate as Range)	9.9 - 10.3
pH (Typical Operating as Range)	9.6 - 10.2
Coolant Refractometer Factor	1.5

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 = 1.5

Health and Safety

Request SDS

TRIM™ SC538AL

High-performance Semisynthetic Fluid

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

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=ap_en-ap_SC538AL

4/F, Block H, No. 200 Jinsu Road Pudong, Shanghai

上海市浦东新区金苏路200号H栋4楼, 201206

China

+86 21 6807-0101, 400-801-3590

info@masterchemical.com.cn

masterfluids.com/ap/en-ap/