# TRIM<sup>®</sup> SC310 nd

## Microemulsion Semisynthetic - No Dye

TRIM<sup>™</sup> SC310 nd is a no dye, high-oil, semichemical coolant. This product combines the cooling, rust inhibition, and wetting of a premium synthetic with the mechanical lubricity and machine "friendliness" of a soluble oil. SC310 nd is well-suited for general, high-speed machining and grinding of all materials.

### Semisynthetics



#### Cutting edge solutions:

TRIM<sup>®</sup> 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, and copper alloys, as well as plastics and composites. With less carryoff, semisynthetics use less material — it all adds up to lower costs.



#### Choose SC310 nd:

- Compatible with a very wide range of material including: cast iron, steels, copper, and many plastics and composites
- Provides superior corrosion inhibition on all ferrous and nonferrous metals and eliminates "hot chip" and clinkering problems often seen when machining cast iron
- Keeps machines very clean while leaving a soft fluid film for ease of cleaning and reduced maintenance
- Has exceptional sump life and very low makeup for extremely low total operating cost
- Low odor and mist makes for an operatorfriendly product
- Extremely effective EP additive package
- Contains no nitrites, heavy metals, phenolic compounds
- Easy recycling or disposal with conventional techniques and equipment

#### SC310 nd especially for:

Applications — band sawing, centerless grinding, cylindrical grinding, drilling, form cylindrical grinding, internal grinding, milling, plain grinding, reaming, tapping, and turning

**Metals** — cast iron, ferrous metals, nonferrous metals, stainless steels, and steels

Industries — automotive, general fabrication, and job shop

SC310 nd is free of — NPEs and sulfur



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## **Application Guidelines**

- Works well in the general machine shops where soluble oil may smoke or not cool sufficiently under heavy cutting loads
- In mixed metal situations, concentration control is critical to fight the effects of galvanic corrosion (7.5% plus)
- Concentrations of 7.0% or more offers both the best sump life and corrosion inhibition
- Not recommended for use on very reactive metals like aluminum alloys, magnesium, and zirconium
- Check for and correct mechanical causes of foam before adding antifoams
- For additional product application information, including performance optimization, please contact your Master Fluid Solutions' Authorized Distributor at <u>https://www.masterfluids.com/in/en-in/distributors/index.php</u>, your

District Sales Manager, or email us at indiainfo@masterfluids.com.

## **Physical Properties Typical Data**

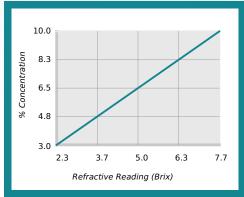
Color (Concentrate) Color (Working Solution) Odor (Concentrate) Form (Concentrate) Flash Point (Concentrate) () pH (Typical Operating as Range) Coolant Refractometer Factor Light yellow to amber Opaque white Mild, pleasant Liquid > 100°C 9.1 - 10.1 1.3

### **Recommended Metalworking Concentrations**

Light Duty Moderate Duty Heavy Duty Design Concentration Range 3.0% - 6.0% 6.0% - 8.0% 8.0% - 10.0% 3.0% - 10.0%



#### **Concentration by % Brix**



<sup>%</sup> Concentration = Refractive Reading x Refractive Factor Coolant Refractometer Factor % Brix = 1.3

#### **Health and Safety**

Request SDS





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### **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: <u>apps.masterfluids.com/makeup/</u>.
- Use mineral-free water to improve sump life and corrosion inhibition while reducing carryoff and concentrate usage.

## **Ordering Information**

20-litre pail 204-liter drum 1000-litre IBC

 $\mathsf{TRIM}^{\circledast}$  SC310 nd  $\mid \ @2023-2025$  Master Fluid Solutions^{\circledast}  $\mid$  2025-04-02



#### **Additional Information**

- Use Master STAGES<sup>™</sup> Whamex XT<sup>™</sup> 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.
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