# SC230

# **Oil-rejecting Semisynthetic**

TRIM<sup>®</sup> SC230 is a low oil, semisynthetic fluid which meets the needs of the modern and demanding job shops. SC230 makes use of the latest in synthetic coolant formulations, and a specially synthesized oil to produce a versatile product ready to meet the demands of the 21st century. This combination of a proprietary chemical formulation and new synthetic oil technology results in a semisynthetic product that will not foam, rejects tramp oil, has great sump life, and is kind to both machines and operators. This product will perform well in centerless and cylindrical form grinding as well as on high-speed, single point turning, and down-the-hole work on vertical and horizontal machining centers.

## 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 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 SC230:

- Compatible with a very wide range of materials
- Has the lubricity to do form grinding, drilling, tapping, and reaming operations without the use of chlorine or sulfur-based EP additives
- Will not foam, even at very high pressures and flow rates
- Has good flushing action so that chips and fines are readily flushed into the machine's chip removal system
- Very low carryoff to reduce the need for makeup coolant for low, long term operating costs
- Easily recycled to reduce coolant purchase and disposal costs

#### SC230 especially for:

Applications — centerless grinding, cooling, corrosion inhibition, down the hole work, drilling, form cylindrical grinding, grinding, high-speed turning, reaming, and tapping

Metals — cast iron, composites, copper alloys, exotic alloys, plastics, steels, and tool steels

Industries — automotive, job shop, and medical

**SC230 is free of** — animal derived materials, chlorinated EP additives, DCHA, nitrites, NPEs, phosphorous, siloxane, and sulfurized EP additives



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#### **Application Guidelines**

- Not recommended in machine tools that rely on the splash of the coolant to lubricate the mechanical portions of the machine tool, e.g. older screw machines, etc.
- This product is a superior cleaning agent so it may "wash out" dirt and residues when a machine is first charged.
- The minimum recommended concentration is 5% on cast iron and 4% on steel.
- Concentrations above 7.5% seem to be better for corrosion inhibition, tool life, and sump life. However, the best concentration for your operation can be determined by on-site testing.
- For additional product application information, including performance optimization, please contact your Master Fluid Solutions' Authorized Distributor at <a href="https://www.2trim.us/distributors.php">https://www.2trim.us/distributors.php</a>, your District Sales Manager, or call our Tech Line at 1-800-537-3365.

### **Physical Properties Typical Data**

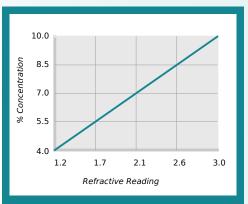
Color (Concentrate)	Blue
Color (Working Solution)	Blue
Odor (Concentrate)	Mild, sweet
Form (Concentrate)	Liquid
Flash Point (Concentrate) (ASTM D93-08)	> 226°F
pH (Concentrate as Range)	9.0 - 9.3
pH (Typical Operating as Range)	8.7 - 9.2
Coolant Refractometer Factor	3.3
Titration Factor (CGF-1 Titration Kit)	0.56
Digital Titration Factor	0.0175
V.O.C. Content (ASTM E1868-10)	110 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%

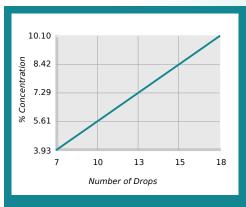


### **Concentration by % Brix**



<sup>%</sup> Concentration = Refractive Reading x Refractive Factor Coolant Refractometer Factor % Brix = 3.3

### **Concentration by Titration**



% Concentration = No. of Drops x Titration Factor Titration Factor = 0.56

#### **Health and Safety**

See the most recent SDS at

https://2trim.us/s/?i=1044-0-en-US-US





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



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## **Additional Information**

- Use Master STAGES<sup>™</sup> Whamex XT<sup>™</sup> for a quick and thorough precleaning of your machine tool and coolant system.
- Before using on any metals or applications not specifically recommended, consult Master Fluid Solutions.
- 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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https://2trim.us/di/?plr=SC230\*en-us\*na



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