TRIM® C290

Economical Synthetic Fluid for Aluminum Machining

TRIM C290 is a synthetic metalworking fluid optimized for the chemical, environmental, and machining requirements of general aluminum parts. C290 is a high performance, easy to use and maintain, metal removal fluid with very high levels of usable lubricity at the point-of-cut. C290's unique chemical formula allows great, nonferrous corrosion prevention on most aluminum alloys.

Synthetics

Peak your performance:

TRIM® clean-running synthetics contain little to no oil. They are typically hard-water tolerant with good corrosion protection. Plus, synthetics leave very low residue for easy cleaning. Paired with extremely low carryoff, synthetics translate to less maintenance and lower operational costs, saving you time and money.

Run clean and long with TRIM synthetics.

Choose C290:

- Great resistance to corrosion on nonferrous materials including aerospace aluminums 6061, 7075, 2024, 3000
- Water-clear, low-foaming and -misting, C290 is a joy to work with and manage
- Provides good results in a wide range of grinding and machining operations
- Excellent tramp oil rejection
- Easily removed from parts for easy cleanup before assembly, painting, or plating operations
- PRTR compliant, no SARA 313 reportable chemistry. Product contains no chlorine, phenol, nitrites, copper, triazine, or silicone
- Very low carryoff and long sump life results in low operating cost

C290 especially for:

Applications — belt grinding, Blanchard grinding, creep-feed grinding, cutting, cylindrical grinding, double disc grinding, drilling, form cylindrical grinding, grinding, in-feed centerless grinding, internal grinding, plain grinding, surface grinding, surface milling, tapping, through-feed centerless grinding, and turning

Metals — 2024, 5000, 6000, 7075, aerospace aluminum alloys, brass, bronze, cast aluminum, composites, copper, glass, high-nickel alloys, high-strength alloy steels, Inconel®, nonferrous metals, plastics, stainless steels, titanium, wrought aluminum, and yellow metals

Industries — general industry

C290 is free of — chlorine, formaldehyde releasers, nitrites, phenols, PRTR materials, SARA 313 listed ingredients, silicone, and sulfur

Master Fluid SOLUTIONS®

TRIM® C290

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Application Guidelines

- Higher concentrations of C290 increase both boundary and EP lubrication.
- Very low foam at working temperatures above 80°F (27°C).
- Maintaining concentration from 7.5% to 10.0% provides the best sump life and corrosion inhibition.
- C290 is not recommended on cast irons.
- C290 should not be used on magnesium or other reactive metals without special precautions.
- For additional product application information, including performance optimization, please contact your Master Fluid Solutions' Authorized Distributor at https://www.masterfluids.com/na/en-us/distributors/index.php, your District Sales Manager, or call our Tech Line at 1-800-537-3365.

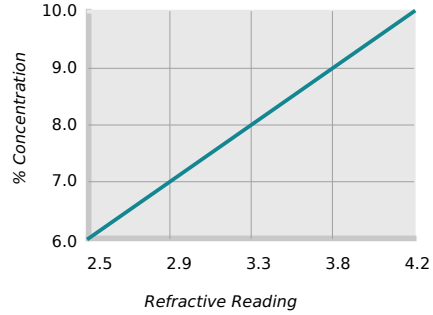
Physical Properties Typical Data

Color (Concentrate)	Colorless to light yellow
Color (Working Solution)	Colorless
Odor (Concentrate)	Mild
Form (Concentrate)	Liquid
Flash Point (Concentrate) (ASTM D93-08)	> 212°F
pH (Concentrate as Range)	7.8 - 8.2
pH (Typical Operating as Range)	7.2 - 8.2
Coolant Refractometer Factor	2.4
Titration Factor (CGF-1 Titration Kit)	1.00
Digital Titration Factor	0.0264
V.O.C. Content (ASTM E1868-10)	45 g/l

Recommended Metalworking Concentrations

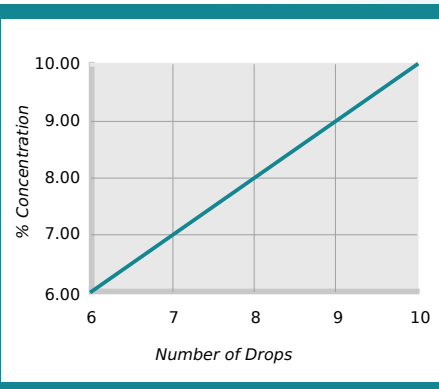
Light Duty	6.0% - 7.0%
Moderate Duty	7.0% - 9.0%
Heavy Duty	9.0% - 10.0%
Design Concentration Range	6.0% - 10.0%

Concentration by % Brix



% Concentration = Refractive Reading x Refractive Factor
Coolant Refractometer Factor % Brix = 2.4

Concentration by Titration



% Concentration = No. of Drops x Titration Factor
Titration Factor = 1.00

Health and Safety

Request SDS

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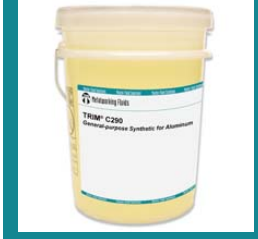
Mixing Instructions

- Recommended usage concentration in water: 6.0% - 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.

1-gallon jug
SKU: C290-1G
UPC-12: 641238082354



5-gallon pail
SKU: C290-5G
UPC-12: 641238082378

54-gallon drum
SKU: C290-54G
UPC-12: 641238082385

270-gallon tote
SKU: C290-270G
UPC-12: 641238082392

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 registered trademark of Master Chemical Corporation d/b/a Master Fluid Solutions.
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