

# TRIM™ C274

## High-performance low-foam synthetic

TRIM C274 is a high-performance synthetic fluid for working cast iron and steel alloys as well as corrosion resistant alloys such as Inconel and titanium. TRIM C274 is ideally suited to situations where high coolant velocities or volumes are necessary to achieve maximum productivity. TRIM C274 is designed to have the superior cooling and chip settling characteristics of a premium synthetic product with the improved residues and mechanical lubricity of a semi-synthetic coolant. This product utilises an extremely effective and proprietary non-chlorine, non-sulphur extreme pressure additive for good tool life and improved surface finishes.

### 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.

### Aerospace Approvals

Company	Specification
Safran Group	PR6300



#### Choose C274:

- Very stable formula provides long operational life with consistent performance
- Chlorine and sulphur free extreme pressure (EP) additives control built-up edge (BUE)
- Excellent choice for nickel alloy, steel alloy and cast iron machining and grinding
- Extremely low foam in mineral free water
- Excellent tramp oil rejection
- Water clear dilution aids filterability, reduces carryoff and facilitates getting the fluid to the point of cut
- Protects machine and tool surfaces while also preventing sticky ways, chucks, tool holders and fixtures
- Easy recycling or disposal with conventional techniques and equipment

#### C274 especially for:

**Applications** — band sawing, belt grinding, Blanchard grinding, cooling, corrosion inhibition, creep-feed grinding, cylindrical grinding, double disc grinding, drilling, form cylindrical grinding, form grinding, grinding, internal grinding, plain grinding, reaming, surface grinding, surface milling, tapping and turning

**Metals** — cast iron, Inconel®, nickel alloys, nonferrous metals, steel alloys, steels and titanium

**Industries** — aerospace, automotive, compressor, energy, machine tool and medical

**C274 is free of** — boron, chlorine, DEA, formaldehyde releasers, nitrites, phenolic compounds and sulphur

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## Application Guidelines

- TRIM C274 is 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.
- TRIM C274 is not recommended on materials like magnesium or zirconium without special precautions.
- This product is a superior cleaning agent so it may "wash out" dirt and residues when a machine is first charged; a thorough cleaning of older machines is required when installing this product the first time.
- The minimum recommended concentration is 5% on cast iron and 4% on steel.
- Concentrations in excess of 7% provide the best corrosion inhibition, tool life and sump life.
- For additional product application information, including performance optimisation, please contact your Master Fluid Solutions' Authorised Distributor at <https://www.masterfluids.com/eu/en/distributors/index.php>, your District Sales Manager, or call our Tech Line at +49 211 41 72 8 -900.

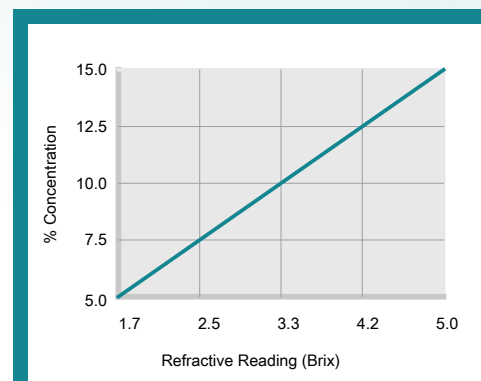
## Physical Properties Typical Data

Colour (Concentrate)	Light yellow
Odour (Concentrate)	Mild amine
Form (Concentrate)	Liquid
Flash Point (Concentrate) (ASTM D93-08)	> 160°C
pH (Concentrate as Range)	9.1 - 10.1
pH (Typical Operating as Range)	8.8 - 9.4
Coolant Refractometer Factor	3.0
Digital Titration Factor	0.2033

## Recommended Metalworking Concentrations

Light Duty	5.0% - 7.0%
Moderate Duty	7.0% - 9.0%
Heavy Duty	9.0% - 15.0%
Design Concentration Range	5.0% - 15.0%

## Concentration by % Brix



% Concentration = Refractive Reading x Refractive Factor  
Coolant Refractometer Factor % Brix = 3.0

## Health and Safety

Request SDS



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## Mixing Instructions

- Recommended usage concentration in water: 5.0% - 15.0%.
- 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/](https://apps.masterfluids.com/makeup/).
- Use mineral-free water to improve sump life and corrosion inhibition while reducing carryoff and concentrate usage.

## Ordering Information

20-litre pail

204-litre drum

1000-litre IBC

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## 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.
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[https://2trim.us/di/?i=eu\\_en\\_C274](https://2trim.us/di/?i=eu_en_C274)



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