ChemTig™ Weld Torch Coolant

PART NUMBER	AVAILABLE SIZE*
CT-WTC-5L	5 Litres
CT-WTC-20L	20 Litres

**Available colours and/or sizes may change without notice.*

DESCRIPTION

Chemtools® ChemTig™ Weld Torch Coolant is a glycol-free water-based heat transfer fluid for liquid-cooled MIG, TIG, and plasma cutting systems. Its high-purity deionised water base provides efficient torch cooling, helping reduce overheating and downtime, while minimising mineral scale and corrosion within the cooling system.

TYPICAL APPLICATIONS

- Liquid-cooled MIG and TIG torches
- Robotic and automated welding systems
- Plasma cutting systems with water-cooled torches
- Laser, resistance, and spot welders
- Self-contained recirculating chiller units

FEATURES & BENEFITS

- Excellent thermal conductivity – high heat transfer efficiency due to water-based formulation
- Low electrical conductivity - reduces current leakage and arc-start interference
- Low viscosity for rapid circulation through fine cooling channels
- Stable cooling performance under continuous operation
- Corrosion inhibiting – reduces oxidation, pitting, and metal particle shedding
- Glycol-free, deionised formulation – minimises scale and leaves no sticky residues
- Economical – extends maintenance intervals and pump, radiator, and torch service life
- Suitable for most liquid-cooled welding and cutting systems – check equipment manufacturer's recommendations

Compatibilities

- Copper and brass components
- Aluminium radiators
- Stainless steel fittings
- Common elastomers (EPDM, nitrile, neoprene)

DIRECTIONS FOR USE

- Drain the existing coolant and flush the system with deionised water before filling.
- Fill the system with coolant directly from the container - do not dilute.
- Operate the system to purge air from hoses and torch channels.
- Inspect coolant level periodically and top up as required.
- Replace coolant every 6–12 months depending on usage and contamination levels, or if coolant becomes cloudy or discoloured.

Note: The product is to be used at full strength – do not mix with glycol-based coolants, automotive antifreeze, hard tap water, or fluids containing oils or hydrocarbons.

TECHNICAL DATA

Appearance	Clear, colourless liquid	
Odour	Mild, neutral	
Glycol Content	None	
pH	7.5 – 8.5	(ASTM E70)
Specific Gravity	0.99 – 1.01	(ASTM D1298)
Electrical Conductivity	< 50 µS/cm (fresh)	(ASTM D1125)
Viscosity @ 25°C	~1 cSt	(ASTM D445)
Flash Point	None – non-flammable	
Boiling Point	Between 86°C and 100°C	
Freezing Point	Approx. -11°C to -13°C	
Flammability	Not classified as flammable	
Evaporation Rate	Moderate	

Note: The above values are typical and may vary slightly depending on production batch.

SHELF LIFE

Approx. 24 months from date of manufacture if stored continuously (unopened) in a cool, dry place.
Note: This product may not perform to given specifications once shelf life has been exceeded.

FIRST AID & SAFETY PRECAUTIONS

Always refer to Safety Data Sheet/s (SDS) before use. The SDS contains this product's hazard classification, first aid measures, and handling, storage, and personal protective equipment requirements. Read and understand the SDS before using, storing, or transporting this product, and make sure it is available to everyone who will handle it. Follow good industrial hygiene practices and avoid unnecessary contact with eyes and skin. If exposure occurs and symptoms persist, seek medical advice and show the SDS or product label where possible. In an emergency, contact the Poisons Information Centre on
13 11 26 (Australia) or the National Poisons Centre on 0800 764 766 (New Zealand).

STORAGE & TRANSPORT

Refer to Safety Data Sheet/s (SDS) for storage and transport requirements. As a general precaution, store in the original container, tightly closed, in a cool, dry, well-ventilated area away from direct sunlight, heat sources, incompatible materials, and food and drink. Do not expose to temperatures exceeding 50°C, or outside the storage temperature range stated on the SDS. Containers should be secured and kept upright during transport.

DISCLAIMER

Every effort has been made to ensure the information in this document is accurate at the date of publication. As conditions of use are beyond our control, users should conduct their own assessment to determine the suitability of the product for their intended application before use. Chemtools® Pty Ltd accepts no liability for any loss, damage, or injury resulting from reliance on the information contained herein, failure to follow the recommendations provided, misuse or abnormal use of the product, or any hazard inherent in the nature of the material. This document may be updated without notice; please ensure you are referring to the latest version, available online.