

# WELDING CHEMICALS INC. SAFETY DATA SHEET

## Section 1: Identification

**MSDS Name:** SDS-MTCF-ENG

**Product Identifier:** MTCF COOLING FLUID - MEDIUM TEMPERATURE (0°F/-18°C)

**Other Means of Identification:** None.

**Recommended Use:** Low-conductive, regular temperature, ethylene glycol-based coolant fluid line designed for closed-loop water cooling systems with an operating temperature range of regular (RTCF), mid (MTCF), and low (LTCF) temperatures.

**Restrictions on Use:** No information available.

**Item Numbers:** MTCF-1GRJ, MTCF-5GC, MTCF-55GPD

**Bar Codes:** 810048 30017 4, 810048 30018 0, 810048 30019 8

**Formula:** FORM1012 MIDCF FORMULA

**Chemical Name/Synonyms:** Cooling Fluid

**Supplier Identification and Address:**

Welding Chemicals Inc.,

2236 Liberty Drive

Niagara Falls, NY 14304

(716) 402-6906

570 Industrial Drive

Fort Erie, Ontario L2A 5M4

(905) 963-3339

**Email:** [qc@weldingchemicalsinc.com](mailto:qc@weldingchemicalsinc.com)

**Web:** [www.weldingchemicalsinc.com](http://www.weldingchemicalsinc.com)

**In emergency call 911.**

**Emergency Telephone Number (M-T 8:30 to 4:30 EST):** 716-402-6906

**For CHEMTREC assistance, call:** 800-424-9300

**For Canada only:** 1-888-CAN-UTEC (226-8832), 613-996-6666 or \*666 on a cellular phone.

## Section 2: Hazard(s) Identification

**GHS Classification:**

Acute toxicity (Oral): Category 4

Eye irritation: Category 2B

Specific target organ systemic toxicity - single exposure (Oral): Category 2 (Kidney, Liver)

Specific target organ systemic toxicity - repeated exposure (Oral): Category 2 (Kidney, Central nervous system)

**GHS Label Elements:**



**Signal Word(s):** Warning

**Hazard Statement(s):**

H302 Harmful if swallowed.

H320 Causes eye irritation.

H371 May cause damage to organs (kidneys, liver) if swallowed.

H373 May cause damage to organs (kidney, central nervous system) through prolonged or repeated exposure.

Contains Ethylene Glycol (CAS 107-21-1).

**Precautionary Statement(s):**

P260 Do not breathe dust/fume/gas/mist/vapors/spray.

P264 Wash skin thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P301+P312+P330 IF SWALLOWED: Call a POISON CENTER or doctor / physician if you feel unwell. Rinse mouth.

P305+P351+P338+P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor / physician.

P309 IF exposed or if you feel unwell: P313 Get medical advice / attention.

P337 + P313 If eye irritation persists: get medical advice / attention.

**Description of Other Hazards:** None.

**Storage:**

P405 Store locked up.

**Disposal:**

P501 Dispose of contents / container to an approved waste disposal plant.

### Section 3: Composition/ Information on Ingredients

Chemical Name	CAS No.	% Conc.	Common Name / Synonyms	Other identifiers
Ethylene glycol	107-21-1	32%	1,2-ethanediol	None

### Section 4: First-Aid Measures

**Inhalation:** Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid if cough or other symptoms appear.

**Skin Contact:** Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Get medical attention if irritation develops or persists.

**Eye Contact:** Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical attention.

**Ingestion:** Induce vomiting immediately. Do not give milk or alcoholic beverages. Get medical attention.

**Most Important Symptoms and Effects, Acute and Delayed:** None known.

**Immediate Medical Attention and Special Treatment:** Treat symptomatically and supportively.

### Section 5: Fire-Fighting Measures

**Suitable Extinguishing Media:** Use agent most appropriate to extinguish fire. Use water spray, dry chemical, carbon dioxide or appropriate foam.

**Unsuitable Extinguishing Media:** N/Av

**Specific Hazards Arising from the Product / Chemical:** None known.

**Explosion Data**

**Sensitivity to Mechanical Impact:** N/Av

**Sensitivity to Static Discharge:** N/Av

**Special Protective Equipment and Precautions for Firefighters:** As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Combustion generates toxic fumes. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

### Section 6: Accidental Release Measures

**Personal Precautions, Protective Equipment, and Emergency Procedures:** Avoid contact with eyes, skin, and clothing. Ensure adequate ventilation. Use proper personal protective equipment as indicated in Section 8.

**Environmental Precautions:** Prevent spilled material from entering sewers, storm drains, and natural waterways.

**Methods and Materials for Containment:** Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable containers. Keep all sources of ignition away from spill/release.

**Measures for Cleaning Up:** Clean up spills immediately, observing precautions in Section 8. Sweep up or absorb material, then place into a suitable clean, dry, closed container for disposal. Provide ventilation.

## Section 7: Handling and Storage

**Precautions for Safe Handling:** Wash thoroughly after handling. Use with adequate ventilation. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Avoid ingestion and inhalation.

### **Conditions for Safe Storage, Including Incompatibilities**

**Storage:** Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible materials. Protect container(s) against physical damage.

**Incompatibilities:** Strong acids. Strong bases. Strong oxidizing agents.

## Section 8: Exposure Controls/Personal Protection

### **Control Parameters:**

Chemical Name	CAS-NO.	VALUE TYPE (FORM OF EXPOSURE)	Control parameters / Permissible concentration	Basis
Ethylene glycol	107-21-1	C (Aerosol only)	100 mg/m <sup>3</sup>	ACGIH
		C	50 ppm q25 mg/m <sup>3</sup>	OSHA P0

**Appropriate Engineering Controls:** Good ventilation using local exhaust should be sufficient to control airborne levels. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

### **Individual Protection Measures**



**Eye / Face protection:** If required, wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA'S eye and face protection regulations in 29 CFR 1910.133 or European Standard EN 166.

**Skin and Body Protection:** Protective garments not normally required.

**Respiratory Protection:** Respiratory protection program meeting OSHA 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed when workplace conditions warrant respirator use.

**Hygiene Measures:** Standard precautionary measures for safe chemical handling. PVC, Neoprene or Nitrile rubber gloves. Do not eat, drink, or smoke when using this product.

## Section 9: Physical and Chemical Properties

**Physical state:** Liquid

**Color:** Colorless

**Odor:** Odorless

**Odor threshold:** N/Av

**pH:** 6.0

**Melting Point:** 9 °F / -13 °C

**Freezing Point:** 0 °F / -18°C

**Initial Boiling Point/Boiling Range:** >194 °F / >90 °C

**Flash Point:** N/Av

**Evaporation Rate:** N/Av

**Flammability (solid, gas):** Not determined.

**Upper/Lower Flammability or Explosive Limits:** N/Av

**Vapor Pressure:** <0.1 @20 °C

**Vapor Density:** N/Av

**Relative Density (@21 °C):** 1.03 -1.04 g/cm<sup>3</sup>

**Solubility in/Miscibility with water:** Completely miscible

**Partition Coefficient: n-Octanol/Water:** N/Av

**Auto-ignition Temperature:** N/Av  
**Decomposition Temperature:** N/Av  
**Viscosity:** cSt 100 °C  
**Explosive Properties:** None known.  
**Oxidizing Properties:** None known.

#### Section 10: Stability and Reactivity

**Reactivity:** No dangerous reactions known.  
**Chemical Stability:** Stable under normal temperatures and pressures.  
**Possibility of Hazardous Reactions:** None under normal processing.  
**Conditions to Avoid:** Incompatible materials, excess heat, sources of ignition.  
**Incompatible Materials:** Oxidizing agents.  
**Hazardous Decomposition Products:** Carbon monoxide, irritating and toxic fumes and gases, carbon dioxide, irritating aldehydes and ketones.  
**Hazardous Polymerization:** Will not occur.

#### Section 11: Toxicological Information

**Likely Routes of Exposure:** Inhalation \_\_\_ Skin Contact XXX Eye Contact \_\_\_ Ingestion \_\_\_  
**Inhalation:** N/Av  
**Ingestion:** N/Av  
**Skin Corrosion / Irritation:** May cause skin irritation in susceptible persons.  
**Serious Eye Damage / Eye Irritation:** Vapors may cause irritation to the eyes, respiratory system and the skin.  
**Respiratory or Skin Sensitization:** N/Av  
**LC50:** N/Av  
**LD50 (oral rat):** >5000 mg/kg  
**LD50 (dermal rat):** >2000 mg/kg  
**Acute Toxicity Estimates:** N/Av  
**STOT – Single Exposure: Ethylene glycol:** Routes of exposure: Ingestion Target Organs: Kidney, Liver  
Assessment: the substance or mixture is classified as specific target organ toxicant, insgle exposure, category 2.  
**Aspiration Toxicity:** N/Av  
**STOT – Repeated Exposure: Ethylene glycol:** Routes of exposure: Ingestion Target Organs: Kidney, Liver  
Assessment: the substance or mixture is classified as specific target organ toxicant, insgle exposure, category 2.  
**Carcinogenicity:**

Chemical Name	ACGIH	IARC	NTP	OSHA
Ethylene glycol	None listed	None listed	None listed	None listed

**Reproductive Toxicity:** N/Av  
**Mutagenic Effects:** N/Av  
**Sensitization:** No effects known.  
**Target organs:** N/Av

#### Section 12: Ecological Information

**Ecotoxicity:** N/Av  
**Persistence and Biodegradation:** Readily biodegradable.  
**Bioaccumulation:** N/Av  
**Other Adverse Effects:** N/Av

#### Section 13: Disposal Considerations

**RCRA P-Series:** None listed.  
**RCRA U-Series:** None listed.  
**Disposal Methods:** Chemical waste generators must determine whether discarded materials are classified as hazardous waste.

**Contaminated Packaging:** Dispose of in accordance with all applicable federal, state, and local regulations.

#### Section 14: Transport Information

**DOT Regulations:** Not regulated.

**TDG Regulations:** Not regulated.

**IMDG Regulations:** Not regulated.

#### Section 15: Regulatory Information

**TSCA (Toxic Substances Control Act):**

CAS# 107-21-1 is listed on the TSCA inventory.

**TSCA Health & Safety Reporting List:**

None of the chemicals are on the Health & Safety Reporting List.

**TSCA Chemical Test Rules:**

None of the chemicals in this product are under a TSCA Chemical Test Rule.

**TSCA Section 12b:**

None of the chemicals are listed under TSCA Section 12b.

**TSCA Significant New Use Rule:**

None of the chemicals in this material have a SNUR under TSCA.

**CERCLA Hazardous Substances and corresponding RQs:**

Chemical Name	CAS #	COMPONENT RQ (lbs)	Calculated product RQ (lbs)
Monoethylene Glycol	107-21-1	5000	*

\*Calculated RQ exceeds reasonably attainable upper limit

**SARA Section 302 Extremely Hazardous Substances:**

None of the chemicals in this product have a TPQ.

**SARA Section 313:**

Ethylene glycol 107-21-1 99%

**Clean Air Act (Section 112 Hazardous Air Pollutants (HAPs)):**

This material does not contain any hazardous air pollutants. This material does not contain any Class 1 Ozone depletors. This material does not contain any Class 2 Ozone depletors.

**Clean Water Act:**

None of the chemicals in this product are listed as Hazardous Substances under the CWA. None of the chemicals in this product are listed as Priority Pollutants under the CWA. None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

**OSHA:**

None of the chemicals in this product are considered highly hazardous by OSHA.

**STATE:**

CAS# 107-21-1 is not present on state lists from CA, PA, MN, MA, FL, or NJ.

**California Prop 65:**

California No Significant Risk Level: None of the chemicals in this product are listed.

**Canada - DSL/NDSL:**

CAS# 107-21-1 is listed on Canada's DSL List.

**Canada - WHMIS 2015**

This product has been classified in accordance with the Globally Harmonized System of Classification and Labelling of Chemicals (GHS), and this SDS contains all of the information required by WHMIS 2015 regulations.

#### Section 16: Other Information

**Abbreviations:**

N/Av Not Available

N/Ap Not Applicable

N/D Not Determined

MSHA (Mine Safety and Health Administration)

NIOSH (National Institute for Occupational Safety and Health)

NFPA (National Fire Protection Association)

STOT (Specific Target Organ Toxicity)

ACGIH (American Conference of Governmental Industrial Hygienists)

IARC (International Agency for Research on Cancer)

NTP (National Toxicity Program)

CERCLA The Comprehensive Environmental Response, Compensation, and Liability Act

SARA (The Superfund Amendments and Reauthorization Act)

WHMIS (Worker Hazardous Materials Information System)

**NFPA Rating:** Health: 2; Flammability: 1; Instability: 0

**Date of Latest Revision:** March 01, 2020

**Revision:** 00

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