

803-LIQUID

PROJECTION TUBE COOLANT

Safety Data Sheet

Section 1: Identification

Product Identifier and Other Means of Identification

Product Identifier: Projection Tube Coolant Other Means Of Identification: Not applicable

Related Part # 803-250ML, 803-500ML

Recommended Use and Restriction on Use

Use: For use in cooling projection tubes

Uses Advised Against: Not available

Details of Manufacturer or Importer

Manufacturer MG Chemicals 1210 Corporate Drive Burlington, Ontario L7L 5R6 CANADA

MG Chemicals (Head Office) 9347-193 Street Surrey, British Columbia V4N 4E7 CANADA

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 info@mgchemicals.com

E-MAIL (Competent Person): sds@mgchemicals.com

Emergency Phone Number

For hazardous material incidents ONLY (leaks, spills, fires, exposures or accidents) USA or CANADA—Call Verisk 3E at **+1-866-519-4752** or **+1-760-476-3962** (Service access code: 335388)

For emergencies involving the transport of dangerous goods; 24/7 service CANADA—Call CANUTEC collect at +1-613-996-6666 or *666 on cellular phones

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Section 2: Hazards) Identification

Classification of Hazardous Chemical

GHS Categories

Criteria		Category	Signal Word	Pictograms
Acute Toxicity	Oral	4	Warning	Exclamation
Specific Target Organ Toxicity	Repeated Exposure	2	Warning	Health

Note: The degree of severity is ranked within each hazard class from

1 (Highest Severity) to up to 5 (Lowest Severity), which is opposite to HMIS and NFPA conventions. Severity category rankings do not allow comparisons between classes.

Label Elements

Signal Word	WARNING
Pictograms	Hazard Statements
	H302: Harmful if swallowed
	H373: May cause damage to organs (kidney) through prolonged or repeated exposure if swallowed
Prevention	Precautionary Statements
P102	Keep out of reach of children.
P260	Do not breathe mist/vapors/spray.
P264	Wash hands thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
Response	Precautionary Statements
P301 + P312, P330	IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. Rinse mouth
P314	Get medical advice/attention if you feel unwell.

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Disposal	Precautionary Statements
P501	Dispose of contents/container in accordance to local/regional/international regulations.

Hazards Not Otherwise Classified

Other Criteria	Hazard Statements/Precautionary Statement	Signal Word	Pictograms
None	None	None	None

Section 3.	Composition/Ir	nformation or	Ingredients
	Composition/ii	normation of	i iliyi culcilis

CAS #	Chemical Name	%(weight)
107-21-1	1,2-ethanediol	70%
56-81-5	1,2,3-propanetriol	30%

Section 4: First-Aid Measures

Exposure Condition	GHS Code/Symptoms/Precautionary Statements
IF SWALLOWED	P301 + P312, P330
Immediate Symptoms	abdominal pain, nausea, unconsciousness, vomiting
Response	Call a POISON CENTER/doctor if you feel unwell.
	Rinse mouth.
IF ON SKIN	P303 + P352, P314
Immediate Symptoms	dry skin
Response	Wash with plenty of water.
	Get medical advice/attention if you feel unwell.
IF IN EYES	P305 + P351 + P338
Immediate Symptoms	redness, irritation, pain
Response	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

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IF INHALED	P304 + P340, P314
Immediate Symptoms	cough, dizziness, headache, respiratory irritation
Response	Remove person to fresh air and keep comfortable for breathing.
	Get medical advice/attention if you feel unwell.

Section 5: Fire-Fighting Measures

Extinguishing Media	In case of fire: Use dry chemical, carbon dioxide, chemical foam,
	or water spray to extinguish.
Specific Hazards	Produces irritating smoke of unknown toxicity in fires.
	Prevent fire-fighting wash from entering waterway or sewer system.
Combustion Products	Produces toxic fumes and carbon oxides
Fire-Fighter	Wear self-contained breathing apparatus and full fire-fighting turn-out gear.

Section 6: Accidental Release Measures

Personal Protection	Use personal protection recommended in Section 8.
Precautions for Response	Remove or keep away all sources of extreme heat or open flames. Do not breathe the mist/spray/vapors.
Environmental Precautions	Avoid releasing to the environment. Prevent spill from entering drains and waterways.
Containment Methods	Contain with inert and non-flammable absorbent (such as soil, sand, vermiculite).
Cleaning Methods	Collect liquid in a sealable, chemical-resistant container. Sprinkle inert absorbent compound onto spill, then sweep into the container. Wash spill area with soap and water to remove the last traces of residue.
Disposal Methods	Dispose of spill waste according to Section 13.

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Section 7: Handling and Storage		
Prevention	Keep out of reach of children.	
	Do not breathe mist/vapors/spray.	
Handling Wear protective gloves/protective clothing/eye protection		
	Wash hands thoroughly after handling.	
	Do not eat, drink or smoke when using this product.	
Storage	Not applicable.	

Section 8: Exposure Controls/Personal Protection

Chemical Name Country Long Term Short Term **Exposure Limits Exposure Limits** (PEL) (STEL) ACGIH 100 mg/m^{3} 1,2-ethanediol Not established U.S.A. OSHA PEL Not established Not established Canada AB Not established 100 mg/m^3 100 ma/m³ (aerosol) Canada BC Not established (vapor) Canada BC Not established 50 mg/m^3 20 mg/m^{3} (particulate) Canada BC 10 mg/m^3 Canada ON Not established 100 mg/m³ Not established 127 mg/m^{3} (mist/vapor) Canada QC 1,2,3-propanetriol ACGIH Not established Not established (mist) U.S.A. OSHA PEL 15 mg/m^3 Not established Canada AB 10 mg/m^3 Not established 10 ma/m^{3} Canada BC Not established Canada ON 10 mg/m^{3} Not established Canada QC 10 mg/m^3 Not established

Substances with Occupational Exposure Limit Values

Note: Ingredients are listed in descending weight contribution order (from greatest to least). The ACGIH¹, OSHA (Table Z-1), and Canadian provinces exposure limits were consulted. Limits from by RTECS database² and data from suppliers' SDS were also consulted. Short term exposure limits (STEL) are for 15 min and long term permissible exposure limits (PEL) for 8 h.

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Engineering Controls		
Ventilation	Keep airborne concentrations below the occupational exposure limits (OEL).	
Personal Protective Eq	uipment	
Eye protection	Wear appropriate protective eyeglasses or chemical safety goggles.	
	Recommendation: Ensure that glasses have side shields for lateral protection.	
Skin Protection	For likely contacts, use polyvinyl alcohol (PVA), viton, or other chemically resistant gloves.	
	For incidental contacts, use nitrile or other chemically resistant gloves.	
Respiratory Protection	For over-exposures up to 10 x OEL of mist/vapors/spray, wear respirator such as a half-mask respirator with organic vapor cartridges.	
	Above 10 x OEL, use a positive-pressure, air-supplied respirator or a self-contained breathing apparatus.	
	RECOMMENDATION: Consult your local safety supply store to ensure that your respirator has a NIOSH (U.S.) approved filter cartridges appropriate for the ingredients listed in Section 3. The respirator should be fitted to the employee by a professional. Ensure vapor cartridges are stored in sealed plastic bags when not being used.	

General Hygiene Considerations

Wash hands thoroughly with water and soap after handling.

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Section 9: Ph	vsical and	Chemical Pro	perties
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Physical State	Liquid	Lower Flammability Limit ^{a)}	3.2%
Appearance	Clear, colorless	Upper Flammability Limit ^{a)}	15.3%
Odor	Mild	Vapor Pressure @20 °C	0.11 hPa [0.08 mmHg]
Odor Threshold	Not available	Vapor Density	>2 (Air =1)
рН	Not available	Specific Gravity @25 °C	1.15
Freezing/Melting	Not	Solubility in	Soluble
Point	available	Water	
Boiling Point	182 °C	Partition	Not
	[359 °F]	Coefficient	available
Flash Point ^{b)}	111 °C	Auto-ignition	400 °C
	[231 °F]	Temperature	[752 °F]
Evaporation	Not	Decomposition	Not
Rate	available	Temperature	available
Flammability	Not	Viscosity	Not
(solid, gas)	applicable	@40 °C	available

a) Using Raoult's Law

b) Closed cup

Section 10: Stability and Reactivity

Reactivity	Not available
Chemical Stability	Chemically stable at normal temperatures and pressures.
Conditions to Avoid	Avoid excessive heat and incompatible substances. Do not use in a way that forms fumes, vapors, mist, or that aerosolizes the product.
Incompatibilities	Strong oxidizing agents, strong bases, strong acids
Polymerization	Will not occur
Decomposition	Will not decompose under normal conditions. For thermal decomposition, see combustion products in Section 5.



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Section 11: Toxicological Information

Summary of Effects and Symptoms by Routes of Exposure		
Eyes	Cause redness, eye irritation and pain.	
Skin	Cause dry skin.	
Inhalation	May cause cough, dizziness, headaches and respiratory irritation.	
Ingestion	Cause abdominal pain, nausea, unconsciousness and vomiting	
Chronic	May have effects on the central nervous system, resulting in abnormal eye movements (nystagmus).	

Acute Toxicity (Lethal Exposure Concentrations)

Chemical Name	LD50	LD50	LC50
	oral	dermal	inhalation
1,2-ethanediol	7 712 mg/kg	10 626 mg/kg	Not
	Rat	Rabbit	established
1,2,3-propanetriol	12 600 mg/kg	10 000 mg/kg	Not
	Rat	Rabbit	established

Note: Toxicity data from the RTECS² and ECHA databases were consulted. The data from supplier SDS were also consulted.

Other Toxicological Effects

Skin corrosion/irritation	Based on available data, the classification criteria are not met.
Serious eye damage/irritation	Based on available data, the classification criteria are not met.
Sensitization (allergic reactions)	Based on available data, the classification criteria are not met.
Carcinogenicity (risk of cancer)	Based on available data, the classification criteria are not met.
Mutagenicity (risk of heritable genetic effects)	Based on available data, the classification criteria are not met.

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Reproductive Toxicity (risk to sex functions)	Based on available data, the classification criteria are not met.
Teratogenicity (risk of fetus malformation)	Based on available data, the classification criteria are not met.
STOT-single exposure	Based on available data, the classification criteria are not met.
STOT-repeated exposure	If swallowed, prolonged or repeated over-exposure to 1,2-ethanediol can cause damage to kidneys.
Aspiration hazard	Based on available data, the classification criteria are not met.

Section 12: Ecological Information

Ecological classifications are based on the IMDG/GHS criteria in conjunction with ecotoxicological data from our suppliers, the European Chemical Agency database (<u>http://echa.europa.eu</u>), and other reliable sources.

Acute Ecotoxicity

Based on available data, the classification criteria are not met.

Chronic Ecotoxicity

Based on available data, the classification criteria are not met.

Biodegradability

Readily biodegradable

Other Effects

Actual VOC (Volatile Organic Compounds) content according to the US (EPA) and Canadian (CEPA) authorities.

Actual VOC = 100% [1151 g/L]

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Section 13: Disposal Information

Dispose of contents in accordance with all local, regional, national, and international regulations.

Section 14: Transport Information

Ground

Refer to TDG regulations (Canadian Transportation of Dangerous Goods regulations); **USA DOT 49 CFR** (Parts 100 to 185) **Regulations.**

Non Regulated

Air

Refer to ICAO-IATA Dangerous Goods Regulations.

Non Regulated

Sea

Refer to IMDG regulations.

Non Regulated

Note: Shipper must be appropriately <u>trained and certified</u> before involvement with the transport of dangerous goods.

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Section 15: Regulatory Information

Canada

Domestic Substance List (DSL) / Non-Domestic Substance Lists (NDSL)

All hazardous ingredients are listed on the DSL.

Hazardous Products Act (R.S.C., 1985, c. H-3)

The safety data sheet and label comply with the Hazardous Product Act and WHMIS 2015.

USA

Other Classifications

HMIS® RATING

HEALTH:	*	1
FLAMMABILITY:		1
PHYSICAL HAZARD:		0
PERSONAL PROTECTION:		

NFPA® 704 CODES



Approximate HMIS and NFPA Risk Ratings Legend: 0 (Low or none); 1 (Slight); 2 (Moderate); 3 (Serious); 4 (Severe)

CAA (Clean Air Act, USA)

This product does not contain any class 1 ozone depleting substances.

This product does not contain any class 2 ozone depleting substances.

This product contains ethylbenzene and xylene that are listed as hazardous air pollutants.

EPCRA (Emergency Planning and Right to Know Act, USA, 40 CFR 372.45)

This product does contains 1,2-ethanediol (CAS# 107-21-1), which is subject to the reporting requirements of section 313 Title III of the SARA of 1986 and 40 CFR part 372.

TSCA (Toxic Substances Control Act of 1976, USA)

All substances are TSCA listed.

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California Proposition 65 (Chemicals known to cause cancer or reproductive toxicity USA).

This product contains ethylene glycol (ingested), which is listed as a developmental toxic substance in California.

Europe

RoHS (Restriction of Hazardous Substances Directive)

This product does not contain any lead, cadmium, mercury, hexavalent chromium, PBB's, PBDE's, DEHP, BBP, DBP, or DIBP and complies with European RoHS regulations.

WEEE (Waste Electrical and Electronic Equipment Directive)

This product is not a piece of electrical or electronics equipment, and is therefore not governed by this regulation.

Section 16: Other Information

SDS Prepared by	Michel Hachey
Date of Review	12 March 2020
Supersedes	11 July 2016

Reason for Changes: Format changes in compliance with the HCS2012 and WHMIS 2015.

Reference

1) ACGIH 2013 TLVs and BEIs: Based on the documentation of the threshold limit values for chemical substances and physical agents & biological exposure indices, American Conference of Governmental of Industrial Hygienist Cincinnati, OH (2013).

2) All toxicological data were checked against the RTECS (Registry of Toxic Effects of Chemical Substances®)

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Abbreviations

- ACGIH American Conference of Governmental Industrial Hygienists (USA)
- ECHA European Chemicals Agency
- EU European Union
- EC50 Half maximal effective concentration
- EL50 Half maximal effective loading
- IARC International Agency for Research on Cancer
- NOELR No observable effect loading ratio
- NTP National Toxicology Program
- GHS Globally Harmonized System of Classification of Labeling of Chemicals
- LC50 Lethal Concentration 50%
- LCLo Lowest published lethal concentration
- LD50 Lethal Dose 50%
- OEL Occupational Exposure Limit
- PEL Permissible Exposure Limit
- SDS Safety Data Sheet
- STEL Short-Term Exposure Limit
- TCLo Lowest published toxic concentration
- TWA Time Weighted Average
- VOC Volatile Organic Content

Technical Queries Contact us regarding any questions, improvement suggestions, or problems with this product. Application notes, instructions, and FAQs are located at <u>www.mgchemicals.com</u>.

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