

8704

# Safety Data Sheet

## Section 1: Identification

### Product Identifier and Other Means of Identification

**Product Name:** 8704**Other Means of Identification:** Threadlocker, High Strength, Wicking**Related Part #:** 8704-10ML, 8704-50ML

### Recommended Use and Restriction on Use

**Use:** Removable thread locker for fasteners up to 1"**Uses Advised Against:** Not available

### Details of Manufacturer or Importer

**Manufacturer**MG Chemicals  
1210 Corporate Drive  
Burlington, Ontario L7L 5R6  
CANADAMG Chemicals (Head Office)  
9347-193 Street  
Surrey, British Columbia V4N 4E7  
CANADA**TEL** +1-800-340-0772**TEL** +1-905-331-1396**FAX** +1-800-340-0773**FAX** +1-905-331-2682**E-MAIL** [support@mgchemicals.com](mailto:support@mgchemicals.com)**E-MAIL** [info@mgchemicals.com](mailto:info@mgchemicals.com)**WEB** [www.mgchemicals.com](http://www.mgchemicals.com)**E-MAIL** (Competent Person): [sds@mgchemicals.com](mailto: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: Hazard(s) Identification**
**Classification of the Chemical Material**
**GHS Categories**

Criteria		Category	Signal Word	Pictograms
Sensitization	Skin	1	Warning	Exclamation
Eye Irritation		2	Warning	Exclamation
Skin Irritation		2	Warning	Exclamation
Specific Target Organ Toxicity	Single Exposure	3	Warning	Exclamation
Hazardous to the Aquatic Environment	Chronic	3	None	None

*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**

<b>Signal Word</b>	<b>WARNING</b>
<b>Pictograms</b>	<b>Hazard Statements</b>
	H319: Causes serious eye irritation H335: May cause respiratory irritation H315: Cause skin irritation H317: May cause an allergic skin reaction
<i>No symbol mandated</i>	H412: Harmful to aquatic life with long lasting effects
<b>Prevention</b>	<b>Precautionary Statements</b>
P102	Keep out of reach of children.
P261	Avoid breathing vapors or fumes.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves and eye protection.
P272	Contaminated work clothing should not be allowed out of the workplace.
P264	Wash hands thoroughly after handling.
P273	Avoid release to the environment.

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<b>Response</b>	<b>Precautionary Statements</b>
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337 + P313	If eye irritation persists: Get medical attention.
P304 + P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P312	Call a POISON CENTER or doctor if you feel unwell.
P302 + P352	IF ON SKIN: Wash with plenty of water.
P333 + P313	If skin irritation or rash occurs: Get medical advice or attention.
P362 + P364	Take off contaminated clothing and wash it before reuse.
<b>Storage</b>	<b>Precautionary Statements</b>
P403 + P233	Store in well-ventilated area. Keep container tightly closed.
P405	Store locked up.
<b>Disposal</b>	<b>Precautionary Statements</b>
P501	Dispose of contents in accordance to local, regional, and international regulations.

**Hazards Not Otherwise Classified**

<b>Other Criteria</b>	<b>Hazard Statements/Precautionary Statement</b>	<b>Signal Word</b>	<b>Pictograms</b>
None	None	None	None

**Section 3: Composition/Information on Ingredients**

<b>CAS #</b>	<b>Chemical Name</b>	<b>%(weight)</b>
25852-47-5	polyglycol dimethacrylate	80-90%
24448-20-2	aromatic dimethacrylate	3-7%
868-77-9	2-hydroxyethyl methacrylate	3-7%
80-15-9	cumene hydroperoxide	1-2%

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**Section 4: First-Aid Measures**

<i>Exposure Condition</i>	<i>GHS Code: Precautionary Statement</i>
<b>IF IN EYES</b>	P305 + P351 + P338, P337 + P313
<b>Immediate Symptoms</b>	<i>redness, severe irritation, pain</i>
<b>Response</b>	Rinse cautiously with water for 20 minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  If eye irritation persists: Get medical attention.
<b>IF INHALED</b>	P304 + P340, P312
<b>Immediate Symptoms</b>	<i>irritation of the respiratory track, cough</i>
<b>Delayed Symptoms</b>	<i>(extreme exposure) shortness of breath, wheezing</i>
<b>Response</b>	Remove person to fresh air and keep comfortable for breathing.  If feeling unwell: Call a POISON CENTER or doctor.
<b>IF ON SKIN</b>	P302 + P352, P362 + P364, P333 + P313
<b>Immediate Symptoms</b>	<i>irritation, redness, allergic contact dermatitis</i>
<b>Response</b>	Wash with plenty of water or shower. Take off contaminated clothing and wash it before reuse.  If skin irritation or rash occurs: Get medical advice or attention.
<b>IF SWALLOWED</b>	P301 + P330 + P331
<b>Immediate Symptoms</b>	<i>Low toxicity: abdominal pain, burning sensation</i>
<b>Response</b>	Rinse mouth. Do not induce vomiting.

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**Section 5: Fire-Fighting Measures**

<b>Extinguishing Media</b>	Use extinguishing media suitable for surrounding materials.
<b>Specific Hazards</b>	Not flammable or combustible, but burns if involved in a fire. Produces irritating fumes in fires or in contact with hot surfaces.  Harmful to the aquatic environment. Prevent fire-fighting wash from entering waterway or sewer system.
<b>Combustion Products</b>	Produces carbon oxides (CO, CO <sub>2</sub> ), nitrogen oxides (NO <sub>x</sub> ), and silicon oxides.
<b>Fire-Fighter</b>	Wear self-contained breathing apparatus and full fire-fighting turn-out gear.

**Section 6: Accidental Release Measures**

<b>Personal Protection</b>	See personal protection equipment in Section 8.
<b>Precautions for Response</b>	Avoid breathing the vapors or fumes.
<b>Environmental Precautions</b>	Avoid releasing to the environment. Prevent spill from entering drains and waterways.
<b>Containment Methods</b>	Prevent spill from entering drains and waterways. Contain with inert absorbent (such as soil, sand, vermiculite).
<b>Cleaning Methods</b>	Sprinkle inert absorbent compound onto spill, then sweep into the container. Wipe off residues with paper towels and place the used towels in the waste container. Wash spill area with soap and water to remove the last traces of residue.
<b>Disposal Methods</b>	Dispose of spill waste according to Section 13.

**8704****Section 7: Handling and Storage**

<b>Prevention</b>	Keep out of reach of children. Avoid breathing vapors or fumes. Use only outdoors or in a well-ventilated area.
<b>Handling</b>	Wear protective gloves and eye protection. Take off contaminated clothing and wash it before reuse. Contaminated work clothing should not be allowed out of the workplace. Wash hands thoroughly after handling.
<b>Storage</b>	Protect from sunlight. Do not expose to temperatures exceeding 38 °C [100 °F]. Store in a well-ventilated area. Keep tightly closed. Store locked up.

**Section 8: Exposure Controls/Personal Protection****Substances with Occupational Exposure Limit Values**

Contains no substances with occupational exposure limits.

*Note:* The ACGIH<sup>1</sup>, OSHA, and Canadian provinces exposure limits were consulted. Limits from the RTECS database<sup>2</sup> and from suppliers' SDSs were also consulted. Short term exposure limits (STEL) are usually for 15 min and long term permissible exposure limits (PEL) for 8 h.

**Engineering Controls**

<b>Ventilation</b>	Keep airborne concentrations below the occupational exposure limits (OEL).
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**8704****Personal Protective Equipment**

- Eye protection** Wear appropriate protective eyeglasses or chemical safety goggles.
- RECOMMENDATION:** Use safety glasses with lateral protection.
- Skin Protection** For likely contacts, use of protective butyl rubber, neoprene or other chemically resistant gloves.
- For incidental contacts, use disposable nitrile or other chemically resistant gloves.
- Respiratory Protection** Not normally required for routine operations, but if exposed to high levels of vapors or fumes, wear respirator such as a half-mask respirator with suitable organic vapor cartridge and particulate filter.
- 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: Physical and Chemical Properties**

<b>Physical State</b>	Liquid	<b>Lower Flammability Limit</b>	Not available
<b>Appearance</b>	Green	<b>Upper Flammability Limit</b>	Not available
<b>Odor</b>	Mild	<b>Vapor Pressure @27 °C</b>	0.4 mmHg [ $<0.1$ kPa]
<b>Odor Threshold</b>	Not available	<b>Vapor Density</b>	$>2.6$ (Air =1)
<b>pH</b>	Not available	<b>Relative Density @24 °C</b>	1.1
<b>Freezing/Melting Point</b>	Not available	<b>Solubility in Water</b>	Slight
<b>Initial Boiling Point</b>	$\geq 149$ °C [ $\geq 300$ °F]	<b>Partition Coefficient n-octanol/water</b>	Not available
<b>Flash Point</b>	$>93$ °C [ $>200$ °F]	<b>Auto-ignition Temperature</b>	Not available
<b>Evaporation Rate</b>	Not available	<b>Decomposition Temperature</b>	Not available
<b>Flammability</b>	Non flammable	<b>Viscosity @40 °C</b>	Not available

**Section 10: Stability and Reactivity**

<b>Reactivity</b>	At 70 °C [158 °F], the cumene hydroperoxide may undergo self-accelerating decomposition.
<b>Chemical Stability</b>	Chemically stable at normal temperatures and pressures
<b>Conditions to Avoid</b>	Temperatures over 38 °C [100 °F] and incompatible substances. Do not use in a way that forms fumes, vapors, mist, or that aerosolizes the product.
<b>Incompatibilities</b>	Strong oxidizing agents, strong acids, strong bases, alkali or alkali earth metals
<b>Polymerization</b>	Will not occur
<b>Decomposition</b>	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**

<b>Eyes</b>	Causes redness, severe eye irritation, or pain.
<b>Skin</b>	Causes skin redness, irritation, or allergic skin reaction.
<b>Inhalation</b>	It may cause irritation of nose, throat and lung (upper respiratory tract).
<b>Ingestion</b>	Low toxicity: It may cause irritation and burning sensation. (See inhalation symptoms.)
<b>Chronic</b>	Prolonged and repeated exposure may damage mucous tissue in the upper respiratory tract and lungs.  Prolonged and repeated exposure may lead to skin sensitization.

**Lethal Exposure Concentrations**

<b>Chemical Name</b>	<b>LD50 oral</b>	<b>LD50 dermal</b>	<b>LC50 inhalation</b>
polyglycol dimethacrylate	Not available	Not available	Not available
aromatic dimethacrylate	Not available	Not available	Not available
2-hydroxyethyl methacrylate	5 050 mg/kg Rat	>5 000 mg/kg Rat	Not available
cumene hydroperoxide	382 mg/kg Rat	490 mg/kg Rabbit	220 ppm Rat

Note: Toxicity data from the RTECS<sup>2</sup> and ECHA databases were consulted. The data from supplier SDSs were also consulted.

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**8704****Other Toxicological Effects**

<b>Skin corrosion/irritation</b>	Causes skin irritation.
<b>Serious eye damage/irritation</b>	Causes serious eye irritation.
<b>Respiratory and skin sensitization</b> (allergic reactions)	Skin sensitizer based on animal studies on polyglycol dimethacrylate.
<b>Carcinogenicity</b> (risk of cancer)	None of the ingredients are classified or listed as a carcinogen by IARC, ACGIH, CA Prop 65, or NTP.
<b>Mutagenicity</b> (risk of heritable genetic effects)	Based on available data, the classification criteria are not met.
<b>Reproductive Toxicity</b> (risk to sex functions)	Based on available data, the classification criteria are not met.
<b>Teratogenicity</b> (risk of fetus malformation)	Based on available data, the classification criteria are not met.
<b>STOT-single exposure</b>	The polyglycol dimethacrylate and cumene hydroperoxide may cause a respiratory irritation of the upper respiratory track.
<b>STOT-repeated exposure</b>	<p>This anaerobic adhesive mixture has a fast fixture time in contact with air and polymerizes in a few minutes only. The mixture doesn't give rise to STOT RE 2 hazard because the cumene hydroperoxide content is inextricably bound in the quick forming polymer matrix and, therefore, is not bioavailable in a long term or repeated exposure under normal use or foreseeable emergencies.</p> <p>Cumene hydroperoxide is a STOT RE 2 and causes damage to lungs through prolonged or repeated exposure. Overexposure may lead to pulmonary edema.</p>
<b>Aspiration hazard</b>	Based on available data, the classification criteria are not met. There are no category 1 components.

**8704****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 (<http://echa.europa.eu>), and other reliable sources.

Polyglycol dimethacrylate is a class 3 chronic environmental pollutant accord to the predominant classification.

The 2-hydroxyethyl methacrylate is non-hazardous. It is biodegradable, with minimal LC50 of 227 mg/L *Pimephales promelas* (fathead minnow); EC50 380 mg/L 48 h *Daphnia magna* (water flea); 345 mg/L 72 h *Selenastrum capricornutum*.

Cumene hydroperoxide is an acute category 2 environmental toxicant (with minimal LC50 of 3.96 mg/L for *Oncorhynchus mykiss* (rainbow trout); EC50 18.84 mg/L 48 h *Daphnia magna* (water flea); 3.1 mg/L 72 h *Desmodesmus subcapitata*).

**Acute Ecotoxicity**

See the chronic ecotoxicity.

**Chronic Ecotoxicity**

Category 3

Harmful to aquatic life with long lasting effects

Avoid release to the environment.

**Persistence and Biodegradability**

Not available

**Bioaccumulative Potential**

Not available

**Other Effects**

Not available

**Section 13: Disposal Considerations**

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

**8704****Section 14: Transport Information****Ground**

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

Not Regulated

**Air**

**Refer to ICAO-IATA Dangerous Goods Regulations.**

Not Regulated

**Sea**

**Refer to IMDG regulations.**

Not Regulated

**Section 15: Regulatory Information****Canada****Domestic Substance List (DSL)/Non-Domestic Substance Lists (NDSL)**

All hazardous ingredients are listed on the DSL/NDSL.

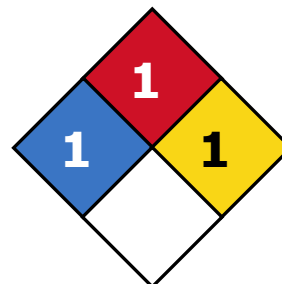
**Hazardous Products Act (R.S.C., 1985, c. H-3)**

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

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**8704****USA****Other Classifications****HMIS® RATING**

<b>HEALTH:</b>	<b>* 1</b>
<b>FLAMMABILITY:</b>	<b>1</b>
<b>PHYSICAL HAZARD:</b>	<b>1</b>
<b>PERSONAL PROTECTION:</b>	

**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 does not contain substances that are listed as hazardous air pollutants.

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

This product contains cumene hydroperoxide (CAS# 80-15-9; reportable quantity = 10 lb), 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.

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

This product does not contain any listed substances in California.

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**8704****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 the** Regulatory Affairs Department

**Date of Revision** 28 February 2020

**Supersedes** 12 December 2018

**Reason for Changes:** Change in emergency phone numbers and general update.

**Reference**

1) ACGIH 2017 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 (2017).

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

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**8704****Abbreviations**

ACGIH	American Conference of Governmental Industrial Hygienists (USA)
EC50	Half maximal effective concentration
EL50	Half maximal effective loading
NOELR	No observable effect loading ratio
GHS	Globally Harmonized System of Classification of Labeling of Chemicals
LC50	Lethal Concentration 50%
LCLo	Lowest published lethal concentration
LD50	Lethal Dose 50%
PEL	Permissible Exposure Limit
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 [www.mgchemicals.com](http://www.mgchemicals.com).

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