

## 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

**Product identifier**

**Product name** BROMCRESOL GREEN-METHYL RED INDICATOR

**Other means of identification**

**Product Code(s)** 2311

**UN-No** 1170

**Recommended use of the chemical and restrictions on use**

**Recommended Use** Use as a laboratory reagent. Industrial (not for food or food contact use). Laboratory chemicals.

**Details of the supplier of the safety data sheet**

**Manufacturer Address**

LaMotte Company, Inc.  
802 Washington Avenue  
P.O. Box 329  
Chestertown, MD 21620 USA  
T 410-778-3100  
F 410-778-9748

**Emergency telephone number**

24 Hour Emergency Number (CHEM-TEL):USA, Canada, Puerto Rico 1-800-255-3924 Outside North American Continent (Call collect) 813-248-0585

## 2. HAZARDS IDENTIFICATION

Serious eye damage/eye irritation	Category 2A
Germ cell mutagenicity	Category 1B
Carcinogenicity	Category 1A
Reproductive Toxicity	Category 1A
Specific target organ toxicity (single exposure)	Category 3
Specific target organ toxicity (repeated exposure)	Category 1
Physical hazards Flammable Liquids.	Category 2

### EMERGENCY OVERVIEW

**DANGER**

**Hazard statements**

Causes serious eye irritation May cause genetic defects May cause cancer May damage fertility or the unborn child May cause respiratory irritation. May cause drowsiness or dizziness Causes damage to organs through prolonged or repeated exposure Highly flammable liquid and vapor.



**Appearance** Dark Blue green

**Physical state** liquid

**Odor** Alcohol

**Precautionary Statements - Prevention**

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Wash face, hands and any exposed skin thoroughly after handling. Wear eye/face protection. Do not breathe dust/fume/gas/mist/vapors/spray. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Keep away from heat/sparks/open flames/hot surfaces. — No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Keep cool. Keep out of the reach of children.

**Precautionary Statements - Response**

IF exposed or concerned: Get medical advice/attention.  
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.  
 IF ON SKIN (or hair): Remove immediately all contaminated clothing. Rinse skin with water  
 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing  
 IF SWALLOWED Drink 1 or 2 glasses of water Call a physician immediately  
 In case of fire: Use CO<sub>2</sub>, dry chemical, or foam for extinction

**Precautionary Statements - Storage**

Store locked up. Store in a well-ventilated place. Keep container tightly closed.

**Precautionary Statements - Disposal**

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

**Other Hazards**

May be harmful if swallowed Toxic to aquatic life with long lasting effects

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Chemical name	CAS No	Weight-%
Methyl alcohol	67-56-1	<3
Water	7732-18-5	to 100%
Ethyl alcohol	64-17-5	59

**4. FIRST AID MEASURES**

**First Aid Measures**

**General advice** Do not get in eyes, on skin, or on clothing. Consult a physician.

**Eye contact** Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.

**Skin contact** Wash off immediately with plenty of water for at least 15 minutes. Consult a physician.

**Inhalation** Remove to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration and contact emergency personnel. Call a physician immediately.

**Ingestion** Drink 1 or 2 glasses of water. Do not induce vomiting without medical advice. Call a physician immediately.

**Self-protection of the first aider** Use personal protective equipment. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.

**5. FIRE-FIGHTING MEASURES**

**Suitable extinguishing media**

Water spray, dry chemical, carbon dioxide (CO<sub>2</sub>), or foam.

**Protective equipment and precautions for firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

**6. ACCIDENTAL RELEASE MEASURES**

**Personal precautions, protective equipment and emergency procedures**

**Personal precautions** See section 8. Ensure adequate ventilation. Remove all sources of ignition.

**Environmental precautions** See Section 12 for additional Ecological Information.

**Methods and material for containment and cleaning up**

**Methods for containment** Absorb spill with inert material (e.g. dry sand or earth), then place in a chemical waste container. Dispose according to federal, state, and local regulations.

**Methods for cleaning up** After cleaning, flush away traces with water.

**7. HANDLING AND STORAGE**

**Precautions for safe handling**

**Handling** Handle in accordance with good industrial hygiene and safety practice. Prevent contact with skin, eyes, and clothing. Do not taste or swallow. Do not eat, drink, or smoke when using this product.

**Conditions for safe storage, including any incompatibilities**

**Storage** Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat and sources of ignition. Separate from acids. Keep away from oxidizing agents. Keep out of the reach of children.

**Incompatible Products** Nitric acid. Strong oxidizing agents.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Control parameters**

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Methyl alcohol 67-56-1	250 ppm STEL TWA: 200 ppm	TWA: 200 ppm TWA: 260 mg/m <sup>3</sup>	IDLH: 6000 ppm TWA: 200 ppm TWA: 260 mg/m <sup>3</sup> STEL: 250 ppm STEL: 325 mg/m <sup>3</sup>
Water 7732-18-5	-	-	Not Established
Ethyl alcohol 64-17-5	1000 ppm STEL	TWA: 1000 ppm TWA: 1900 mg/m <sup>3</sup>	IDLH: 3300 ppm TWA: 1000 ppm TWA: 1900 mg/m <sup>3</sup>

NIOSH IDLH: *Immediately Dangerous to Life or Health*

**Appropriate engineering controls**

**Engineering Measures** Showers  
Eyewash stations  
Ventilation systems.

**Individual protection measures, such as personal protective equipment**

<b>Eye/Face Protection</b>	Wear safety glasses with side shields (or goggles).
<b>Skin and body protection</b>	Nitrile rubber. Gloves & Lab Coat.
<b>Respiratory protection</b>	Use only with adequate ventilation.
<b>Hygiene Measures</b>	Do not eat, drink or smoke when using this product.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

<b>Physical state</b>	liquid	<b>Odor</b>	Alcohol
<b>Appearance</b>	Dark Blue green		
<b>Property</b>	<b>Values</b>	<b>Remarks • Method</b>	
pH		Not Applicable	
<b>Melting point / freezing point</b>	No information available		
<b>Boiling point / boiling range</b>	78.5 °C / 173.3 °F		
<b>Flash point</b>	22 °C / 72 °F	Closed cup	
<b>Evaporation rate</b>			
<b>Flammability (solid, gas)</b>	No information available		
<b>Flammability Limit in Air</b>			
<b>Upper flammability limit:</b>	19% Ethanol		
<b>Lower flammability limit:</b>	3.3% Ethanol		
<b>Vapor pressure</b>	ca. 40 mmHg @ 20°C		
<b>Vapor density</b>	1.6 @ 20°C		
<b>Specific gravity</b>	No information available		
<b>Water solubility</b>	No information available		
<b>Solubility in other solvents</b>	No information available		
<b>Partition coefficient</b>	No information available		
<b>Autoignition temperature</b>	No information available		
<b>Decomposition temperature</b>	No information available		
<b>Kinematic viscosity</b>	No information available		
<b>Dynamic viscosity</b>	No information available		
<b>Explosive properties</b>	No information available		
<b>Oxidizing properties</b>	No information available		
<b>Other Information</b>			
<b>Softening point</b>	No information available		
<b>Molecular weight</b>	No information available		
<b>VOC Content (%)</b>	No information available		
<b>Density</b>	No information available		
<b>Bulk density</b>	No information available		

## 10. STABILITY AND REACTIVITY

<b>Stability</b>	Stable under normal conditions of use and storage.
<b>Hazardous polymerization</b>	Hazardous polymerization does not occur.
<b>Conditions to avoid</b>	Heat, flames and sparks.
<b>Incompatible materials</b>	Nitric acid. Strong oxidizing agents.
<b>Hazardous decomposition products</b>	Carbon oxides (COx).

## 11. TOXICOLOGICAL INFORMATION

### Information on likely routes of exposure

**Component Information**

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Methyl alcohol 67-56-1	= 6200 mg/kg ( Rat )	= 15800 mg/kg ( Rabbit )	= 22500 ppm ( Rat ) 8 h = 64000 ppm ( Rat ) 4 h
Water 7732-18-5	> 90 mL/kg ( Rat )	Not Established	Not Established
Ethyl alcohol 64-17-5	= 7060 mg/kg ( Rat )	Not Established	= 124.7 mg/L ( Rat ) 4 h

**Information on toxicological effects**

**Carcinogenicity** The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical name	ACGIH	IARC	NTP	OSHA
Methyl alcohol 67-56-1	Not Established	Not Established	Not Established	Not Established
Water 7732-18-5	Not Established	Not Established	Not Established	Not Established
Ethyl alcohol 64-17-5	A3	Group 1	Known	X

*NTP (National Toxicology Program)*

*Known - Known Carcinogen*

**Chronic toxicity**

Ethanol has been shown to be a reproductive toxin only when consumed as an alcoholic beverage. Prolonged skin contact may cause skin irritation and/or dermatitis.

<b>ATEmix (oral)</b>	2848
<b>ATEmix (dermal)</b>	11111 mg/kg
<b>ATEmix (inhalation-dust/mist)</b>	18.6 mg/l

**12. ECOLOGICAL INFORMATION**

**Ecotoxicity**

**Unknown Aquatic Toxicity** 0.12 % of the mixture consists of components(s) of unknown hazards to the aquatic environment

Chemical name	Toxicity to Algae	Toxicity to Fish	Daphnia Magna (Water Flea)
Methyl alcohol 67-56-1	Not Established	13500 - 17600: 96 h Lepomis macrochirus mg/L LC50 flow-through 18 - 20: 96 h Oncorhynchus mykiss mL/L LC50 static 19500 - 20700: 96 h Oncorhynchus mykiss mg/L LC50 flow-through 28200: 96 h Pimephales promelas mg/L LC50 flow-through 100: 96 h Pimephales promelas mg/L LC50 static	Not Established
Water 7732-18-5	Not Established	Not Established	Not Established
Ethyl alcohol 64-17-5	Not Established	12.0 - 16.0: 96 h Oncorhynchus mykiss mL/L LC50 static 13400 - 15100: 96 h Pimephales promelas mg/L LC50 flow-through 100: 96 h Pimephales promelas mg/L LC50 static	9268 - 14221: 48 h Daphnia magna mg/L LC50 10800: 24 h Daphnia magna mg/L EC50 2: 48 h Daphnia magna mg/L EC50 Static

**Persistence and degradability**

Ethanol: When released into the soil, this material is expected to leach into groundwater. When released into the soil, this material is expected to quickly evaporate. When released into water, this material may evaporate to a moderate extent. When released into the air, this material is expected to be readily degraded by reaction with photochemically produced hydroxyl radicals. When released into the air, this material is expected to be readily removed from the atmosphere by dry and wet deposition. When released into the air, this material is expected to have a half-life between 1 and 10 days.

**Bioaccumulation/Accumulation**

No information available.

Chemical name	Log Pow
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Methyl alcohol 67-56-1	-0.77
Water 7732-18-5	Not Established
Ethyl alcohol 64-17-5	-0.32

**13. DISPOSAL CONSIDERATIONS**

**Disposal Methods** Dispose of waste product or used containers according to local regulations.

**Contaminated packaging** Do not reuse empty containers.

Chemical name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
Methyl alcohol 67-56-1	Not Established	Included in waste stream: F039	Not Established	Ignitable waste
Water 7732-18-5	Not Established	-	Not Established	Not Established
Ethyl alcohol 64-17-5	Not Established	-	Not Established	Not Established

Chemical name	RCRA - Halogenated Organic Compounds	RCRA - P Series Wastes	RCRA - F Series Wastes	RCRA - K Series Wastes
Methyl alcohol 67-56-1	Not Established	Not Established	Not Established	Not Established
Water 7732-18-5	Not Established	Not Established	Not Established	Not Established
Ethyl alcohol 64-17-5	Not Established	Not Established	Not Established	Not Established

This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical name	California Hazardous Waste Status
Methyl alcohol 67-56-1	-
Water 7732-18-5	-
Ethyl alcohol 64-17-5	-

**14. TRANSPORT INFORMATION**

**DOT**

Proper shipping name      ETHANOL SOLUTION (Ethyl Alcohol Solution)  
 UN-No                              1170  
 Hazard Class                      3  
 Packing group                      II

**IATA**

Proper shipping name      ETHANOL SOLUTION (Ethyl Alcohol Solution)  
 UN-No                              1170  
 Hazard Class                      3  
 Packing group                      II

**IMDG/IMO**

Proper shipping name      ETHANOL SOLUTION (Ethyl Alcohol Solution)  
 UN-No                              1170  
 Hazard Class                      3

Packing group II

**15. REGULATORY INFORMATION**

**International Inventories**

<b>TSCA</b>	Complies
<b>DSL/NDSL</b>	Complies
<b>EINECS/ELINCS</b>	Complies
<b>ENCS</b>	Complies
<b>IECSC</b>	Complies
<b>KECL</b>	Complies
<b>PICCS</b>	Complies
<b>AICS</b>	Complies

**Legend:**

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory  
**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List  
**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances  
**ENCS** - Japan Existing and New Chemical Substances  
**IECSC** - China Inventory of Existing Chemical Substances  
**KECL** - Korean Existing and Evaluated Chemical Substances  
**PICCS** - Philippines Inventory of Chemicals and Chemical Substances  
**AICS** - Australian Inventory of Chemical Substances

**US Federal Regulations**

**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical name	SARA 313 - Threshold Values %
Methyl alcohol 67-56-1	1.0
Water 7732-18-5	Not Established
Ethyl alcohol 64-17-5	Not Established

**SARA 311/312 Hazard Categories**

<b>Acute health hazard</b>	Yes
<b>Chronic Health Hazard</b>	Yes
<b>Fire hazard</b>	Yes
<b>Sudden release of pressure hazard</b>	No
<b>Reactive Hazard</b>	No

**CWA (Clean Water Act)**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Methyl alcohol 67-56-1	Not Established	Not Established	Not Established	Not Established
Water 7732-18-5	Not Established	Not Established	Not Established	Not Established
Ethyl alcohol 64-17-5	Not Established	Not Established	Not Established	Not Established

**CERCLA**

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical name	Hazardous Substances RQs	CERCLA/SARA RQ	RQ
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Methyl alcohol 67-56-1	5000 lb	Not Established	RQ 5000 lb final RQ RQ 2270 kg final RQ
Water 7732-18-5	-	Not Established	-
Ethyl alcohol 64-17-5	-	Not Established	-

**US State Regulations**

**California Proposition 65**

WARNING! This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm

Chemical name	California Proposition 65
Methyl alcohol 67-56-1	Developmental
Water 7732-18-5	Not Established
Ethyl alcohol 64-17-5	Carcinogen

**U.S. State Right-to-Know Regulations**

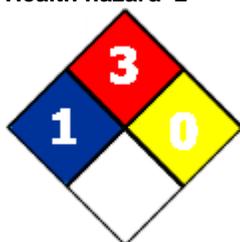
Chemical name	New Jersey	Massachusetts	Pennsylvania
Methyl alcohol 67-56-1	X	X	X
Water 7732-18-5	Not Established	Not Established	X
Ethyl alcohol 64-17-5	X	X	X

**CPSC (Consumer Product Safety Commission) - Specially Regulated Substances**

Chemical name	CPSC (Consumer Product Safety Commission) - Specially Regulated Substances
Methyl alcohol 67-56-1	Special labeling, 16 CFR 1500.14 (including mixtures containing >=4% by weight)

**16. OTHER INFORMATION**

**NFPA** Health hazard 1 Flammability 3 Instability 0 Physical and Chemical Hazards N/A  
 Health hazard 2 Flammability 3



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 Disclaimer

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information

relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

**End of Safety Data Sheet**