

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

Product identifier

Product name Magnesium Test Solution #1

Other means of identification

Product Code(s) 5140
UN-No 1230

Recommended use of the chemical and restrictions on use

Recommended Use Laboratory chemicals. Industrial (not for food or food contact use).

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

Acute toxicity - Oral	Category 3
Acute toxicity - Dermal	Category 3
Acute toxicity - Inhalation (Dusts/Mists)	Category 4
Specific target organ toxicity (single exposure)	Category 1
Physical hazards Flammable Liquids.	Category 3

EMERGENCY OVERVIEW

DANGER

Hazard statements

Toxic if swallowed. Toxic in contact with skin. Harmful if inhaled. Causes damage to organs. .
 FLAMMABLE LIQUID AND VAPOR.



Appearance Clear yellow solution

Physical state liquid

Odor Alcohol

Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves/protective clothing/eye protection/face protection. Use only outdoors or in a well-ventilated area. Do not breathe dust/fume/gas/mist/vapors/spray. 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.

Precautionary Statements - Response

IF exposed: Call a POISON CENTER or doctor/physician.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a POISON CENTER or doctor/physician if you feel unwell

Wash contaminated clothing before reuse

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

Call a POISON CENTER or doctor/physician if you feel unwell

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician, Rinse mouth

In case of fire: Use CO₂, dry chemical, or foam for extinction

Precautionary Statements - Storage

Store locked up. Store in a well-ventilated place. Keep cool.

Precautionary Statements - Disposal

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

Other Hazards

Harmful to aquatic life with long lasting effects

3. COMPOSITION/INFORMATION ON INGREDIENTS

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Chemical name	CAS No	Weight-%
7-Benzothiazolesulfonic acid, 2,2'-(1-triazene-1,3-diyl-di-4,1-phenylene)bis[6-methyl-, disodium salt	1829-00-1	<0.05
Water	7732-18-5	to 100%
Methyl alcohol	67-56-1	50

4. FIRST AID MEASURES

First Aid Measures

General advice	Do not get in eyes, on skin, or on clothing. Do not breathe dust/fume/gas/mist/vapors/spray.
Eye contact	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open while rinsing. Call a physician immediately.
Skin contact	Wash off immediately with plenty of water for at least 15 minutes. Remove and isolate contaminated clothing and shoes. Wash contaminated clothing before reuse. Call a physician immediately.
Inhalation	IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. If symptoms persist, call a physician.
Ingestion	Drink plenty of water. Never give anything by mouth to an unconscious person. Do not induce vomiting without medical advice. Call a physician or poison control center immediately.
Self-protection of the first aider	Use personal protection recommended in Section 8. Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media

Do not use a solid water stream as it may scatter and spread fire.

Specific hazards arising from the chemical

Vapors may travel to source of ignition and flash back. Flash back possible over considerable distance.

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

Evacuate personnel to safe areas. Ensure adequate ventilation. Remove all sources of ignition. Use personal protection recommended in Section 8.

Environmental precautions

See Section 12 for additional Ecological Information.

Methods and material for containment and cleaning up

Methods for containment

A vapor suppressing foam may be used to reduce vapors. Contain and collect spillage with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see Section 13). Do not flush to sewer.

Methods for cleaning up

Minimize the amount spilled and suppress resultant vapors. 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. Do not taste or swallow. To avoid ignition of vapors by static electricity discharge, all metal parts of the equipment must be grounded. Avoid contact with skin, eyes or clothing. 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. Store away from strong acids and oxidizers. Keep out of the reach of children.

Incompatible Products

Strong oxidizing agents. Contact with metals (aluminum, zinc, tin) may release hydrogen gas.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
7-Benzothiazolesulfonic acid, 2,2'-(1-triazene-1,3-diyl-di-4,1-phenylene)bis[6-methyl-, disodium salt	-	-	Not Established

1829-00-1			
Water 7732-18-5	-	-	Not Established
Methyl alcohol 67-56-1	250 ppm STEL TWA: 200 ppm	TWA: 200 ppm TWA: 260 mg/m ³	IDLH: 6000 ppm TWA: 200 ppm TWA: 260 mg/m ³ STEL: 250 ppm STEL: 325 mg/m ³

NIOSH IDLH: Immediately Dangerous to Life or Health

Appropriate engineering controls

Engineering Measures Showers
Eyewash stations
Ventilation systems. Use explosion-proof electrical/ventilating/lighting/equipment.

Individual protection measures, such as personal protective equipment

Eye/Face Protection Wear safety glasses with side shields (or goggles).

Skin and body protection Wear protective gloves/clothing. Wear latex or nitrile gloves. Neoprene gloves.

Respiratory protection Use only with adequate ventilation. In case of insufficient ventilation wear suitable respiratory equipment.

Hygiene Measures Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash before reuse.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state liquid
Appearance Clear yellow solution
Odor Alcohol

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
		No information available
pH		
Melting point / freezing point	No information available	
Boiling point / boiling range	64.7 °C / 148.5 °F	(for Methanol)
Flash point	24 °C / 75 °F	Closed cup Methanol
Evaporation rate		
Flammability (solid, gas)	No information available	
Flammability Limit in Air		
Upper flammability limit:	36%	
Lower flammability limit:	6%	
Vapor pressure	127 mmHg @ 25°C (Methanol)	
Vapor density	1.1 @ 20°C (Air=1)	
Specific gravity	0.79	
Water solubility	completely soluble	
Solubility in other solvents	No information available	
Partition coefficient	No information available	
Autoignition temperature	240 °C / 464 °F	Methanol
Decomposition temperature	No information available	
Kinematic viscosity	No information available	
Dynamic viscosity	No information available	
Explosive properties	No information available	
Oxidizing properties	No information available	

Other Information

Softening point No information available
Molecular weight No information available

VOC Content (%)	No information available
Density	No information available
Bulk density	No information available

10. STABILITY AND REACTIVITY

Stability	Stable under recommended storage conditions.
Hazardous polymerization	Hazardous polymerization does not occur.
Conditions to avoid	Heat, flames and sparks.
Incompatible materials	Strong oxidizing agents. Contact with metals (aluminum, zinc, tin) may release hydrogen gas.
Hazardous decomposition products	Carbon oxides (COx). Formaldehyde.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
7-Benzothiazolesulfonic acid, 2,2'-(1-triazene-1,3-diyl-di-4,1-phenylene)bis[6-methyl-, disodium salt 1829-00-1	Not Established	Not Established	Not Established
Water 7732-18-5	> 90 mL/kg (Rat)	Not Established	Not Established
Methyl alcohol 67-56-1	= 6200 mg/kg (Rat)	= 15800 mg/kg (Rabbit)	= 22500 ppm (Rat) 8 h = 64000 ppm (Rat) 4 h

Information on toxicological effects

Chemical name	ACGIH	IARC	NTP	OSHA
7-Benzothiazolesulfonic acid, 2,2'-(1-triazene-1,3-diyl-di-4,1-phenylene)bis[6-methyl-, disodium salt 1829-00-1	Not Established	Not Established	Not Established	Not Established
Water 7732-18-5	Not Established	Not Established	Not Established	Not Established
Methyl alcohol 67-56-1	Not Established	Not Established	Not Established	Not Established

ATEmix (oral)	200
ATEmix (dermal)	600 mg/kg
ATEmix (inhalation-dust/mist)	1 mg/l

12. ECOLOGICAL INFORMATION

Ecotoxicity

Unknown Aquatic Toxicity 50 % of the mixture consists of component(s) of unknown hazards to the aquatic environment

Chemical name	Toxicity to Algae	Toxicity to Fish	Daphnia Magna (Water Flea)
7-Benzothiazolesulfonic acid, 2,2'-(1-triazene-1,3-diyl-di-4,1-phenylene)bis[6-methyl-, disodium salt 1829-00-1	Not Established	Not Established	Not Established
Water 7732-18-5	Not Established	Not Established	Not Established
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	Not Established

		Pimephales promelas mg/L LC50 flow-through 100: 96 h Pimephales promelas mg/L LC50 static	
--	--	--	--

Persistence and degradability

Inherently biodegradable, fulfilling criteria. In the atmosphere, methanol will be photo-oxidized relatively quickly; the half-life ranges between 3 and 30 days. In soil, surface or groundwater, rapid biodegradation is expected with the half-life ranging from 1 to 7 days.

Bioaccumulation/Accumulation

This preparation contains no substance considered to be persistent, bioaccumulating nor toxic (PBT).

Mobility

Will likely be mobile in the environment due to its water solubility.

Chemical name	Log Pow
7-Benzothiazolesulfonic acid, 2,2'-(1-triazene-1,3-diyl)-4,1-phenylenebis[6-methyl-, disodium salt 1829-00-1	Not Established
Water 7732-18-5	Not Established
Methyl alcohol 67-56-1	-0.77

13. DISPOSAL CONSIDERATIONS

Disposal Methods

Should not be released into the environment. Dispose of contents/containers in accordance with local regulations.

Contaminated packaging

Do not reuse empty containers.

Chemical name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
7-Benzothiazolesulfonic acid, 2,2'-(1-triazene-1,3-diyl)-4,1-phenylenebis[6-methyl-, disodium salt 1829-00-1	Not Established	-	Not Established	Not Established
Water 7732-18-5	Not Established	-	Not Established	Not Established
Methyl alcohol 67-56-1	Not Established	Included in waste stream: F039	Not Established	Ignitable waste

Chemical name	RCRA - Halogenated Organic Compounds	RCRA - P Series Wastes	RCRA - F Series Wastes	RCRA - K Series Wastes
7-Benzothiazolesulfonic acid, 2,2'-(1-triazene-1,3-diyl)-4,1-phenylenebis[6-methyl-, disodium salt 1829-00-1	Not Established	Not Established	Not Established	Not Established
Water 7732-18-5	Not Established	Not Established	Not Established	Not Established
Methyl alcohol 67-56-1	Not Established	Not Established	Not Established	Not Established

Chemical name	California Hazardous Waste Status
7-Benzothiazolesulfonic acid, 2,2'-(1-triazene-1,3-diyl)-4,1-phenylenebis[6-methyl-, disodium salt 1829-00-1	-
Water 7732-18-5	-
Methyl alcohol 67-56-1	-

14. TRANSPORT INFORMATION

DOT

Proper shipping name	METHANOL
UN-No	1230
Hazard Class	3
Packing group	II

IATA

Proper shipping name	METHANOL
UN-No	1230
Hazard Class	3
Subsidiary class	6.1
Packing group	II

IMDG/IMO

Proper shipping name	METHANOL
UN-No	1230
Hazard Class	3
Subsidiary class	6.1
Packing group	II

15. REGULATORY INFORMATION

International Inventories

TSCA	Complies
DSL/NDSL	Complies
EINECS/ELINCS	Complies
ENCS	Complies
IECSC	Complies
KECL	Does not comply
PICCS	Complies
AICS	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 %
7-Benzothiazolesulfonic acid, 2,2'-(1-triazene-1,3-diyl)-4,1-phenylene)bis[6-methyl-, disodium salt 1829-00-1	Not Established
Water 7732-18-5	Not Established
Methyl alcohol	1.0

67-56-1	
---------	--

SARA 311/312 Hazard Categories

Acute health hazard	Yes
Chronic Health Hazard	Yes
Fire hazard	Yes
Sudden release of pressure hazard	No
Reactive Hazard	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
7-Benzothiazolesulfonic acid, 2,2'-(1-triazene-1,3-diyl)-4,1-phenylenebis[6-methyl-, disodium salt 1829-00-1	Not Established	Not Established	Not Established	Not Established
Water 7732-18-5	Not Established	Not Established	Not Established	Not Established
Methyl alcohol 67-56-1	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
7-Benzothiazolesulfonic acid, 2,2'-(1-triazene-1,3-diyl)-4,1-phenylenebis[6-methyl-, disodium salt 1829-00-1	-	Not Established	-
Water 7732-18-5	-	Not Established	-
Methyl alcohol 67-56-1	5000 lb	Not Established	RQ 5000 lb final RQ RQ 2270 kg final RQ

US State Regulations**California Proposition 65**

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

Chemical name	California Proposition 65
7-Benzothiazolesulfonic acid, 2,2'-(1-triazene-1,3-diyl)-4,1-phenylenebis[6-methyl-, disodium salt 1829-00-1	Not Established
Water 7732-18-5	Not Established
Methyl alcohol 67-56-1	Developmental

U.S. State Right-to-Know Regulations

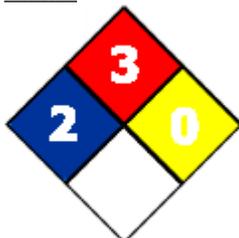
Chemical name	New Jersey	Massachusetts	Pennsylvania
7-Benzothiazolesulfonic acid, 2,2'-(1-triazene-1,3-diyl)-4,1-phenylenebis[6-methyl-, disodium salt 1829-00-1	Not Established	Not Established	Not Established
Water 7732-18-5	Not Established	Not Established	X
Methyl alcohol 67-56-1	X	X	X

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

<u>NFPA</u>	Health hazard 2	Flammability 3	Instability 0	Physical and Chemical Hazards N/A
<u>HMIS</u>	Health hazard 2	Flammability 3	Stability 0	



HEALTH	2
FLAMMABILITY	3
REACTIVITY	0

Prepared by Regulatory Affairs Department
 Issuing Date Jun-26-2015
 Revision Date Jun-26-2015
 Reason for revision New US GHS format
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 Material Safety Data Sheet