

Issuing Date 1/21/2013

Revision Number 0

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name	ALKALINITY TITRATION REAGENT B
Product Code(s)	4493
Recommended Use	Test kit reagent. Laboratory chemicals. Industrial (not for food or food contact use).
Company	LaMotte Company, Inc. 802 Washington Avenue P.O. Box 329 Chestertown, MD 21620 USA
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**WARNING!****Emergency Overview**

Harmful if swallowed

May cause severe eye and skin irritation

May cause irritation of respiratory tract

Appearance Clear, colorless**Physical State** Liquid**Odor** Odorless

OSHA Regulatory Status Safety information is given for exposure to the reagent as sold and considers exposure to the chemical if user has direct eye and skin contact.

Potential Health Effects

Principle Routes of Exposure Eye contact, Skin contact, Ingestion, Inhalation.

Acute Toxicity**Eyes**

Contact with eyes may cause severe irritation. Causes irritation, redness, and pain.

Skin

Irritating to skin. Symptoms can include redness, itching, and pain. Prolonged or repeated contact may dry skin and cause irritation.

Inhalation

Depending on exposure, the effects from inhalation of corrosive mists can vary from mild irritation to serious damage to respiratory tract. Effects are expected to be less severe than for exposure to higher concentrations which symptoms can include coughing, nausea, vomiting.

Ingestion

Harmful if swallowed. Causes irritation or burns to the digestive and respiratory tract. Can cause immediate pain and burning in the mouth, throat, esophagus and GI tract. May cause nausea, vomiting, and diarrhea, and in severe cases death.

Chronic Effects

Aggravated Medical Conditions Hypersensitivity may occur in those with preexisting skin disorders. Respiratory disorders. Preexisting eye disorders.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Formula H₂SO₄ in H₂O

Chemical Name	CAS-No	Weight %
Sulfuric acid	7664-93-9	0.1
Water	7732-18-5	to 100%

4. 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	Immediately flush eyes with gentle stream of water for at least 15 minutes, occasionally lifting upper and lower eyelids. Call a physician immediately.
Skin Contact	Wash off immediately with soap and plenty of water for at least 15 minutes while removing all contaminated clothing and shoes. Excess acid on skin can be neutralized with a 2% solution of sodium bicarbonate in water. Consult a physician.
Inhalation	Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration and contact emergency personnel.
Ingestion	DO NOT INDUCE VOMITING. Drink plenty of water. Clean mouth with water. Call a physician immediately. Never give anything by mouth to an unconscious person.
Protection of First-aiders	Use personal protective equipment. See Section 8 for more detail. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; induce 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

Flammable Properties	Not flammable.
Flash Point	Not applicable
Suitable Extinguishing Media	Dry chemical or CO ₂ . DO NOT USE WATER.
Explosion Data	
Specific Hazards Arising from the Chemical	Contact with most metals causes the formation of explosive and flammable hydrogen gas. React vigorously with water.
NFPA	Health Hazard 1 Flammability 0 Stability 0 Physical and Chemical Hazards W
HMIS	Health Hazard 1 Flammability 0 Stability 1

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions	Ensure adequate ventilation. Avoid contact with skin, eyes, and inhalation of vapors. Use personal protective equipment. Refer to Section 8.
Methods for Cleaning Up	Neutralize spill with alkaline material (sodium bicarbonate), being careful to prevent splattering, then containerize slurry and hold for later disposal. If local regulations permit, dilute slurry with water and rinse to drain with excess water. After cleaning, flush away traces with water.

7. HANDLING AND STORAGE

Handling	Handle in accordance with good industrial hygiene and safety practice. Prevent contact with skin, eyes, and clothing. Do not ingest. Do not eat, drink, or smoke when using this product.
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Storage Keep containers tightly closed in a dry, cool, and well-ventilated place. Keep away from incompatible materials such as cyanides or sulfides. Store away from strong bases or metals. Do not store near combustible materials. Keep out of the reach of children.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Sulfuric acid 7664-93-9	TWA: 0.2 mg/m ³	TWA: 1 mg/m ³	IDLH: 15 mg/m ³ TWA: 1 mg/m ³
Water 7732-18-5	None Known	None Known	None Known

Engineering Measures Ensure adequate ventilation, especially in confined areas.

Personal Protective Equipment

Eye/Face Protection Safety glasses with side-shields.
Skin and Body Protection Wear protective gloves/clothing.
Respiratory Protection When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using this product. Wash hands before breaks and immediately after handling the product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Clear, colorless	Odor	Odorless
Physical State	Liquid	pH	1
Flash Point	Not applicable	Autoignition Temperature	Not applicable
Boiling Point/Range	No data available	Flammability Limits in Air	Not applicable
Vapor Pressure	No information available	Vapor Density	No information available

10. STABILITY AND REACTIVITY

Stability Stable under normal conditions of use and storage.

Incompatible Products Water. Strong bases. Metals. Combustible materials. Cyanides. Sulfides. Formaldehyde.

Conditions to Avoid Excessive heat. Incompatible products. Direct sunlight.

Hazardous Decomposition Products Hydrogen gas. Sulfur oxides (SO_x).

Hazardous Reactions Reacts violently with water. Contact with metals may evolve flammable hydrogen gas.

Hazardous Polymerization Hazardous polymerization does not occur.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Sulfuric acid	2140 mg/kg (Rat)	None Known	510 mg/m ³ (Rat) 2 h
Water	90 mL/kg (Rat)	None Known	None Known

Chronic Toxicity

Chemical Name	ACGIH	IARC	NTP	OSHA
Sulfuric acid	A2	Group 1	Known	X
Water	None Known	None Known	None Known	None Known

ACGIH: (American Conference of Governmental Industrial Hygienists)

A2 - Suspected Human Carcinogen

IARC: (International Agency for Research on Cancer)

Group 1 - Carcinogenic to Humans

NTP: (National Toxicity Program)

Known - Known Carcinogen

OSHA: (Occupational Safety & Health Administration)

X - Present

Endocrine Disruptor Information

Chemical Name	EU - Endocrine Disruptors Candidate List	EU - Endocrine Disruptors - Evaluated Substances	Japan - Endocrine Disruptor Information
Sulfuric acid	None Known	None Known	None Known
Water	None Known	None Known	None Known

12. ECOLOGICAL INFORMATION

Ecotoxicity

The material may be toxic to aquatic life.

Chemical Name	Toxicity to Algae	Toxicity to Fish	Microtox	Daphnia Magna (Water Flea)
Sulfuric acid	None Known	LC50> 500 mg/L Brachydanio rerio 96 h	None Known	EC50 = 29 mg/L 24 h
Water	None Known	None Known	None Known	None Known

Bioaccumulation/Accumulation

When released into the soil, this material may leach into ground water. When released into the air, this material may be removed from the atmosphere to a moderate extent by wet or dry deposition.

Chemical Name	Log Pow
Sulfuric acid	None Known
Water	None Known

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method

Dispose according to federal, state, and local regulations. If permitted, neutralize reagent with sodium bicarbonate/sodium carbonate, add slurry to large volume of water to dilute, rinse to drain with excess water.

Chemical Name	RCRA - Halogenated Organic Compounds	RCRA - P Series Wastes	RCRA - F Series Wastes	RCRA - K Series Wastes
Sulfuric acid - 7664-93-9	None Known	None Known	None Known	None Known
Water - 7732-18-5	None Known	None Known	None Known	None Known

14. TRANSPORT INFORMATION

DOT Not regulated

IATA Not regulated

IMDG/IMO Not regulated

15. REGULATORY INFORMATION

International Inventories

Component	TSCA	DSL	EINECS/ELINCS	ENCS	IECSC	KECL	PICCS	AICS
Sulfuric acid 7664-93-9 (0.1)	Present	X	X	1-430; 1-724	X	KE-32570	X	X
Water 7732-18-5 (to 100%)	Present	X	X	ENCS	X	KE-35400	X	X

U.S. 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	CAS-No	Weight %	SARA 313 - Threshold Values %
Sulfuric acid	7664-93-9	0.1	1.0
Water	7732-18-5	to 100%	None Known

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	No
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	Yes

Clean Water Act

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

Component	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Sulfuric acid 7664-93-9 (0.1)	1000 lb	None Known	None Known	X
Water 7732-18-5 (to 100%)	None Known	None Known	None Known	None Known

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)

This product does not contain any HAPs.

Chemical Name	CAS-No	Weight %	HAPS data	VOC Chemicals	Class 1 Ozone Depletors	Class 2 Ozone Depletors
Sulfuric acid	7664-93-9	0.1	None Known	None Known	None Known	None Known
Water	7732-18-5	to 100%	None Known	None Known	None Known	None Known

CERCLA

Chemical Name	Hazardous Substances RQs	Extremely Hazardous Substances RQs
Sulfuric acid	1000 lb	1000 lb
Water	None Known	None Known

U.S. State Regulations

California Proposition 65

WARNING! California Proposition 65 has classified "strong inorganic acid mists containing sulfuric acid" as a chemical known to the State of California to cause cancer. This classification applies only to "mists" containing sulfuric acid and not to sulfuric acid or sulfuric acid solutions, as in this solution.

Chemical Name	CAS-No	California Prop. 65
Sulfuric acid	7664-93-9	Carcinogen
Water	7732-18-5	None Known

U.S. State Right-to-Know Regulations

Chemical Name	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Sulfuric acid	X	X	X	X	X
Water	None Known	None Known	None Known	None Known	None Known

International Regulations

Mexico - Grade

Chemical Name	Carcinogen Status	Exposure Limits
Sulfuric acid	A2	Mexico: TWA= 1 mg/m ³
Water	None Known	None Known

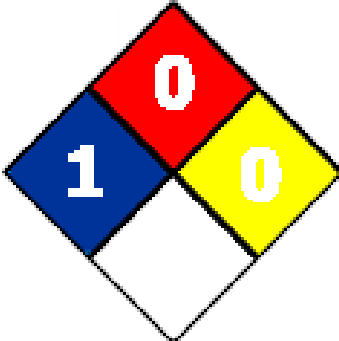

Canada

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR

Component	WHMIS Hazard Class
Sulfuric acid 7664-93-9 (0.1)	1 % D1A E
Water 7732-18-5 (to 100%)	Uncontrolled product according to WHMIS classification criteria

Chemical Name	NPRI
Sulfuric acid	X

16. OTHER INFORMATION

NFPA	HMIS	PPE	Transport Symbol						
	<table border="1"> <tr> <td>Health Hazard</td> <td style="text-align: center;">1</td> </tr> <tr> <td>Fire Hazard</td> <td style="text-align: center;">0</td> </tr> <tr> <td>Reactivity</td> <td style="text-align: center;">1</td> </tr> </table>	Health Hazard	1	Fire Hazard	0	Reactivity	1		
Health Hazard	1								
Fire Hazard	0								
Reactivity	1								

Prepared By Regulatory Affairs Department
 Issuing Date 1/21/2013
 Revision Date -
 Revision Note Initial Release.
Disclaimer

The information provided on this MSDS 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 MSDS



Issuing Date 3/21/2013

Revision Number 0

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name PHENOLPHTHALEIN TABLETS
Product Code(s) T-2246
Synonyms none
Recommended Use Test kit reagent. Industrial (not for food or food contact use). Laboratory chemicals.
Company LaMotte Company, Inc.
802 Washington Avenue
P.O. Box 329
Chestertown, MD 21620
USA
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

Emergency Overview
Product dust may be irritating to eyes, skin and respiratory system
Large oral doses may cause gastrointestinal irritation
Appearance White **Physical State** Tablet, ~0.1g (100mg) **Odor** None

OSHA Regulatory Status While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this MSDS contains valuable information critical to the safe handling and proper use of the product. This MSDS should be retained and available for employees and other users of this product.

Potential Health Effects

Acute Toxicity

Eyes May cause irritation.
Skin May cause irritation.
Inhalation May cause irritation of respiratory tract.
Ingestion May cause irritation. May cause gastrointestinal discomfort if consumed in extremely large amounts.

Chronic Effects

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	Weight %
Excipient	-	<1
Phenolphthalein	77-09-8	<1
Potassium chloride	7447-40-7	>98

LaMotte Company proprietary formulation under the State of New Jersey Trade Secret Protection Law, assigned the NJTSRN 80100291-5110p, and may be disclosed only in a medical emergency.

4. FIRST AID MEASURES

General Advice Show this safety data sheet to the doctor in attendance. Keep out of reach of children.

Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If irritation persists or develops, contact a physician.

Skin Contact Wash off with soap and plenty of water removing all contaminated clothes and shoes. If irritation develops or persists, consult physician.

Inhalation Move to fresh air.

Ingestion Drink plenty of water. Consult a physician.

Protection of First-aiders Do not use mouth-to-mouth method if victim ingested or inhaled the substance; induce 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

Flammable Properties Not a fire hazard.

Flash Point Not applicable

Suitable Extinguishing Media Dry chemical, CO₂, water spray or alcohol-resistant foam.

NFPA	Health Hazard 0	Flammability 0	Stability 0	Physical and Chemical Hazards -
HMIS	Health Hazard 1	Flammability 0	Stability 0	

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions Avoid contact with skin, eyes, and clothing.

Methods for Containment Sweep up in a manner that does not disperse dust and shovel into suitable containers for disposal.

Methods for Cleaning Up After cleaning, flush away traces with water.

7. HANDLING AND STORAGE

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

Storage Keep container tightly closed in a dry and well-ventilated place. Protect from moisture. Keep out of the reach of children.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Excipient	None Known	None Known	None Known
Phenolphthalein 77-09-8	None Known	None Known	None Known

Potassium chloride 7447-40-7	None Known	None Known	None Known
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Engineering Measures
Showers
Eyewash stations
Ventilation systems.

Personal Protective Equipment

Eye/Face Protection Safety glasses with side-shields.
Skin and Body Protection Protective gloves.
Respiratory Protection None required under normal usage. If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn.

Hygiene Measures Wash thoroughly after handling.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	White	Odor	None
Physical State	Tablet, ~0.1g (100mg)	pH	6 (1 tablet in 10mL of water)
Flash Point	Not applicable	Boiling Point/Range	No information available

Vapor Pressure	No information available	Vapor Density	No information available
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10. STABILITY AND REACTIVITY

Stability Stable under recommended storage conditions. Stability decreases in the presence of moisture.

Incompatible Products Strong oxidizing agents. Strong acids.

Conditions to Avoid Moisture. Excessive heat.

Hazardous Decomposition Products Hazardous decomposition products formed under fire conditions - . Hydrogen chloride. Potassium Oxides.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Excipient	None Known	None Known	None Known
Phenolphthalein	None Known	None Known	None Known
Potassium chloride	2600 mg/kg (Rat)	None Known	None Known

Chronic Toxicity

Chemical Name	ACGIH	IARC	NTP	OSHA
Excipient	None Known	None Known	None Known	None Known
Phenolphthalein	None Known	Group 2B	Reasonably Anticipated	X
Potassium chloride	None Known	None Known	None Known	None Known

IARC: (International Agency for Research on Cancer)
Group 2B - Possibly Carcinogenic to Humans
NTP: (National Toxicity Program)
Reasonably Anticipated - Reasonably Anticipated to be a Human Carcinogen
OSHA: (Occupational Safety & Health Administration)
X - Present

Endocrine Disruptor Information

Chemical Name	EU - Endocrine Disruptors Candidate List	EU - Endocrine Disruptors - Evaluated Substances	Japan - Endocrine Disruptor Information
Excipient	None Known	None Known	None Known
Phenolphthalein	Group III Chemical	None Known	None Known
Potassium chloride	None Known	None Known	None Known

12. ECOLOGICAL INFORMATION**Ecotoxicity**

Chemical Name	Toxicity to Algae	Toxicity to Fish	Microtox	Daphnia Magna (Water Flea)
Excipient	None Known	None Known	None Known	None Known
Phenolphthalein	None Known	None Known	None Known	None Known
Potassium chloride	EC50 = 2500 mg/L 72 h	LC50= 2010 mg/L Lepomis macrochirus 96 h	None Known	EC50 = 825 mg/L 48 h
Chemical Name	Log Pow			
Excipient	None Known			
Phenolphthalein	None Known			
Potassium chloride	None Known			

13. DISPOSAL CONSIDERATIONS**Waste Disposal Method**

Dispose of in accordance with local regulations. Dispose of contents/container in accordance with local regulation.

Chemical Name	RCRA - Halogenated Organic Compounds	RCRA - P Series Wastes	RCRA - F Series Wastes	RCRA - K Series Wastes
Excipient -	None Known	None Known	None Known	None Known
Phenolphthalein - 77-09-8	None Known	None Known	None Known	None Known
Potassium chloride - 7447-40-7	None Known	None Known	None Known	None Known

14. TRANSPORT INFORMATION

DOT Not regulated

IATA Not regulated

IMDG/IMO Not regulated

15. REGULATORY INFORMATION**International Inventories**

Component	TSCA	DSL	EINECS/ELINCS	ENCS	IECSC	KECL	PICCS	AICS
Excipient (<1)	XU	X	EINECS/ELINCS	6-902	X	KE-25266	X	X
Phenolphthalein 77-09-8 (<1)	Present	X	X	9-1152	X	KE-03234	X	X
Potassium chloride 7447-40-7 (>98)	Present	X	X	1-228	X	KE-29086	X	X

U.S. Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

Chemical Name	CAS-No	Weight %	SARA 313 - Threshold Values %
Excipient		<1	None Known
Phenolphthalein	77-09-8	<1	None Known
Potassium chloride	7447-40-7	>98	None Known

SARA 311/312 Hazard Categories

Acute Health Hazard	No
Chronic Health Hazard	No
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

Clean Water Act

Component	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Excipient (<1)	None Known	None Known	None Known	None Known
Phenolphthalein 77-09-8 (<1)	None Known	None Known	None Known	None Known
Potassium chloride 7447-40-7 (>98)	None Known	None Known	None Known	None Known

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)

This product contains the following HAPs:.

Chemical Name	CAS-No	Weight %	HAPS data	VOC Chemicals	Class 1 Ozone Depletors	Class 2 Ozone Depletors
Excipient		<1	None Known	None Known	None Known	None Known
Phenolphthalein	77-09-8	<1	None Known	Group III	None Known	None Known
Potassium chloride	7447-40-7	>98	None Known	None Known	None Known	None Known

CERCLA

Chemical Name	Hazardous Substances RQs	Extremely Hazardous Substances RQs
Excipient	None Known	None Known
Phenolphthalein	None Known	None Known
Potassium chloride	None Known	None Known

U.S. State Regulations

California Proposition 65

WARNING! This product contains a chemical known to the State of California to cause cancer

Chemical Name	CAS-No	California Prop. 65
Excipient		None Known
Phenolphthalein	77-09-8	Carcinogen
Potassium chloride	7447-40-7	None Known

Chemical Name	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Excipient	None Known	None Known	None Known	None Known	None Known
Phenolphthalein	None Known	None Known	None Known	None Known	None Known
Potassium chloride	None Known	None Known	None Known	None Known	None Known

International Regulations

Mexico - Grade

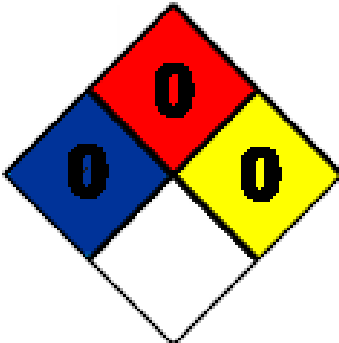

Chemical Name	Carcinogen Status	Exposure Limits

Excipient	None Known	None Known
Phenolphthalein	None Known	None Known
Potassium chloride	None Known	None Known

Canada

Component	WHMIS Hazard Class
Excipient (<1)	Not determined
Phenolphthalein 77-09-8 (<1)	Not determined
Potassium chloride 7447-40-7 (>98)	Uncontrolled product according to WHMIS classification criteria

16. OTHER INFORMATION

NFPA	HMIS	PPE	Transport Symbol						
	<table border="1"> <tr> <td>Health Hazard</td> <td>1</td> </tr> <tr> <td>Fire Hazard</td> <td>0</td> </tr> <tr> <td>Reactivity</td> <td>0</td> </tr> </table>	Health Hazard	1	Fire Hazard	0	Reactivity	0		
Health Hazard	1								
Fire Hazard	0								
Reactivity	0								

Issuing Date 3/21/2013
Revision Date -
Revision Note Update to Format.
Disclaimer

The information provided on this MSDS 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 MSDS

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name	BROMCRESOL GREEN METHYL RED INDICATOR TABLETS
Product Code(s)	T-2311
Synonyms	none
Recommended Use	Test kit reagent. Industrial (not for food or food contact use). Laboratory chemicals.
Company	LaMotte Company, Inc. 802 Washington Avenue P.O. Box 329 Chestertown, MD 21620 USA
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
Emergency Overview

Product dust may be irritating to eyes, skin and respiratory system
Large oral doses may cause gastrointestinal irritation

Appearance Blue green	Physical State Tablet	Odor None
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OSHA Regulatory Status While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this MSDS contains valuable information critical to the safe handling and proper use of the product. This MSDS should be retained and available for employees and other users of this product.

Potential Health Effects
Acute Toxicity

Eyes	May cause irritation.
Skin	May cause irritation.
Inhalation	May cause irritation of respiratory tract.
Ingestion	May cause irritation. May cause gastrointestinal discomfort if consumed in large amounts.

Chronic Effects
3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	Weight %
Methyl red	493-52-7	<0.1
Bromcresol green	76-60-8	<0.2
Thiosulfate, sodium, pentahydrate	10102-17-7	0.4
2-Propenoic acid, 2-methyl-, potassium salt, polymer with diethenylbenzene	65405-55-2	1
Potassium chloride	7447-40-7	>98

4. FIRST AID MEASURES

General Advice	Show this safety data sheet to the doctor in attendance. Keep out of reach of children.
Eye Contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If irritation persists or develops, contact a physician.
Skin Contact	Wash off with soap and plenty of water removing all contaminated clothes and shoes. If irritation develops or persists, consult physician.
Inhalation	Move to fresh air.
Ingestion	Drink plenty of water. Consult a physician.
Protection of First-aiders	Do not use mouth-to-mouth method if victim ingested or inhaled the substance; induce 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

Flammable Properties	Not a fire hazard.			
Flash Point	Not applicable			
Suitable Extinguishing Media	Dry chemical, CO ₂ , water spray or alcohol-resistant foam.			
Explosion Data				
NFPA	Health Hazard 0	Flammability 0	Stability 0	Physical and Chemical Hazards -
HMIS	Health Hazard 0	Flammability 0	Stability 0	

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions	Avoid contact with skin, eyes, and clothing.
Methods for Containment	Sweep up in a manner that does not disperse dust and shovel into suitable containers for disposal.
Methods for Cleaning Up	If local regulations permit, dissolve and rinse to drain with excess water. After cleaning, flush away traces with water.

7. HANDLING AND STORAGE

Handling	Avoid contact with skin, eyes and clothing. Handle in accordance with good industrial hygiene and safety practice. Do not ingest. Do not eat, drink, or smoke when using this product.
Storage	Keep container tightly closed in a dry and well-ventilated place. Protect from moisture. Keep out of the reach of children.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Methyl red 493-52-7	None Known	None Known	None Known
Bromcresol green 76-60-8	None Known	None Known	None Known
Thiosulfate, sodium, pentahydrate 10102-17-7	None Known	None Known	None Known

2-Propenoic acid, 2-methyl-, potassium salt, polymer with diethenylbenzene 65405-55-2	None Known	None Known	None Known
Potassium chloride 7447-40-7	None Known	None Known	None Known

Engineering Measures

Showers
Eyewash stations
Ventilation systems.

Personal Protective Equipment**Eye/Face Protection**

Safety glasses with side-shields.

Skin and Body Protection

Protective gloves.

Respiratory Protection

None required under normal usage. If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Blue green	Odor	None
Physical State	Tablet	pH	6 (1 tablet in 10mL of water)
Flash Point	Not applicable	Boiling Point/Range	No information available

Vapor Pressure	No information available	Vapor Density	No information available
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10. STABILITY AND REACTIVITY

Stability	Stable.
Incompatible Products	Strong oxidizing agents.
Conditions to Avoid	Moisture. Excessive heat.
Hazardous Decomposition Products	Hazardous decomposition products formed under fire conditions -. Carbon oxides (COx). Hydrogen chloride.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Methyl red	None Known	None Known	None Known
Bromcresol green	None Known	None Known	None Known
Thiosulfate, sodium, pentahydrate	5000 mg/kg (Rat)	None Known	None Known
2-Propenoic acid, 2-methyl-, potassium salt, polymer with diethenylbenzene	None Known	None Known	None Known
Potassium chloride	2600 mg/kg (Rat)	None Known	None Known

Chronic Toxicity

Chemical Name	ACGIH	IARC	NTP	OSHA
Methyl red	None Known	None Known	None Known	None Known
Bromcresol green	None Known	None Known	None Known	None Known
Thiosulfate, sodium, pentahydrate	None Known	None Known	None Known	None Known
2-Propenoic acid, 2-methyl-, potassium salt, polymer with diethenylbenzene	None Known	None Known	None Known	None Known

Potassium chloride	None Known	None Known	None Known	None Known
Chemical Name	EU - Endocrine Disruptors Candidate List	EU - Endocrine Disruptors - Evaluated Substances	Japan - Endocrine Disruptor Information	
Methyl red	None Known	None Known	None Known	
Bromcresol green	None Known	None Known	None Known	
Thiosulfate, sodium, pentahydrate	None Known	None Known	None Known	
2-Propenoic acid, 2-methyl-, potassium salt, polymer with diethenylbenzene	None Known	None Known	None Known	
Potassium chloride	None Known	None Known	None Known	

12. ECOLOGICAL INFORMATION

Ecotoxicity

Chemical Name	Toxicity to Algae	Toxicity to Fish	Microtox	Daphnia Magna (Water Flea)
Methyl red	None Known	None Known	None Known	None Known
Bromcresol green	None Known	None Known	None Known	None Known
Thiosulfate, sodium, pentahydrate	None Known	LC50= 24000 mg/L Gambusia affinis 96 h	None Known	None Known
2-Propenoic acid, 2-methyl-, potassium salt, polymer with diethenylbenzene	None Known	None Known	None Known	None Known
Potassium chloride	EC50 = 2500 mg/L 72 h	LC50= 2010 mg/L Lepomis macrochirus 96 h	None Known	EC50 = 825 mg/L 48 h
Chemical Name	Log Pow			
Methyl red	None Known			
Bromcresol green	None Known			
Thiosulfate, sodium, pentahydrate	None Known			
2-Propenoic acid, 2-methyl-, potassium salt, polymer with diethenylbenzene	None Known			
Potassium chloride	None Known			

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method

Dispose of in accordance with local regulations. Dispose of contents/container in accordance with local regulation.

Chemical Name	RCRA - Halogenated Organic Compounds	RCRA - P Series Wastes	RCRA - F Series Wastes	RCRA - K Series Wastes
Methyl red - 493-52-7	None Known	None Known	None Known	None Known
Bromcresol green - 76-60-8	None Known	None Known	None Known	None Known
Thiosulfate, sodium, pentahydrate - 10102-17-7	None Known	None Known	None Known	None Known
2-Propenoic acid, 2-methyl-, potassium salt, polymer with diethenylbenzene - 65405-55-2	None Known	None Known	None Known	None Known
Potassium chloride - 7447-40-7	None Known	None Known	None Known	None Known

14. TRANSPORT INFORMATION

DOT Not regulated

IATA Not regulated

IMDG/IMO Not regulated

15. REGULATORY INFORMATION

International Inventories

Component	TSCA	DSL	EINECS/ELINCS	ENCS	IECSC	KECL	PICCS	AICS
Methyl red 493-52-7 (<0.1)	Present	X	X	5-243	X	KE-06693	X	X
Bromcresol green 76-60-8 (<0.2)	Present	X	X	ENCS	X	KE-02745	X	X
Thiosulfate, sodium, pentahydrate 10102-17-7 (0.4)	TSCA	X	EINECS/ELINCS	1-503	X	KECL	X	X
2-Propenoic acid, 2-methyl-, potassium salt, polymer with diethenylbenzene 65405-55-2 (1)	XU	X	EINECS/ELINCS	6-902	X	KE-25266	X	X
Potassium chloride 7447-40-7 (>98)	Present	X	X	1-228	X	KE-29086	X	X

U.S. Federal Regulations**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

Chemical Name	CAS-No	Weight %	SARA 313 - Threshold Values %
Methyl red	493-52-7	<0.1	None Known
Bromcresol green	76-60-8	<0.2	None Known
Thiosulfate, sodium, pentahydrate	10102-17-7	0.4	None Known
2-Propenoic acid, 2-methyl-, potassium salt, polymer with diethenylbenzene	65405-55-2	1	None Known
Potassium chloride	7447-40-7	>98	None Known

SARA 311/312 Hazard Categories

Acute Health Hazard	No
Chronic Health Hazard	No
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

Clean Water Act

Component	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Methyl red 493-52-7 (<0.1)	None Known	None Known	None Known	None Known
Bromcresol green 76-60-8 (<0.2)	None Known	None Known	None Known	None Known
Thiosulfate, sodium, pentahydrate 10102-17-7 (0.4)	None Known	None Known	None Known	None Known
2-Propenoic acid, 2-methyl-, potassium salt, polymer with diethenylbenzene 65405-55-2 (1)	None Known	None Known	None Known	None Known
Potassium chloride 7447-40-7 (>98)	None Known	None Known	None Known	None Known

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)

This product does not contain any HAPs.

Chemical Name	CAS-No	Weight %	HAPS data	VOC Chemicals	Class 1 Ozone Depletors	Class 2 Ozone Depletors
Methyl red	493-52-7	<0.1	None Known	None Known	None Known	None Known
Bromcresol green	76-60-8	<0.2	None Known	None Known	None Known	None Known
Thiosulfate, sodium, pentahydrate	10102-17-7	0.4	None Known	None Known	None Known	None Known
2-Propenoic acid, 2-methyl-, potassium salt, polymer with diethenylbenzene	65405-55-2	1	None Known	None Known	None Known	None Known
Potassium chloride	7447-40-7	>98	None Known	None Known	None Known	None Known

CERCLA

Chemical Name	Hazardous Substances RQs	Extremely Hazardous Substances RQs
Methyl red	None Known	None Known
Bromcresol green	None Known	None Known
Thiosulfate, sodium, pentahydrate	None Known	None Known
2-Propenoic acid, 2-methyl-, potassium salt, polymer with diethenylbenzene	None Known	None Known
Potassium chloride	None Known	None Known

U.S. State Regulations**California Proposition 65**

This product does not contain any Proposition 65 chemicals

Chemical Name	CAS-No	California Prop. 65
Methyl red	493-52-7	None Known
Bromcresol green	76-60-8	None Known
Thiosulfate, sodium, pentahydrate	10102-17-7	None Known
2-Propenoic acid, 2-methyl-, potassium salt, polymer with diethenylbenzene	65405-55-2	None Known
Potassium chloride	7447-40-7	None Known

Chemical Name	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Methyl red	None Known	None Known	None Known	None Known	None Known
Bromcresol green	None Known	None Known	None Known	None Known	None Known
Thiosulfate, sodium, pentahydrate	None Known	X	None Known	None Known	None Known
2-Propenoic acid, 2-methyl-, potassium salt, polymer with diethenylbenzene	None Known	None Known	None Known	None Known	None Known
Potassium chloride	None Known	None Known	None Known	None Known	None Known

International Regulations**Mexico - Grade**

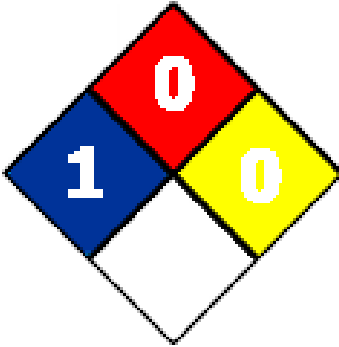

Chemical Name	Carcinogen Status	Exposure Limits
Methyl red	None Known	None Known
Bromcresol green	None Known	None Known
Thiosulfate, sodium, pentahydrate	None Known	None Known
2-Propenoic acid, 2-methyl-, potassium salt, polymer with diethenylbenzene	None Known	None Known
Potassium chloride	None Known	None Known

Canada

Component	WHMIS Hazard Class
Methyl red 493-52-7 (<0.1)	Uncontrolled product according to WHMIS classification criteria
Bromcresol green 76-60-8 (<0.2)	Uncontrolled product according to WHMIS classification criteria
Thiosulfate, sodium, pentahydrate 10102-17-7 (0.4)	Uncontrolled product according to WHMIS classification criteria

2-Propenoic acid, 2-methyl-, potassium salt, polymer with diethenylbenzene 65405-55-2 (1)	Not determined
Potassium chloride 7447-40-7 (>98)	Uncontrolled product according to WHMIS classification criteria

16. OTHER INFORMATION

NFPA	HMIS	PPE	Transport Symbol						
	<table border="1"> <tr> <td style="background-color: #0000FF; color: white;">Health Hazard</td> <td style="text-align: center; font-weight: bold;">1</td> </tr> <tr> <td style="background-color: #FF0000; color: white;">Fire Hazard</td> <td style="text-align: center; font-weight: bold;">0</td> </tr> <tr> <td style="background-color: #FFFF00; color: black;">Reactivity</td> <td style="text-align: center; font-weight: bold;">0</td> </tr> </table>	Health Hazard	1	Fire Hazard	0	Reactivity	0		
Health Hazard	1								
Fire Hazard	0								
Reactivity	0								

Issuing Date 2/1/2013
Revision Date -
Revision Note Update to Format.
Disclaimer

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End of MSDS