



Issuing Date 3/28/2012

Revision Number 0

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name CALCIUM HARDNESS TABLET

Product Code(s) 6846

Recommended Use Test kit reagent. 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

Emergency Overview

May cause skin and eye irritation

May be harmful if swallowed

Large oral doses may cause gastrointestinal irritation and circulatory problems

Appearance Light pink, with white specks **Physical State** Tablet, ~0.1g (100mg)

Odor Odorless

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

Principle Routes of Exposure Skin and eye contact

Acute Toxicity

Eyes

May cause irritation.

Skin

May cause irritation.

Inhalation

Not an expected route of exposure.

Ingestion

May be harmful if swallowed. May cause gastrointestinal discomfort if consumed in large amounts.

Chronic Effects

None known

Aggravated Medical Conditions None known.

Interactions with Other Chemicals None known.

Environmental Hazard No information available.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	Weight %
2,4,6(1H,3H,5H)-Pyrimidinetrione, 5-[(hexahydro-2,4,6-trioxo-5-pyrimidinyl)imino]-, monoammonium salt	3051-09-0	<0.5
Carboxymethylcellulose	-	1-5
Polyamino Carboxylic acid	-	1-10
Lithium hydroxide	1310-65-2	10
Carbonate salt	-	10-15
Potassium salt	-	35-45

Ingredients not specifically listed by name are proprietary to the LaMotte Company, registered under the State of New Jersey Trade Secret protection law, assigned the NJTSRN#80100291-5025p, and may be disclosed only in a medical emergency. Excipients not listed by name are non-hazardous and proprietary to the manufacturer.

4. FIRST AID MEASURES

General Advice	Do not get in eyes, on skin, or on clothing.
Eye Contact	Immediately flush eyes with gentle stream of water for at least 15 minutes, occasionally lifting upper and lower eyelids. If irritation persists or develops, contact a physician.
Skin Contact	Wash off with warm water and soap. If irritation develops or persists, consult physician.
Inhalation	Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration and contact emergency personnel.
Ingestion	Drink plenty of water. Clean mouth with water. If gastrointestinal distress occurs contact physician. Consult a physician.
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 a fire hazard.			
Flash Point	Not applicable			
Suitable Extinguishing Media	Water spray, dry chemical, carbon dioxide (CO ₂), or foam.			
Explosion Data				
NFPA	Health Hazard 1	Flammability 0	Stability 0	Physical and Chemical Hazards N/A
HMIS	Health Hazard 1	Flammability 0	Stability 0	

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions	Refer to Section 8. Avoid contact with the skin and the eyes.
Methods for Containment	Sweep up in a manner that does not disperse dust and shovel into suitable containers for disposal.
Methods for Cleaning Up	Containerize spill material and hold for later disposal. If local regulations permit, dissolve with large volume of water, neutralize with dilute acid (acetic, hydrochloric), then 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.
Storage	Keep containers tightly closed in a dry, cool, and well-ventilated place. Keep away from direct sunlight. Keep away from heat, moisture, and incompatibles. Keep out of the reach of children.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
2,4,6(1H,3H,5H)-Pyrimidinetrione, 5-[(hexahydro-2,4,6-trioxo-5-pyrimidinyl)imino]-, monoammonium salt 3051-09-0	None Known	None Known	None Known
Carboxymethylcellulose	None Known	None Known	None Known
Polyamino Carboxylic acid	None Known	None Known	None Known
Lithium hydroxide 1310-65-2	None Known	None Known	None Known
Carbonate salt	None Known	None Known	None Known
Potassium salt	None Known	None Known	None Known

Engineering Measures	None under normal use conditions. For home use.
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Personal Protective Equipment

Eye/Face Protection	Safety glasses with side-shields.
Skin and Body Protection	Wear latex or nitrile gloves.
Respiratory Protection	None required under normal usage.

Hygiene Measures	Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes and clothing. Wear suitable gloves and eye/face protection. Wash hands and face before breaks and immediately after handling the product.
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9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Light pink with white specks	Odor	Odorless
Physical State	Tablet, ~0.1g (100mg)	pH	12 (0.1g/10mL water)
Flash Point	Not applicable	Autoignition Temperature	Not applicable
Boiling Point/Range	No information available	Freezing Point	No information available
Explosion Limits	Not applicable		
Molecular Weight	No data available	Water Solubility	Soluble in water

10. STABILITY AND REACTIVITY

Stability	Stable.
Incompatible Products	Strong acids.
Conditions to Avoid	Exposure to air or moisture over prolonged periods. Extremes of temperature and direct sunlight.
Hazardous Decomposition Products	None under normal use.
Hazardous Polymerization	Hazardous polymerization does not occur.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
2,4,6(1H,3H,5H)-Pyrimidinetrione, 5-[(hexahydro-2,4,6-trioxo-5-pyrimidinyl)imino]-, monoammonium salt	None Known	None Known	None Known
Carboxymethylcellulose	None Known	None Known	None Known
Polyamino Carboxylic acid	2 g/kg (Rat)	None Known	None Known
Lithium hydroxide	None Known	None Known	960 mg/m ³ (Rat) 4 h
Carbonate salt	4090 mg/kg (Rat)	None Known	None Known
Potassium salt	2600 mg/kg (Rat)	None Known	None Known

Chronic Toxicity

Chronic Toxicity	None known.
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Chemical Name	ACGIH	IARC	NTP	OSHA
2,4,6(1H,3H,5H)-Pyrimidinetrione, 5-[(hexahydro-2,4,6-trioxo-5-pyrimidinyl)imino]-, monoammonium salt	None Known	None Known	None Known	None Known
Carboxymethylcellulose	None Known	None Known	None Known	None Known
Polyamino Carboxylic acid	None Known	None Known	None Known	None Known
Lithium hydroxide	None Known	None Known	None Known	None Known
Carbonate salt	None Known	None Known	None Known	None Known
Potassium salt	None Known	None Known	None Known	None Known

Endocrine Disruptor Information

Chemical Name	EU - Endocrine Disruptors Candidate List	EU - Endocrine Disruptors - Evaluated Substances	Japan - Endocrine Disruptor Information
2,4,6(1H,3H,5H)-Pyrimidinetrione, 5-[(hexahydro-2,4,6-trioxo-5-pyrimidinyl)imino]-, monoammonium salt	None Known	None Known	None Known
Carboxymethylcellulose	None Known	None Known	None Known
Polyamino Carboxylic acid	None Known	None Known	None Known
Lithium hydroxide	None Known	None Known	None Known
Carbonate salt	None Known	None Known	None Known
Potassium salt	None Known	None Known	None Known

12. ECOLOGICAL INFORMATION

Ecotoxicity

Chemical Name	Toxicity to Algae	Toxicity to Fish	Microtox	Daphnia Magna (Water Flea)
2,4,6(1H,3H,5H)-Pyrimidinetrione, 5-[(hexahydro-2,4,6-trioxo-5-pyrimidinyl)imino]-, monoammonium salt	None Known	None Known	None Known	None Known
Carboxymethylcellulose	None Known	None Known	None Known	None Known
Polyamino Carboxylic acid	None Known	LC50= 159 mg/L <i>Lepomis macrochirus</i> 96 h LC50= 320 mg/L <i>Poecilia reticulata</i> 96 h	EC50 = 56 mg/L 8 h	None Known
Lithium hydroxide	None Known	None Known	None Known	None Known
Carbonate salt	EC50 = 242 mg/L 120 h	LC50= 300 mg/L <i>Lepomis macrochirus</i> 96 h	None Known	EC50 = 265 mg/L 48 h
Potassium salt	EC50 = 2500 mg/L 72 h	LC50= 2010 mg/L <i>Lepomis macrochirus</i> 96 h	None Known	EC50 = 825 mg/L 48 h

Persistence and Degradability No information available.

Chemical Name	Log Pow
2,4,6(1H,3H,5H)-Pyrimidinetrione, 5-[(hexahydro-2,4,6-trioxo-5-pyrimidinyl)imino]-, monoammonium salt	None Known
Carboxymethylcellulose	None Known
Polyamino Carboxylic acid	None Known
Lithium hydroxide	None Known
Carbonate salt	None Known
Potassium salt	None Known

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method Dispose of in accordance with local regulations.

Contaminated Packaging Dispose of in accordance with local regulations.

Chemical Name	RCRA - Halogenated Organic Compounds	RCRA - P Series Wastes	RCRA - F Series Wastes	RCRA - K Series Wastes
2,4,6(1H,3H,5H)-Pyrimidinetrione, 5-[(hexahydro-2,4,6-trioxo-5-pyrimidinyl)imino]-, monoammonium salt - 3051-09-0	None Known	None Known	None Known	None Known
Carboxymethylcellulose -	None Known	None Known	None Known	None Known
Polyamino Carboxylic acid -	None Known	None Known	None Known	None Known
Lithium hydroxide - 1310-65-2	None Known	None Known	None Known	None Known
Carbonate salt -	None Known	None Known	None Known	None Known
Potassium salt -	None Known	None Known	None Known	None Known

14. TRANSPORT INFORMATION

DOT

Proper Shipping Name CORROSIVE SOLID, BASIC, INORGANIC, N.O.S. (<10% Lithium Hydroxide mixture)
Hazard Class 8
UN-No 3262
Packing Group III

IATA

UN-No 3262
Proper Shipping Name CORROSIVE SOLID, BASIC, INORGANIC, N.O.S. (<10% Lithium Hydroxide mixture)
Hazard Class 8
Packing Group III

IMDG/IMO

Proper Shipping Name CORROSIVE SOLID, BASIC, INORGANIC, N.O.S. (<10% Lithium Hydroxide mixture)
Hazard Class 8
UN-No 3262
Packing Group III

15. REGULATORY INFORMATION

International Inventories

Component	TSCA	DSL	EINECS/ELINCS	ENCS	IECSC	KECL	PICCS	AICS
2,4,6(1H,3H,5H)-Pyrimidinetrione, 5-[(hexahydro-2,4,6-trioxo-5-pyrimidinyl)imino]-, monoammonium salt 3051-09-0 (<0.5)	Present	X	X	ENCS	X	KECL	X	X
Carboxymethylcellulose (1-5)	TSCA	DSL	EINECS/ELINCS	ENCS	X	KECL	X	X
Polyamino Carboxylic acid (1-10)	Present	X	X	2-1265	X	KE-13651	X	X
Lithium hydroxide 1310-65-2 (10)	Present	X	X	1-712	X	KE-22570	X	X
Carbonate salt (10-15)	Present	X	X	1-164	X	KE-31380	X	X
Potassium salt (35-45)	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 %
2,4,6(1H,3H,5H)-Pyrimidinetrione, 5-[(hexahydro-2,4,6-trioxo-5-pyrimidinyl)imino]-, monoammonium salt	3051-09-0	<0.5	None Known
Carboxymethylcellulose		1-5	None Known
Polyamino Carboxylic acid		1-10	None Known
Lithium hydroxide	1310-65-2	10	None Known
Carbonate salt		10-15	None Known
Potassium salt		35-45	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	No

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).

Component	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
2,4,6(1H,3H,5H)-Pyrimidinetrione, 5-[(hexahydro-2,4,6-trioxo-5-pyrimidinyl)imino]-, monoammonium salt 3051-09-0 (<0.5)	None Known	None Known	None Known	None Known
Carboxymethylcellulose (1-5)	None Known	None Known	None Known	None Known

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Polyamino Carboxylic acid (1-10)	None Known	None Known	None Known	None Known
Lithium hydroxide 1310-65-2 (10)	None Known	None Known	None Known	None Known
Carbonate salt (10-15)	None Known	None Known	None Known	None Known
Potassium salt (35-45)	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 substances regulated as hazardous air pollutants (HAPS) under Section 112 of the Clean Air Act Amendments of 1990.

Chemical Name	CAS-No	Weight %	HAPS data	VOC Chemicals	Class 1 Ozone Depleters	Class 2 Ozone Depleters
2,4,6(1H,3H,5H)-Pyrimidinetrione, 5-[(hexahydro-2,4,6-trioxo-5-pyrimidinyl)imino]-, monoammonium salt	3051-09-0	<0.5	None Known	None Known	None Known	None Known
Carboxymethylcellulose		1-5	None Known	None Known	None Known	None Known
Polyamino Carboxylic acid		1-10	None Known	None Known	None Known	None Known
Lithium hydroxide	1310-65-2	10	None Known	None Known	None Known	None Known
Carbonate salt		10-15	None Known	None Known	None Known	None Known
Potassium salt		35-45	None Known	None Known	None Known	None Known

CERCLA

Chemical Name	Hazardous Substances RQs	Extremely Hazardous Substances RQs
2,4,6(1H,3H,5H)-Pyrimidinetrione, 5-[(hexahydro-2,4,6-trioxo-5-pyrimidinyl)imino]-, monoammonium salt	None Known	None Known
Carboxymethylcellulose	None Known	None Known
Polyamino Carboxylic acid	None Known	None Known
Lithium hydroxide	None Known	None Known
Carbonate salt	None Known	None Known
Potassium salt	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
2,4,6(1H,3H,5H)-Pyrimidinetrione, 5-[(hexahydro-2,4,6-trioxo-5-pyrimidinyl)imino]-, monoammonium salt	3051-09-0	None Known
Carboxymethylcellulose		None Known
Polyamino Carboxylic acid		None Known
Lithium hydroxide	1310-65-2	None Known
Carbonate salt		None Known
Potassium salt		None Known

Chemical Name	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
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2,4,6(1H,3H,5H)-Pyrimidinetrione, 5-[(hexahydro-2,4,6-trioxo-5-pyrimidinyl)imino]-, monoammonium salt	None Known	None Known	None Known	None Known	None Known
Carboxymethylcellulose	None Known	None Known	None Known	None Known	None Known
Polyamino Carboxylic acid	None Known	None Known	None Known	None Known	None Known
Lithium hydroxide	None Known	None Known	None Known	None Known	None Known
Carbonate salt	None Known	None Known	None Known	None Known	None Known
Potassium salt	None Known	None Known	None Known	None Known	None Known

International Regulations

Mexico - Grade



Chemical Name	Carcinogen Status	Exposure Limits
2,4,6(1H,3H,5H)-Pyrimidinetrione, 5-[(hexahydro-2,4,6-trioxo-5-pyrimidinyl)imino]-, monoammonium salt	None Known	None Known
Carboxymethylcellulose	None Known	None Known
Polyamino Carboxylic acid	None Known	None Known
Lithium hydroxide	None Known	None Known
Carbonate salt	None Known	None Known
Potassium salt	None Known	None Known

Canada

Component	WHMIS Hazard Class
2,4,6(1H,3H,5H)-Pyrimidinetrione, 5-[(hexahydro-2,4,6-trioxo-5-pyrimidinyl)imino]-, monoammonium salt 3051-09-0 (<0.5)	Not determined
Carboxymethylcellulose (1-5)	Not determined
Polyamino Carboxylic acid (1-10)	Uncontrolled product according to WHMIS classification criteria
Lithium hydroxide 1310-65-2 (10)	1 % E
Carbonate salt (10-15)	1 % D2B E
Potassium salt (35-45)	Uncontrolled product according to WHMIS classification criteria



16. OTHER INFORMATION

NFPA	HMIS	PPE	Transport Symbol						
	<table><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								

Prepared By

Regulatory Affairs Department

Issuing Date	3/28/2012
Revision Date	02-Apr-2012
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