Safety Data Sheet

Issuing Date Apr-14-2015 **Revision Number** 0

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

Product identifier

Product name **Calcium Hardness Tablet**

Other means of identification

Product Code(s) **6846A**

UN-No 3262

Recommended use of the chemical and restrictions on use

Recommended Use Use as a laboratory reagent. 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 4
Serious eye damage/eye irritation	Category 2

EMERGENCY OVERVIEW

WARNING

Hazard statements
Harmful if swallowed. Causes serious eye irritation.

Appearance light pink with white specks **Physical state** Tablet ~0.1g (100mg) **Odor** Odorless

Precautionary Statements - Prevention
Wash face, hands and any exposed skin thoroughly after handling. Do not eat, drink or smoke when using this product. Wear eye/face protection.

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 SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell, Rinse mouth

Precautionary Statements - Disposal
Dispose of contents/container to an approved waste disposal plant.

Other Hazards
Harmful to aquatic life with long lasting effects

Unknown Acute Toxicity
4.5% of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	CAS No	Weight-%
Polyamino Carboxylic acid	-	1-10
Lithium hydroxide	1310-65-2	10
Carbonate salt	-	10-15
Excipient	-	20-30
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#80100291-5002p, 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

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 Remove 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. Rinse mouth.

Self-protection of the first aider Use personal protective equipment. See section 8 for more information. 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_2), 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. Avoid contact with the skin and the eyes.

Environmental precautions No special environmental precautions required. See Section 12 for additional Ecological Information.

Methods and material for containment and cleaning up

Methods for containment Sweep up in a manner that does not dispurse 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

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 direct sunlight. Keep away from heat, moisture, and incompatibles. Keep out of the reach of children.

Incompatible Products Strong acids.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Polyamino Carboxylic acid	-	-	Not Established
Lithium hydroxide 1310-65-2	-	-	Not Established
Carbonate salt	-	-	Not Established
Excipient	-	-	Not Established
Potassium salt	-	-	Not Established

Appropriate engineering controls

Engineering Measures None under normal use conditions. For home use.

Individual protection measures, such as personal protective equipment

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

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 eyes, skin and clothing. Wear suitable gloves and eye/face protection. Wash hands and face before breaks and immediately after handling the product. Do not eat, drink or smoke when using this product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state Tablet ~0.1g (100mg)

Appearance	light pink with white specks	**Odor**	Odorless

Property	**Values**	**Remarks • Method**
pH		
Melting point / freezing point	No information available	
Boiling point / boiling range	No information available	
Flash point	No information available	
Evaporation rate		
Flammability (solid, gas)	No information available	
Flammability Limit in Air		
Upper flammability limit:	No information available	
Lower flammability limit:	No information available	
Vapor pressure	No information available	
Vapor density	No information available	
Specific gravity	No information available	
Water solubility	Soluble in water	
Solubility in other solvents	No information available	
Partition coefficient	No information available	
Autoignition temperature	No information available	
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.
Hazardous polymerization	Hazardous polymerization does not occur.
Conditions to avoid	Exposure to air or moisture over prolonged periods. Extremes of temperature and direct sunlight.
Incompatible materials	Strong acids.
Hazardous decomposition products	None under normal use.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Inhalation	Not an expected route of exposure.
Eye contact	May cause irritation.
Skin contact	May cause irritation.
Ingestion	May be harmful if swallowed.

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Polyamino Carboxylic acid	= 2 g/kg (Rat)	Not Established	Not Established
Lithium hydroxide 1310-65-2	= 120 mg/kg (Rat) = 210 mg/kg (Rat)	Not Established	= 960 mg/m³ (Rat) 4 h
Carbonate salt	= 4090 mg/kg (Rat)	Not Established	= 2300 mg/m³ (Rat) 2 h
Excipient	> 10 g/kg (Rat)	Not Established	Not Established

Potassium salt	= 2600 mg/kg (Rat)	Not Established	Not Established

Information on toxicological effects

Chemical name	ACGIH	IARC	NTP	OSHA
Polyamino Carboxylic acid	-	Not Established	Not Established	-
Lithium hydroxide 1310-65-2	-	Not Established	Not Established	-
Carbonate salt	-	Not Established	Not Established	-
Excipient	-	Not Established	Not Established	-
Potassium salt	-	Not Established	Not Established	-

Chronic toxicity None known.

ATEmix (oral) 990 mg/kg

Oral LD50

Dermal LD50 No information available

12. ECOLOGICAL INFORMATION

Ecotoxicity

Unknown Aquatic Toxicity 43.4 % 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)
Polyamino Carboxylic acid	Not Established	320: 96 h Poecilia reticulata mg/L LC50 semi-static	Not Established
Lithium hydroxide 1310-65-2	Not Established	Not Established	Not Established
Carbonate salt	242: 120 h Nitzschia mg/L EC50	310 - 1220: 96 h Pimephales promelas mg/L LC50 static 300: 96 h Lepomis macrochirus mg/L LC50 static	265: 48 h Daphnia magna mg/L EC50
Excipient	Not Established	Not Established	Not Established
Potassium salt	2500: 72 h Desmodesmus subspicatus mg/L EC50	750 - 1020: 96 h Pimephales promelas mg/L LC50 static 1060: 96 h Lepomis macrochirus mg/L LC50 static	825: 48 h Daphnia magna mg/L EC50 83: 48 h Daphnia magna mg/L EC50 Static

Persistence and degradability

No information available.

Bioaccumulation/Accumulation

No information available.

Chemical name	Log Pow
Polyamino Carboxylic acid	Not Established
Lithium hydroxide 1310-65-2	Not Established
Carbonate salt	Not Established
Excipient	Not Established
Potassium salt	Not Established

13. DISPOSAL CONSIDERATIONS

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

Contaminated packaging Dispose of waste product or used containers according to local regulations.

Chemical name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
Polyamino Carboxylic acid	Not Established	-	Not Established	Not Established
Lithium hydroxide 1310-65-2	Not Established	-	Not Established	Not Established
Carbonate salt	Not Established	-	Not Established	Not Established
Excipient	Not Established	-	Not Established	Not Established
Potassium salt	Not Established	-	Not Established	Not Established

Chemical name	RCRA - Halogenated Organic Compounds	RCRA - P Series Wastes	RCRA - F Series Wastes	RCRA - K Series Wastes
Polyamino Carboxylic acid	Not Established	Not Established	Not Established	Not Established
Lithium hydroxide 1310-65-2	Not Established	Not Established	Not Established	Not Established
Carbonate salt	Not Established	Not Established	Not Established	Not Established
Excipient	Not Established	Not Established	Not Established	Not Established
Potassium salt	Not Established	Not Established	Not Established	Not Established

Chemical name	California Hazardous Waste Status
Polyamino Carboxylic acid	-
Lithium hydroxide 1310-65-2	-
Carbonate salt	-
Excipient	-
Potassium salt	-

14. TRANSPORT INFORMATION

DOT

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

IATA

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

IMDG/IMO

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

15. REGULATORY INFORMATION

International Inventories

TSCA	Complies
DSL/NDSL	Does not comply
EINECS/ELINCS	Does not comply
ENCS	Does not comply
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 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	SARA 313 - Threshold Values %
Polyamino Carboxylic acid	Not Established
Lithium hydroxide 1310-65-2	Not Established
Carbonate salt	Not Established
Excipient	Not Established
Potassium salt	Not Established

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

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
Polyamino Carboxylic acid	Not Established	Not Established	Not Established	Not Established
Lithium hydroxide 1310-65-2	Not Established	Not Established	Not Established	Not Established
Carbonate salt	Not Established	Not Established	Not Established	Not Established
Excipient	Not Established	Not Established	Not Established	Not Established
Potassium salt	Not Established	Not Established	Not Established	Not Established

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive

Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

Chemical name	Hazardous Substances RQs	CERCLA/SARA RQ	RQ
Polyamino Carboxylic acid	-	Not Established	-
Lithium hydroxide 1310-65-2	-	Not Established	-
Carbonate salt	-	Not Established	-
Excipient	-	Not Established	-
Potassium salt	-	Not Established	-

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals

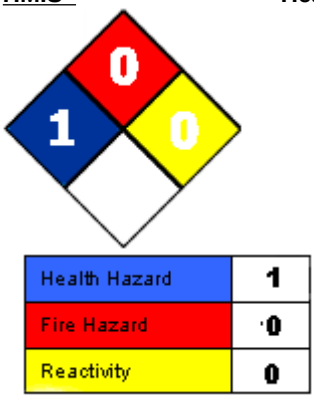
U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Polyamino Carboxylic acid	Not Established	Not Established	Not Established
Lithium hydroxide 1310-65-2	Not Established	Not Established	Not Established
Carbonate salt	Not Established	Not Established	Not Established
Excipient	Not Established	Not Established	Not Established
Potassium salt	Not Established	Not Established	Not Established

16. OTHER INFORMATION

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

HMIS **Health hazard** 1 **Flammability** 0 **Stability** 0



Prepared by Regulatory Affairs Department
Issuing Date Apr-14-2015
Revision Date Apr-29-2015
Reason for revision MSDS was reviewed per Canada request - Canada requires MSDS to be dated within 3 years of the request

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