

Issuing Date Sep-09-2014

Revision Date Sep-18-2014

Revision Number 1.01

1. Identification of the Substance/Preparation and of the Company/Undertaking

Product identifier**Product name** Phosphorus Tablets**Other means of identification****Product Code(s)** 5422**Recommended use of the chemical and restrictions on use****Recommended Use** Test kit reagent.**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

OSHA Regulatory Status

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.122)

EMERGENCY OVERVIEW

The product contains no substances which at their given concentration, are considered to be hazardous to health

Appearance White **Physical state** Tablet **Odor** None**Precautionary Statements - Prevention**

Wear protective gloves/protective clothing/eye protection/face protection

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	CAS-No	Weight %
Antimony Potassium Tartrate	28300-74-5	0.08
D-Isoascorbic acid	89-65-6	<2
Resin	-	0 - 10%

Ammonium molybdate tetrahydrate	12054-85-2	2
Sodium bisulfate	7681-38-1	10-15
Chloride salt	-	15-25
Excipient	-	55-65

*The exact percentage (concentration) of composition has been withheld as a trade secret.

LaMotte Company proprietary formulation under the State of New Jersey Trade Secret Protection Law, assigned the NJTSRN 80100291-5034p, and may be disclosed only in a medical emergency

4. FIRST AID MEASURES

FIRST AID MEASURES

General advice	No hazards which require special first aid measures. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons. 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. Not an expected route of exposure.
Ingestion	Do NOT induce vomiting. Drink plenty of water. Consult a physician.
<u>Protection of First-aiders</u>	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

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Dry chemical, CO₂, water spray or alcohol-resistant 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	Avoid contact with skin, eyes, and clothing.
Environmental precautions	See Section 12 for additional Ecological Information.

Methods and material for containment and cleaning up

Methods for cleaning up	Sweep up and shovel into suitable containers for disposal. After cleaning, flush away traces with water.
--------------------------------	--

7. HANDLING AND STORAGE

Precautions for safe handling

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.
-----------------	--

Conditions for safe storage, including any incompatibilities

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

Incompatible Products Acids. Strong reducing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Antimony Potassium Tartrate 28300-74-5	TWA: 0.5 mg/m ³	TWA: 0.5 mg/m ³	IDLH: 50 mg/m ³ TWA: 0.5 mg/m ³
D-Isoascorbic acid 89-65-6	-	-	None Established
Resin	-	-	None Established
Ammonium molybdate tetrahydrate 12054-85-2	TWA: 0.5 mg/m ³	TWA: 5 mg/m ³	IDLH: 1000 mg/m ³
Sodium bisulfate 7681-38-1	-	-	None Established
Chloride salt	-	-	None Established
Excipient	-	-	None Established

Appropriate engineering controls

Engineering Measures Showers
Eyewash stations
Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face Protection Safety glasses with side-shields.

Skin and body protection Protective gloves.

Hygiene Measures Remove and wash contaminated clothing before re-use.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	Tablet	Odor	None
Appearance	White	Odor threshold	Not Applicable
Color	White		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	2	(1 tablet in 10mL of water)
Melting point/freezing point	No information available	
Boiling Point/Range	No information available	
Flash point	Not Applicable -	
Evaporation rate	No information available	
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	Soluble
Partition coefficient	No information available
Autoignition temperature	Not Applicable
Decomposition temperature	No information available
Kinematic viscosity	No information available
Dynamic viscosity	No information available
Explosive properties	Not Applicable
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 Reactions	None under normal processing.
Hazardous polymerization	Hazardous polymerization does not occur.
Conditions to avoid	Excessive heat. Moisture.
Incompatible materials	Acids. Strong reducing agents.
Hazardous decomposition products	None under normal use.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure**Component Information**

Chemical name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Antimony Potassium Tartrate 28300-74-5	= 115 mg/kg (Rat)	None Established	None Established
D-Isoascorbic acid 89-65-6	= 18 g/kg (Rat)	None Established	None Established
Resin	None Established	None Established	None Established
Ammonium molybdate tetrahydrate 12054-85-2	None Established	None Established	None Established
Sodium bisulfate 7681-38-1	= 2490 mg/kg (Rat)	None Established	None Established
Chloride salt	= 2600 mg/kg (Rat)	None Established	None Established
Excipient	> 10 g/kg (Rat)	None Established	None Established

Information on toxicological effects

Chemical name	ACGIH	IARC	NTP	OSHA
Antimony Potassium Tartrate 28300-74-5	-	None Established	None Established	-
D-Isoascorbic acid 89-65-6	-	None Established	None Established	-

Resin	-	None Established	None Established	-
Ammonium molybdate tetrahydrate 12054-85-2	A3	None Established	None Established	-
Sodium bisulfate 7681-38-1	-	None Established	None Established	-
Chloride salt	-	None Established	None Established	-
Excipient	-	None Established	None Established	-

ACGIH: (American Conference of Governmental Industrial Hygienists)
A3 - Animal Carcinogen

The following values are calculated based on chapter 3.1 of the GHS document .

ATEmix (oral) 5222 mg/kg

12. ECOLOGICAL INFORMATION

Ecotoxicity

Chemical name	Toxicity to Algae	Toxicity to Fish	Daphnia Magna (Water Flea)
Antimony Potassium Tartrate 28300-74-5	None Established	None Established	None Established
D-Isoascorbic acid 89-65-6	None Established	None Established	None Established
Resin	None Established	None Established	None Established
Ammonium molybdate tetrahydrate 12054-85-2	None Established	None Established	None Established
Sodium bisulfate 7681-38-1	None Established	None Established	190: 48 h Daphnia magna mg/L EC50
Chloride salt	2500: 72 h Desmodosmus 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
Excipient	None Established	None Established	None Established

Persistence and degradability

No information available.

Bioaccumulation/Accumulation

No information available.

Chemical name	Log Pow
Antimony Potassium Tartrate 28300-74-5	None Established
D-Isoascorbic acid 89-65-6	None Established
Resin	None Established
Ammonium molybdate tetrahydrate 12054-85-2	None Established
Sodium bisulfate 7681-38-1	None Established
Chloride salt	None Established
Excipient	None Established

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method

Dispose of in accordance with local regulations.

Contaminated packaging

Do not re-use empty containers.

Chemical name	RCRA (hazardous constituent - no waste number)	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
Antimony Potassium Tartrate 28300-74-5		-	None Established	None Established
D-Isoascorbic acid 89-65-6	None Established	-	None Established	None Established
Resin	None Established	-	None Established	None Established
Ammonium molybdate tetrahydrate 12054-85-2	None Established	-	None Established	None Established
Sodium bisulfate 7681-38-1	None Established	-	None Established	None Established
Chloride salt	None Established	-	None Established	None Established
Excipient	None Established	-	None Established	None Established

Chemical name	RCRA - Halogenated Organic Compounds	RCRA - P Series Wastes	RCRA - F Series Wastes	RCRA - K Series Wastes
Antimony Potassium Tartrate 28300-74-5	None Established	None Established	None Established	None Established
D-Isoascorbic acid 89-65-6	None Established	None Established	None Established	None Established
Resin	None Established	None Established	None Established	None Established
Ammonium molybdate tetrahydrate 12054-85-2	None Established	None Established	None Established	None Established
Sodium bisulfate 7681-38-1	None Established	None Established	None Established	None Established
Chloride salt	None Established	None Established	None Established	None Established
Excipient	None Established	None Established	None Established	None Established

Chemical name	California Hazardous Waste Status
Antimony Potassium Tartrate 28300-74-5	-
D-Isoascorbic acid 89-65-6	-
Resin	-
Ammonium molybdate tetrahydrate 12054-85-2	-
Sodium bisulfate 7681-38-1	-
Chloride salt	-
Excipient	-

14. TRANSPORT INFORMATION**DOT** Not regulated**ICAO** Not regulated

IATA

Not regulated

15. REGULATORY INFORMATION**International Inventories**

TSCA	Complies
DSL/NDSL	Complies
EINECS/ELINCS	Complies
ENCS	Complies
IECSC	Complies
KECL	Complies
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 Commercial Chemical Substances/EU 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

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	SARA 313 - Threshold Values %
Antimony Potassium Tartrate 28300-74-5	1.0
D-Isoascorbic acid 89-65-6	None Established
Resin	None Established
Ammonium molybdate tetrahydrate 12054-85-2	1.0
Sodium bisulfate 7681-38-1	None Established
Chloride salt	None Established
Excipient	None 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

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

Antimony Potassium Tartrate 28300-74-5	None Established	X	None Established	X
D-Isoascorbic acid 89-65-6	None Established	None Established	None Established	None Established
Resin	None Established	None Established	None Established	None Established
Ammonium molybdate tetrahydrate 12054-85-2	None Established	None Established	None Established	None Established
Sodium bisulfate 7681-38-1	None Established	None Established	None Established	None Established
Chloride salt	None Established	None Established	None Established	None Established
Excipient	None Established	None Established	None Established	None 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
Antimony Potassium Tartrate 28300-74-5	100 lb	None Established	RQ 100 lb final RQ RQ 45.4 kg final RQ
D-Isoascorbic acid 89-65-6	-	None Established	-
Resin	-	None Established	-
Ammonium molybdate tetrahydrate 12054-85-2	-	None Established	-
Sodium bisulfate 7681-38-1	-	None Established	-
Chloride salt	-	None Established	-
Excipient	-	None Established	-

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

This product does not contain any Proposition 65 chemicals

Chemical name	California Prop. 65
Antimony Potassium Tartrate 28300-74-5	None Established
D-Isoascorbic acid 89-65-6	None Established
Resin	None Established
Ammonium molybdate tetrahydrate 12054-85-2	None Established
Sodium bisulfate 7681-38-1	None Established
Chloride salt	None Established
Excipient	None Established

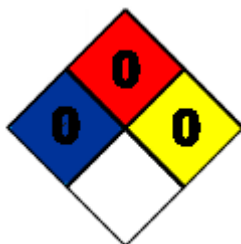
U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Antimony Potassium Tartrate 28300-74-5	X	X	X
D-Isoascorbic acid 89-65-6	None Established	None Established	None Established

Resin	None Established	None Established	None Established
Ammonium molybdate tetrahydrate 12054-85-2	None Established	None Established	None Established
Sodium bisulfate 7681-38-1	None Established	None Established	None Established
Chloride salt	None Established	None Established	None Established
Excipient	None Established	None Established	None Established

16. OTHER INFORMATION

NFPA	Health hazard 0	Flammability 0	Instability 0	Physical and Chemical Hazards N/A
HMIS	Health hazard 1	Flammability 0	Physical hazards 0	Personal precautions N/A



Health Hazard	1
Fire Hazard	0
Reactivity	0

Issuing Date Sep-09-2014

Revision Date Sep-18-2014

Revision note

Update to Format 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 MSDS