

**1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING****Product identifier****Product name** Phosphorus Tablets (See 5422A for SDS)**Other means of identification****Product Code(s)** 5422**Recommended use of the chemical and restrictions on use****Recommended Use** Use as a laboratory 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 numbers**

(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 product is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

**EMERGENCY OVERVIEW****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.

IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing and wash before reuse.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

IF SWALLOWED: Drink 1 or 2 glasses of water. Call a physician immediately.

**Storage:**

Store in a well-ventilated place. Keep cool.

**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

<b>General advice</b>	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.
<b>Eye contact</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If irritation persists or develops, contact a physician.
<b>Skin contact</b>	Wash off with soap and plenty of water removing all contaminated clothes and shoes. If irritation develops or persists, consult physician.
<b>Inhalation</b>	Remove to fresh air. Not an expected route of exposure.
<b>Ingestion</b>	Do NOT induce vomiting. Drink plenty of water. Consult a physician.
<b><u>Self-protection of the first aider</u></b>	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. FIREFIGHTING MEASURES

##### Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Dry chemical, CO<sub>2</sub>, 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

<b>Personal precautions</b>	Avoid contact with eyes, skin and clothing.
<b>Environmental precautions</b>	See Section 12 for additional Ecological Information.
<b><u>Methods and material for containment and cleaning up</u></b>	
<b>Methods for containment</b>	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).
<b>Methods for cleaning up</b>	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 eyes, skin and clothing. Handle in accordance with good industrial hygiene and safety practice. Do not taste or swallow. 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 <sup>3</sup> Sb	TWA: 0.5 mg/m <sup>3</sup> Sb (vacated) TWA: 0.5 mg/m <sup>3</sup> Sb	IDLH: 50 mg/m <sup>3</sup> Sb TWA: 0.5 mg/m <sup>3</sup> Sb
D-Isoascorbic acid 89-65-6	*-	*-	Not Established
Resin	*-	*-	Not Established
Ammonium molybdate tetrahydrate 12054-85-2	TWA: 0.5 mg/m <sup>3</sup> Mo respirable fraction	TWA: 5 mg/m <sup>3</sup> Mo (vacated) TWA: 5 mg/m <sup>3</sup> Mo	IDLH: 1000 mg/m <sup>3</sup> Mo
Sodium bisulfate* 7681-38-1	*-	*-	Not Established
Chloride salt	*-	*-	Not Established
Excipient	*-	*-	Not Established

**Appropriate engineering controls**

**Engineering Measures** Showers  
Eyewash stations  
Ventilation systems.

**Individual protection measures, such as personal protective equipment**

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

**Skin and body protection** Protective gloves.

**Hygiene Measures** Take off contaminated clothing and wash before reuse.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Information on basic physical and chemical properties**

<b>Physical state</b>	Tablet	<b>Odor</b>	None
<b>Appearance</b>	White	<b>Odor threshold</b>	Not Applicable
<b>Color</b>	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 / boiling 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	

<b>Lower flammability limit:</b>	No information available
<b>Vapor pressure</b>	No information available
<b>Vapor density</b>	No information available
<b>Specific gravity</b>	No information available
<b>Water solubility</b>	Soluble in water
<b>Solubility in other solvents</b>	Soluble
<b>Partition coefficient</b>	No information available
<b>Autoignition temperature</b>	Not Applicable
<b>Decomposition temperature</b>	No information available
<b>Kinematic viscosity</b>	No information available
<b>Dynamic viscosity</b>	No information available
<b>Explosive properties</b>	Not Applicable
<b>Oxidizing properties</b>	No information available

**Other Information**

<b>Softening point</b>	No information available
<b>Molecular weight</b>	No information available
<b>VOC Content (%)</b>	No information available
<b>Density</b>	No information available
<b>Bulk density</b>	No information available

**10. STABILITY AND REACTIVITY**

<b>Stability</b>	Stable.
<b>Hazardous polymerization</b>	Hazardous polymerization does not occur.
<b>Conditions to avoid</b>	Excessive heat. Moisture.
<b>Incompatible materials</b>	Acids. Strong reducing agents.
<b>Hazardous decomposition products</b>	None under normal use.

**11. TOXICOLOGICAL INFORMATION****Information on likely routes of exposure****Component identification**

Chemical name	ATEmix (oral)	ATEmix (dermal)	Inhalation LC50
Antimony Potassium Tartrate 28300-74-5	= 115 mg/kg ( Rat )	Not Established	Not Established
D-Isoascorbic acid 89-65-6	= 18 g/kg ( Rat )	Not Established	Not Established
Resin	Not Established	Not Established	Not Established
Ammonium molybdate tetrahydrate 12054-85-2	Not Established	Not Established	Not Established
Sodium bisulfate* 7681-38-1	= 2490 mg/kg ( Rat )	Not Established	Not Established
Chloride salt	= 2600 mg/kg ( Rat )	Not Established	Not Established
Excipient	> 10 g/kg ( Rat )	Not Established	Not Established

**Information on toxicological effects**

Chemical name	ACGIH	IARC	NTP	OSHA
Antimony Potassium Tartrate 28300-74-5	Not Established	Not Established	Not Established	Not Established
D-Isoascorbic acid 89-65-6	Not Established	Not Established	Not Established	Not Established
Resin	Not Established	Not Established	Not Established	Not Established

Ammonium molybdate tetrahydrate 12054-85-2	A3	Not Established	Not Established	Not Established
Sodium bisulfate* 7681-38-1	Not Established	Not Established	Not Established	Not Established
Chloride salt	Not Established	Not Established	Not Established	Not Established
Excipient	Not Established	Not Established	Not Established	Not Established

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

ATEmix (oral) 5,222.00 mg/kg

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

Chemical name	Toxicity to Algae	Toxicity to Fish	Daphnia Magna (Water Flea)
Antimony Potassium Tartrate 28300-74-5	Not Established	Not Established	Not Established
D-Isoascorbic acid 89-65-6	Not Established	Not Established	Not Established
Resin	Not Established	Not Established	Not Established
Ammonium molybdate tetrahydrate 12054-85-2	Not Established	Not Established	Not Established
Sodium bisulfate* 7681-38-1	Not Established	Not Established	190: 48 h Daphnia magna mg/L EC50
Chloride 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
Excipient	Not Established	Not Established	Not Established

### Persistence and degradability

No information available.

### Bioaccumulation/Accumulation

No information available.

Chemical name	Log Pow
Antimony Potassium Tartrate 28300-74-5	Not Established
D-Isoascorbic acid 89-65-6	Not Established
Resin	Not Established
Ammonium molybdate tetrahydrate 12054-85-2	Not Established
Sodium bisulfate* 7681-38-1	Not Established
Chloride salt	Not Established
Excipient	Not Established

## 13. DISPOSAL CONSIDERATIONS

### Disposal Methods

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

### Contaminated packaging

Do not reuse empty containers.

Chemical name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes

Antimony Potassium Tartrate 28300-74-5	Not Established	-	Not Established	Not Established
D-Isoascorbic acid 89-65-6	Not Established	-	Not Established	Not Established
Resin	Not Established	-	Not Established	Not Established
Ammonium molybdate tetrahydrate 12054-85-2	Not Established	-	Not Established	Not Established
Sodium bisulfate* 7681-38-1	Not Established	-	Not Established	Not Established
Chloride salt	Not Established	-	Not Established	Not Established
Excipient	Not Established	-	Not Established	Not 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	Not Established	Not Established	Not Established	Not Established
D-Isoascorbic acid 89-65-6	Not Established	Not Established	Not Established	Not Established
Resin	Not Established	Not Established	Not Established	Not Established
Ammonium molybdate tetrahydrate 12054-85-2	Not Established	Not Established	Not Established	Not Established
Sodium bisulfate* 7681-38-1	Not Established	Not Established	Not Established	Not Established
Chloride salt	Not Established	Not Established	Not Established	Not Established
Excipient	Not Established	Not Established	Not Established	Not Established

Chemical name	California Hazardous Waste Status
Antimony Potassium Tartrate 28300-74-5	Toxic
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

**IATA** Not regulated

**IMDG/IMO** Not regulated

**15. REGULATORY INFORMATION****International Inventories**

<b>TSCA</b>	Complies
<b>DSL/NDSL</b>	Complies
<b>EINECS/ELINCS</b>	Complies
<b>ENCS</b>	Complies
<b>IECSC</b>	Complies
<b>KECL</b>	Complies
<b>PICCS</b>	Complies
<b>AICS</b>	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 %
Antimony Potassium Tartrate 28300-74-5	1.0
D-Isoascorbic acid 89-65-6	Not Established
Resin	Not Established
Ammonium molybdate tetrahydrate 12054-85-2	1.0
Sodium bisulfate* 7681-38-1	Not Established
Chloride salt	Not Established
Excipient	Not Established

**SARA 311/312 Hazard Categories**

<b>Acute health hazard</b>	Yes
<b>Chronic Health Hazard</b>	No
<b>Fire hazard</b>	No
<b>Sudden release of pressure hazard</b>	No
<b>Reactive Hazard</b>	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
Antimony Potassium Tartrate 28300-74-5	100 lb	X	Not Established	X
D-Isoascorbic acid 89-65-6	Not Established	Not Established	Not Established	Not Established
Resin	Not Established	Not Established	Not Established	Not Established
Ammonium molybdate tetrahydrate	Not Established	Not Established	Not Established	Not Established

12054-85-2				
Sodium bisulfate* 7681-38-1	Not Established	Not Established	Not Established	Not Established
Chloride salt	Not Established	Not Established	Not Established	Not Established
Excipient	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
Antimony Potassium Tartrate 28300-74-5	100 lb	Not Established	RQ 100 lb final RQ RQ 45.4 kg final RQ
D-Isoascorbic acid 89-65-6	*-	Not Established	-
Resin	*-	Not Established	-
Ammonium molybdate tetrahydrate 12054-85-2	*-	Not Established	-
Sodium bisulfate* 7681-38-1	*-	Not Established	-
Chloride salt	*-	Not Established	-
Excipient	*-	Not Established	-

**US State Regulations**

Chemical name	California Proposition 65
Antimony Potassium Tartrate 28300-74-5	Not Established
D-Isoascorbic acid 89-65-6	Not Established
Resin	Not Established
Ammonium molybdate tetrahydrate 12054-85-2	Not Established
Sodium bisulfate* 7681-38-1	Not Established
Chloride salt	Not Established
Excipient	Not 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	Not Established	Not Established	Not Established
Resin	Not Established	Not Established	Not Established
Ammonium molybdate tetrahydrate 12054-85-2	Not Established	Not Established	Not Established
Sodium bisulfate* 7681-38-1	Not Established	Not Established	Not Established
Chloride salt	Not Established	Not Established	Not Established
Excipient	Not Established	Not Established	Not Established

**CPSC (Consumer Product Safety Commission) - Specially Regulated Substances****16. OTHER INFORMATION**



NFPA

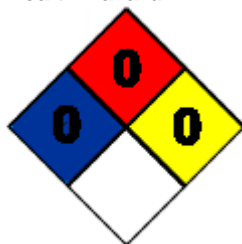
Health hazard 0

Flammability 0

Instability 0

Physical and Chemical Hazards N/A

Health hazard 1



Health Hazard	1
Fire Hazard	0
Reactivity	0

**Issuing Date**

Sep-09-2014

**Reason for revision**

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 Safety Data Sheet**