

MATERIAL SAFETY DATA SHEET
LaMOTTE COMPANY
PO BOX 329 - CHESTERTOWN - MARYLAND - 21620
TELEPHONE # FOR INFORMATION 410-778-3100
24 Hour Emergency Number (CHEM-TEL) 800-255-3924

1. PRODUCT IDENTIFICATION

Phosphate Acid Reagent

Code Nr. **V-6282**

2. HAZARDOUS INGREDIENTS

NAME	CAS #	TSCA #	%	PEL	TLV
† Sulfuric Acid	7664-93-9		12	1 mg/cubic m	1 mg/cubic m
Ammonium Molybdate	12054-85-2		<1	N/E	N/E
Antimony Potassium Tartrate	28300-74-5	11071-15-1	<0.1	N/A	N/A

3. NON-HAZARDOUS INGREDIENTS EXCEPT WATER (7732-18-5)

NAME	CAS #	%
Water to 100%		

4. PHYSICAL DATA

<i>Appearance:</i> Clear Colorless Liquid			
<i>Solubility in Water:</i> Soluble	<i>Odor:</i> Slight	<i>Boiling Point:</i> Unknown	<i>Melt. Point:</i> N/A
<i>Vapor Pressure:</i> Unknown	<i>Vapor Density:</i> Unknown	<i>pH:</i> <1	

5. FIRE AND EXPLOSION DATA

<i>Flash Point (method used)</i> N/A	<i>Flammable Limit: LEL:</i> N/A	<i>UEL:</i> N/A
<i>Extinguishing Media:</i> Not a fire hazard		
<i>HMIS Hazard: Health - 2 Flammability - 0 Reactivity - 1 Scale: 4 = Extreme, 3 = High, 2 = Moderate, 1 = Slight, 0 = Least</i>		
<i>Special Fire Fighting Procedures:</i> Firefighters wear self-contained breathing apparatus		
<i>Unusual Fire & Explosion Hazard:</i> A violent exothermic reaction occurs with water. May react with metals to liberate flammable, explosive hydrogen gas.		

6. REACTIVITY DATA

<i>Stability:</i>	<i>Conditions to avoid:</i> N/A
<input checked="" type="checkbox"/> <i>Stable</i>	<i>Incompatibility (Materials to avoid):</i> Water, metals, organic or combustible materials, and strong bases.
<input type="checkbox"/> <i>Unstable</i>	<i>Hazardous Decomposition Products:</i> SOx, hydrogen gas

7. HEALTH HAZARD DATA

<i>Toxicity:</i> orl rat LD50: 2140 mg/kg for sulfuric acid, concentrated			
<i>Primary Route of Entry:</i>	<input type="checkbox"/> <i>Inhalation</i> <input checked="" type="checkbox"/> <i>Ingestion</i>	<input checked="" type="checkbox"/> <i>Skin</i> <input type="checkbox"/> <i>N/A</i>	<i>Carcinogenicity:</i> <input checked="" type="checkbox"/> <i>None</i> <input type="checkbox"/> <i>OSHA</i> <input type="checkbox"/> <i>NTP</i> <input type="checkbox"/> <i>IARC</i>
<i>Other Health Related Comments:</i>			
<i>Target Organs:</i> Corrosive to all body parts.			
<i>Signs and symptoms of exposure:</i> Severe burns. Ingestion may be fatal. Inhalation can cause coughing, chest pains, damage to lungs.			
<i>Medical Condition Aggravated by Exposure:</i> N/A			

8. EMERGENCY FIRST AID PROCEDURES

<i>Eye Contact:</i> Immediately flush with water for 15 minutes. Get prompt medical attention.
<i>Ingestion:</i> Do not induce vomiting. Rinse out mouth. Drink plenty of water. Call a doctor immediately.
<i>Inhalation:</i> Remove to fresh air. If breathing is difficult give oxygen.
<i>Skin Contact:</i> Immediately flush with water for 15 minutes while removing affected clothing. Consult a physician.

9. SPILL AND DISPOSAL PROCEDURES

<i>Spill and Leak:</i> Cover contaminated surface with sodium bicarbonate. Mix and carefully add water to form slurry. Scoop up and flush down drain with excess water.
<i>Disposal:</i> Add slowly to a large volume of soda ash - slaked lime. Flush neutralized solution down drain with excess water. Dispose according to federal, state and local regulations.

10. PRECAUTIONARY MEASURES

<i>In Handling:</i> <input checked="" type="checkbox"/> <i>Gloves</i> <input checked="" type="checkbox"/> <i>Eye Protection</i> <input type="checkbox"/> <i>N/A</i> <input checked="" type="checkbox"/> <i>Other:</i> Lab Coat
<i>Ventilation</i> <input checked="" type="checkbox"/> <i>Normal</i> <input type="checkbox"/> <i>Mechanical</i> <input type="checkbox"/> <i>Respiratory Protection</i>
<i>Work/Hygienic Practices:</i> Avoid contact with eyes, skin and clothing.

11. SPECIAL PRECAUTIONS

<i>Store away from alkalis.</i>

DATE: 5/27/99 The above information is believed to be correct but does not claim to be all inclusive and should be used only as a guide.

† This is a toxic chemical subject to reporting requirements of section 313 of EPCRA and 40CFR372.

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TELEPHONE # FOR INFORMATION 410-778-3100
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1. PRODUCT IDENTIFICATION

Phosphate Reducing Reagent

Code Nr. **V-6283**

2. HAZARDOUS INGREDIENTS

NAME	CAS #	TSCA #	%	PEL	TLV
D(-)-Isoascorbic Acid	89-65-6		10	N/E	N/E
Sucrose	57-50-1		90	N/E	10 mg/cubic m total dust

3. NON-HAZARDOUS INGREDIENTS EXCEPT WATER (7732-18-5)

NAME	CAS #	%
N/A		

4. PHYSICAL DATA

<i>Appearance:</i> White Powder	<i>Odor:</i> None	<i>Boiling Point:</i> N/A	<i>Melt. Point:</i> 170-185 C d.
<i>Solubility in Water:</i> Soluble	<i>Vapor Pressure:</i> N/A	<i>Vapor Density:</i> N/A	<i>pH:</i> 2-3 (0.1 g/10mL water)

5. FIRE AND EXPLOSION DATA

<i>Flash Point (method used):</i> N/A	<i>Flammable Limit: LEL:</i> N/A	<i>UEL:</i> N/A
<i>Extinguishing Media:</i> Water spray	<i>Scale: 4 = Extreme, 3 = High, 2 = Moderate, 1 = Slight, 0 = Least</i>	
<i>HMIS Hazard: Health - 0</i>	<i>Flammability - 0</i>	<i>Reactivity - 0</i>
<i>Special Fire Fighting Procedures:</i> Firefighters wear self-contained breathing apparatus		
<i>Unusual Fire & Explosion Hazard:</i> Contact of Iso-ascorbic acid w/ chemically active metals (Al, Zn, Mg, Cu) can generate flammable hydrogen gas.		

6. REACTIVITY DATA

<i>Stability:</i>	<i>Conditions to avoid:</i> Heat, moisture
<input checked="" type="checkbox"/> <i>Stable</i>	<i>Incompatibility (Materials to avoid):</i> Strong oxidizers (nitric or sulfuric acid), metals
<input type="checkbox"/> <i>Unstable</i>	<i>Hazardous Decomposition Products:</i> COx

7. HEALTH HAZARD DATA

<i>Toxicity:</i> non-toxic	<i>Primary Route of Entry:</i>	<input checked="" type="checkbox"/> <i>Inhalation</i>	<input checked="" type="checkbox"/> <i>Skin</i>	<i>Carcinogenicity:</i>	<input checked="" type="checkbox"/> <i>None</i>	<input type="checkbox"/> <i>NTP</i>
		<input checked="" type="checkbox"/> <i>Ingestion</i>	<input type="checkbox"/> <i>N/A</i>		<input type="checkbox"/> <i>OSHA</i>	<input type="checkbox"/> <i>IARC</i>
<i>Other Health Related Comments:</i>						
<i>Target Organs:</i> N/A						
<i>Signs and symptoms of exposure:</i> Dust may irritate eyes, skin, respiratory tract.						
<i>Medical Condition Aggravated by Exposure:</i> N/A						

8. EMERGENCY FIRST AID PROCEDURES

<i>Eye Contact:</i> Flush with water for 15 minutes.
<i>Ingestion:</i> Rinse out mouth. Drink plenty of water.
<i>Inhalation:</i> Remove to fresh air.
<i>Skin Contact:</i> Rinse skin. Wash with soap and water.

9. SPILL AND DISPOSAL PROCEDURES

<i>Spill and Leak:</i> Avoid raising, breathing dust. Sweep up, dissolve in water. Wash down drain with excess water.
<i>Disposal:</i> Dissolve in water. Wash down drain with excess water. Dispose according to federal, state and local regulations.

10. PRECAUTIONARY MEASURES

<i>In Handling:</i>	<input checked="" type="checkbox"/> <i>Gloves</i>	<input checked="" type="checkbox"/> <i>Eye Protection</i>	<input type="checkbox"/> <i>N/A</i>	<input checked="" type="checkbox"/> <i>Other:</i> Lab Coat
<i>Ventilation</i>	<input checked="" type="checkbox"/> <i>Normal</i>	<input type="checkbox"/> <i>Mechanical</i>	<input type="checkbox"/> <i>Respiratory Protection</i>	
<i>Work/Hygienic Practices:</i> N/A				

11. SPECIAL PRECAUTIONS

Avoid skin contact and inhalation of powder.
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DATE: 2/2/2000 The above information is believed to be correct but does not claim to be all inclusive and should be used only as a guide.

A This is a toxic chemical subject to reporting requirements of section 313 of EPCRA and 40CFR372