



# MSDS

P.O. Box 329 - 802 Washington Avenue Chestertown, MD 21620 - USA

## MATERIAL SAFETY DATA SHEET

TELEPHONE # FOR INFORMATION 410 778-3100

24 HOUR EMERGENCY NUMBER (CHEM-TEL): USA, Canada, Puerto Rico 800-255-3924;

Outside North American Continent 813-248-0585 (call Collect)

### 1. Product Identification

**Product Code:** V-6277

**Product Description:** Sulfate Reagent

**Manufactured By:** LaMotte Company  
802 Washington Avenue  
Chestertown, MD 21620

### 2. Composition/Information On Ingredients

Hazard	CAS#/Name	%	PEL	TLV
Yes	10326-27-9 Barium Chloride dihydrate	36	0.5 mg/cubic m as Ba	0.5 mg/cubic m as Ba
Yes	5949-29-1 Citric Acid, Monohydrate	60	N/E	N/E
Yes	9000-01-5 Gum Arabic	4	N/E	N/E

### 3. Hazards Overview

**Primary Route Of Entry:** Skin Ingestion Inhalation

Toxic by inhalation or ingestion. May be fatal if swallowed. Abdominal pain and vomiting.

#### HMIS Hazard

Scale: 4 = Extreme, 3 = High, 2 = Moderate, 1 = Slight, 0 = Least

Health: 3      Flammability: 0      Reactivity: 1

**Carcinogenicity:** None:

#### **Other Health Related Comments:**

Poison! Danger! Toxic by inhalation or ingestion. See Section 11, Toxicity.

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#### **4. First Aid Measures**

**Eye Contact:** Flush with water for 15 minutes. Consult a physician.

**Skin Contact:** Immediately flush with water. Remove affected clothing and wash skin thoroughly with soap and water.

**Ingestion:** Induce vomiting immediately. Call a physician immediately.

**Inhalation:** Remove to fresh air.

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#### **5. Fire Fighting Measures**

**Flash Point (Method Used):** N/A

**LEL:** N/A

**UEL:** N/A

**Extinguishing Media:** Not a fire hazard

**Special Fire Fighting Procedures:** N/A

**Unusual Fire & Explosion Hazard:** N/A

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#### **6. Accidental Release Measures**

Wear gloves and eye protection. Avoid breathing dust. Sweep up, containerize, & hold for hazardous waste disposal or treat as described in Section 13.

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#### **7. Handling & Storage**

Store in cool, dry, ventilated area away from heat and moisture. Keep container tightly closed in secure "poison" area--out of reach of children. No eating or smoking when handling.

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## **8. Exposure Controls/Personal Protection**

### **Ventilation**

Normal

### **Protection When Handling**

Eye Protection Gloves Lab coat

**Work/Hygenic Practices:** Avoid inhalation of dust or contact, eyes & skin. Wash thoroughly with soap & water after handling.

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## **9. Physical & Chemical Properties**

**Appearance:** White Powder  
**Solubility In Water:** Soluble  
**Odor:** None  
**pH:** 3 (0.1g in 10mL water)

**Vapor Density:** N/A  
**Vapor Pressure:** N/A  
**Boiling Point:** N/A  
**Melting Point:** Unknown

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## **10. Stability & Reactivity**

**Stable:** Yes  
**Conditions To Avoid:** N/A  
**Incompatibility (Materials To Avoid):** Strong oxidizing materials  
**Hazardous Decomposition Products:** HCl, CO<sub>x</sub>

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## **11. Toxicological Information**

Barium Chloride: Toxic Dose, Oral human LD<sub>50</sub>: 11.4 mg/kg. Highly toxic by ingestion! Estimated lethal dose in humans is 1 gram. Investigated as a tumorigen. Acacia powder may cause allergic skin or respiratory reaction (hives, eczema; asthma, coughing)

**Target Organs:** Central Nervous System Heart Skin

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## **12. Ecological Information**

Barium Chloride is expected to significantly bioaccumulate in the environment.

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## **13. Disposal Considerations**

Do NOT flush barium chloride to sewers and watercourses. Lab treatment methods to convert the chloride to the sulfate by dissolving in water and adding sulfuric acid are slow & inefficient. Direct disposal of reagent as a hazardous waste is recommend

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## **14. Transportation Information**

### **Proper Shipping Name:**

**DOT:** BARIUM COMPOUNDS, N.O.S.  
(BARIUM CHLORIDE)

**IATA:** BARIUM COMPOUNDS, N.O.S.  
(BARIUM CHLORIDE)

### **Hazard Class/Div:**

**DOT:** 6.1

**IATA:** 6.1

**UN:** 1564

**Packing Group:** III

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## **15. Regulatory Information**

### **Chemical Inventory Status**

Hazard	Ingredient	USA TSCA	Europe EC	--- Canada ---		Australia	Japan
				DSL	NDSL		
Yes	10361-37-2 Barium Chloride anhydrous	Yes	Yes	Yes	No	Yes	Yes
Yes	77-92-9 Citric Acid, Anhydrous	Yes	Yes	Yes	No	Yes	Yes
Yes	9000-01-5 Gum Arabic (Acacia)	Yes	Yes	Yes	No	Yes	No

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**Federal, State, & International Regulations**

<b>Ingredient</b>	<b>--- SARA 302 ---</b>		<b>----- SARA 313 -----</b>		<b>CERCLA</b>	<b>RCRA 261.33</b>	<b>TSCA 8(D)</b>
	<b>RQ</b>	<b>TPQ</b>	<b>Listed</b>	<b>Chemical Category</b>			
10361-37-2 Barium Chloride anhydrous	No	No	No	Barium comp.	No	No	No
77-92-9 Citric Acid, Anhydrous	No	No	No	No	No	No	No
9000-01-5 Gum Arabic (Acacia)	No	No	No	No	No	No	No

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**--- SARA 311/312 ---****Hazard Categories****----- Australia -----****Hazchem****Poison****This MSDS Is****Ingredient    Acute    Chronic    Fire    Pressure    Reactivity    Code    Schedule    WHMIS Compliant**

10361-37-2    Yes    No    No    No    No    2Z    S6  
Barium Chloride anhydrous

77-92-9    Yes    No    No    No    No    None Allocated    None Allocated  
Citric Acid, Anhydrous

9000-01-5    Yes    No    Yes    No    No    None Allocated    None Allocated  
Gum Arabic (Acacia)

**product V-6277**    Yes    No    No    No    No    2Z    S6    Yes  
**as a whole**

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**16. Other Information**

No eating or smoking when handling.

**Prepared By:** IP, Regulatory Affairs Department

**Revised:** 4/1/2008

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