



MSDS

Material Safety Data Sheet

PO Box 329 • 802 Washington Avenue • Chestertown, MD 21620 • USA
Telephone Number 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	Manufactured By:	LaMotte Company
Product Description:	Sulfate Reagent		802 Washington Avenue Chestertown, MD 21620

2. Composition/Information on Ingredients

Hazardous	Name	CAS #	%	OSHA PEL	ACGIH TLV
Yes	Barium Chloride dihydrate	10326-27-9	36	0.5 mg/cubic m as Ba	0.5 mg/cubic m as Ba
Yes	Citric Acid monohydrate	5949-29-1	60	N/E	N/E
Yes	Gum Arabic; (Acacia powder)	9000-01-5	4	N/E	N/E

3. Hazards Overview

Primary Route of Entry: Ingestion Inhalation Skin

Poison! Danger! Toxic by inhalation or ingestion. May be fatal if swallowed. Abdominal pain and vomiting. May cause irritation to skin, eyes, and respiratory tract

HMIS Hazard: (Scale: 4 = Extreme, 3 = High, 2 = Moderate, 1 = Slight, 0 = Least)

Health: 2 Flammability: 0 Reactivity: 1

Carcinogenicity: None

Other Health Related Comments:

Acacia powder may cause allergic skin or respiratory reaction in sensitive individuals. (See Section 11.)

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: N/A **LEL:** N/A **UEL:** N/A

Fire Rating

Extinguishing Media: Not a fire hazard

Special Fire Fighting Procedures: N/A

Hazardous Combustion and/or Decomposition Products: HCl, CO_x

Unusual Fire & Explosion Hazard: N/A

6. Accidental Release Measures

Wear gloves and eye protection. Avoid breathing dust. Sweep up and containerize. Vacuuming or wet sweeping may be used to avoid dust dispersal. Hold for hazardous waste disposal or treat as described in Section 13.

7. Handling & Storage

Keep in a tightly closed container in a secure “poison” area, away from food and out of the reach of children. Store in a cool, dry, ventilated area away from heat and moisture.

8. Exposure Controls/Personal Protection

Ventilation

Use with adequate ventilation.

Protection When Handling

Gloves Eye Protection Lab coat

Work/Hygienic Practices: Avoid inhalation of dust or contact with eyes and skin. Wash thoroughly with soap and water after handling.

9. Physical & Chemical Properties

Appearance:	White Powder	Boiling Point:	N/A
		Melting Point:	Unknown
		pH:	3 (0.1g in 10mL water)
Odor:	None	Vapor Density:	N/A
Solubility in Water:	Soluble	Vapor Pressure:	N/A

10. Stability & Reactivity

Stable: Yes
Conditions to Avoid: N/A
Materials to Avoid: N/A

Hazardous Decomposition Products: HCl, CO_x

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11. Toxicological Information

Barium chloride: Toxic Dose, Oral human LDLo: 11.4 mg/kg; Highly toxic! Estimated lethal dose in humans is 1 gram. Oral rat LD50: 118 mg/kg (barium chloride anhydrous); Investigated as a tumorigen (barium chloride dihydrate).

Acacia powder is a weak allergen. Inhalation of dust may cause such symptoms as asthma, coughing and wheezing. Hives, eczema, and swelling may also occur.

Target Organs: Heart, Respiratory System, and Central Nervous System

12. Ecological Information

Barium chloride is expected to significantly bioaccumulate in the environment.

13. Disposal Considerations

Do NOT flush barium chloride to sewers and watercourses. Dispose of as a hazardous waste, or treat and remove the barium chloride as follows: Dissolve in water. Add excess dilute sulfuric acid. Let stand overnight. Remove insolubles (BaSO₄) and send them to an EPA approved landfill. Carefully neutralize the sulfuric acid (from which the barium sulfate has been removed) with sodium bicarbonate. The neutralized solution may be flushed down the drain with water. Follow federal, state and local regulations.

14. Transport Information

Domestic:

Proper Shipping Name: BARIUM COMPOUNDS, N.O.S. (BARIUM CHLORIDE)

International:

Proper Shipping Name: BARIUM COMPOUND, N.O.S. (BARIUM CHLORIDE)

Hazard Class/Div: 6.1

UN1564

Packing Group: III

15. Regulatory Information**Chemical Inventory Status**

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

Federal, State, & International Regulations

Ingredient	---SARA 302---		----- SARA 313 -----		CERCLA	RCRA 261.33	TSCA 8(D)
	RQ	TPQ	Listed	Chemical Category			
Barium Chloride anhydrous (10361-37-2)	No	No	No	Barium compound	No	No	No
Citric Acid, Monohydrate	No	No	No	No	No	No	No
Gum Arabic (9000-01-5)	No	No	No	No	No	No	No

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15. Regulatory Information

Ingredient	----- SARA 311/312 ----- Hazard Categories	----- Australia -----		This MSDS is WHMIS Compliant
		Hazchem Code	Poison Schedule	
Barium Chloride anhydrous (10361-37-2)	Acute: Yes Chronic: No Fire: No Pressure: No Reactivity: No (Pure/Solid)	2Z	S6	
Citric Acid, Monohydrate	Acute: Yes Chronic: No Fire: No Pressure: No Reactivity: No (Pure/Solid)	None allocated	None allocated	
Gum Arabic (9000-01-5)	Acute: Yes Chronic: No Fire: Yes Pressure: No Reactivity: No (Pure/Solid)	None allocated	None allocated	
For product #V-6277 mixture, taken as a whole	Acute: Yes Chronic: No Fire: No Pressure: No Reactivity: No	2Z	S6	Yes

16. Other Information

No eating or smoking when handling.

Prepared By: IP

Revised: 3/23/2005