

# **MATERIAL SAFETY DATA SHEET**

BARIUM SULFATE, POWDER, LAB GRADE  
CAROLINA BIOLOGICAL

Revised: 12/09/07  
Replaces: 10/07/07  
Printed: 18/08/08

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## **1. PRODUCT DESCRIPTION**

Product Name: Barium Sulfate Powder Lab Grade  
Product Code(s): 84-6950  
Size: 500 g  
Chemical Name: Barium Sulfate  
CAS Number: 7727-43-7  
Formula: BaSO4  
Synonyms: Sulfuric acid, barium salt; barytes; blanc fixe  
Distributor: Carolina Biological Supply Company  
2700 York Road  
Burlington, NC 27215

Chemical Information: 800-227-1150 (8am-5pm (ET) M-F)  
Chemtrec (Transportation Spill Response 24 hours): 800-424-9300

## **2. COMPOSITION/INFORMATION ON INGREDIENTS**

Principle Hazardous Components: Barium Sulfate (CAS# 7727-43-7)  
TLV and PEL units: No data available.

## **3. HAZARD IDENTIFICATION**

Emergency Overview:  
Potential Health Effects:  
Eyes: May cause irritation.  
Skin: May cause irritation.  
Ingestion: May cause gastrointestinal discomfort.  
Inhalation: May cause irritation to respiratory tract.

## **4. FIRST AID MEASURES**

Emergency and First Aid Procedures:  
Eyes - Flush with water for at least 15 minutes, raising and lowering eyelids occasionally. Get medical attention if irritation persists.  
Skin - Thoroughly wash exposed area for at least 15 minutes. Remove contaminated clothing. Launder contaminated clothing before reuse. Get medical attention if irritation persists.  
Ingestion - If swallowed, if conscious, give plenty of water. Immediately call a physician or poison control center. Never give anything by mouth to an unconscious person.  
Inhalation - Remove to fresh air. Give oxygen if breathing is difficult; give artificial respiration if breathing has stopped. Keep person warm and quiet, and get medical attention.

## **5. FIREFIGHTING PROCEDURES**

Flash Point(Method Used): No data available.  
NFPA Rating: Health: No data available.  
Fire: No data available.  
Reactivity: No data available.

Extinguisher Media:

Use media suitable to extinguish surrounding fire.  
Flammable Limits in Air % by Volume: No data available.  
Autoignition Temperature: No data available.

Special Firefighting Procedures:

Firefighters should wear full protective equipment and NIOSH approved self-contained breathing apparatus.  
Unusual Fire and Explosion Hazards: Not considered to be an explosion hazard.

In the event of a fire, wear full protective clothing and NIOSH-approved

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self-  
contained breathing apparatus with full facepiece operated in the  
pressure  
demand or other positive pressure mode.

### **6. SPILL OR LEAK PROCEDURES**

Steps to be Taken in Case Material is Released or Spilled:

Ventilate area of spill. Clean-up personnel should wear proper  
protective equipment. Avoid creating dust. Sweep or scoop up and  
containerize for disposal.

### **7. SPECIAL PRECAUTIONS**

Precautions to be Taken in Handling or Storing: Keep in a tightly  
closed  
container. Protect from physical damage. Store in a cool, dry,  
ventilated  
area away from sources of heat, moisture and incompatibilities.

### **8. SPECIAL PROTECTION INFORMATION**

Respiratory Protection(Specify Type):

None needed under normal conditions of use with adequate ventilation.  
NIOSH approved equipment should be worn if PELs are exceeded.

Ventilation:

Local Exhaust: Yes  
Mechanical(General): Yes  
Special: No  
Other: No

Protective Gloves:

Rubber, neoprene, PVC, or equivalent.

Eye Protection:

Splash proof chemical safety goggles should be worn at all times.

Other Protective Clothing or Equipment:

Lab apron, eye wash, and safety shower.

### **9. PHYSICAL DATA**

Molecular Weight: 233.39

Melting Point: 1580C

Boiling Point: Decomposes above 1600C

Vapor Pressure: No data available.

Vapor Density(Air=1): No data available.

Specific Gravity(H2O=1): 4.5

Percent Volatile by Volume: No data available.

Evaporation Rate(H2O=1): No data available.

Solubility in Water: Insoluble

Appearance and Odor: Fine, white powder. Odorless.

### **10. REACTIVITY DATA**

Stability: Stable

Conditions to Avoid: No data available.

Incompatibility(Materials to Avoid): Aluminum, phosphorus.

Hazardous Decomposition Products: When heated to decomposition, emits  
toxic

fumes of sulfur oxides.

Hazardous Polymerization: Will not occur

### **11. TOXICITY DATA**

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Toxicity Data: No LD50/LC50 information found relating to normal routes of occupational exposure

Effects of Overexposure: No data available.

Acute: See section 3

Chronic: Long term inhalation of dust may lead to decomposition in lungs in sufficient quantities to produce baritosis- a benign pneumoconiosis.

This produces a radiologic picture even though symptoms and abnormal signs may not be present.

Conditions Aggravated by Overexposure: No data available.

Target Organs: No data available.

Primary Route(s) of Entry: No data available.

## 12. ECOLOGICAL DATA

EPA Waste Numbers: No data available.

## 13. DISPOSAL INFORMATION

Waste Disposal Methods: Dispose in accordance with all applicable Federal, State and Local regulations.

Always contact a permitted waste disposer (TSD) to assure compliance.

## 14. TRANSPORT INFORMATION

DOT Hazard Class: Not Regulated

## 15. REGULATORY INFORMATION

EPA TSCA Status: On TSCA Inventory

Hazard Category for SARA Section 311/312 Reporting: Acute

	SARA EHS Sec. 302	SARA Sec. 313 Chemicals Name Chemical List Category	CERCLA Sec. 103 RQ lbs.	RCRA Sec.
Product or Components 261.33	TPQ			

Barium Sulfate      No                      No                      Barium Compound      No                      No

## 16. ADDITIONAL INFORMATION

The information provided in this Material Safety Data Sheet represents a compilation of data drawn directly from various sources available to us. Carolina Biological Supply makes no representation or guarantee as to the suitability of this information to a particular application of the substance covered in the Material Safety Data Sheet. Any employer must carefully assess the applicability of any information contained herein in regards to the particular use to which the employer puts the material.

Glossary

ACGIH.....American Conference of Governmental Industrial Hygienists

CAS Number..Chemical Abstracts Service Number

CERCLA.....Comprehensive Environmental Response, Compensation, and Liability Act

DOT.....U.S. Department of Transportation

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IARC.....International Agency of Research on Cancer  
mppcf.....million particles per cubic foot  
N/A.....Not Available  
NTP.....National Toxicology Program  
OSHA.....Occupational Safety and Health Administration  
PEL.....Permissible Exposure Limit  
ppm.....parts per million  
RCRA.....Resource Conservation and Recovery Act  
SARA.....Superfund Amendments and Reauthorization Act  
TLV.....Threshold Limit Value  
TSCA.....Toxic Substances Control Act