



LTS Research Laboratories, Inc.  
Safety Data Sheet  
Barium Chloride

---

1. Product and Company Identification

---

Trade Name: Barium chloride  
Chemical Formula: BaCl<sub>2</sub>  
Recommended Use: Scientific research and development

Manufacturer/Supplier: LTS Research Laboratories, Inc.  
Street: 37 Ramland Road  
City: Orangeburg  
State: New York  
Zip Code: 10962  
Country: USA  
Tel #: 855-587-2436 / 855-lts-chem

24-Hour Emergency Contact: 800-424-9300 (US & Canada)  
+1-703-527-3887 (International)

---

2. Hazards Identification

---

Signal Word: Danger



Hazard Statements: H319 Causes serious eye irritation.  
H301 Toxic if swallowed  
H332 Harmful if inhaled

Precautionary Statements: P261: Avoid breathing dust/fume/gas/mist/vapors/spray  
P264: Wash thoroughly after handling  
P270: Do not eat, drink or smoke when using this product.  
P271: Use only outdoors or in a well-ventilated area.  
P280: Wear protective gloves/protective clothing/eye protection/face protection  
P301+P310+P330: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Rinse mouth.  
P304+P340+P31: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell. CENTER or doctor/physician  
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P337+P313: If eye irritation persists get medical advice/attention.  
P405: Store locked up.  
P501: Dispose of contents/container to an approved waste disposal plant.

HMIS Health Ratings (0-4):  
Health: 2  
Flammability: 0  
Physical: 1

---

### 3. Composition

---

Chemical Family: Salt  
Additional Names: Barium Dichloride

Barium chloride (BaCl<sub>2</sub>):  
Percentage: 100 wt.%  
CAS #: 10361-37-2  
EC #: 233-788-1

---

### 4. First Aid Procedures

---

General Treatment: Immediately remove any clothing soiled by the product. In case of irregular breathing or respiratory arrest provide artificial respiration.

Special Treatment: None

Important Symptoms: None

Inhalation: Remove victim to fresh air. Supply oxygen if breathing is difficult.

Ingestion: Seek Medical Attention.

Skin: Wash affected area with mild soap and water. Remove any contaminated clothing.

Eyes: Flush eyes with water, blinking often for several minutes. Remove contact lenses if present and easy to do. Continue rinsing

---

### 5. Firefighting Measures

---

Flammability: Not flammable

Extinguishing Media: No special restrictions – use suitable extinguishing agent for surrounding material and type of fire.

Spec. Fire Fighting Procedure: Use full-face, self-contained breathing apparatus with full protective clothing to prevent contact with skin and eyes. See section 10 for decomposition products.

---

### 6. Accidental Release Measures

---

If Material Is Released/Spilled: Wear appropriate respiratory and protective equipment specified in special protection information. Isolate spill area and provide ventilation. Vacuum up spill using a high efficiency particulate absolute (HEPA) air filter and place in a closed container for disposal. Take care not to raise dust.

Environmental Precautions: Isolate runoff to prevent environmental pollution.

---

### 7. Handling and Storage

---

Handling Conditions: Handle under dry protective gas. Wash thoroughly after handling.

Storage Conditions: Store in a cool dry place in a tightly sealed container. Store under dry inert gas. Store apart from materials and conditions listed in section 10.

Work/Hygienic Maintenance: Do not use tobacco or food in work area. Wash thoroughly before eating and smoking. Do not blow dust off clothing or skin with compressed air.

Ventilation: Provide sufficient ventilation to maintain concentration at or below threshold limit.

---

## 8. Exposure Controls and Personal Protection

---

Permissible Exposure Limits:	Long-term value:0.5 mg/m <sup>3</sup>
Threshold Limit Value:	Long-term value:0.5 mg/m <sup>3</sup>
Special Equipment:	None
Respiratory Protection:	Dust Respirator
Protective Gloves:	Rubber gloves
Eye Protection:	Safety glasses or goggles
Body Protection:	Protective work clothing. Wear close-toed shoes and long sleeves/pants.

---

## 9. Physical and Chemical Characteristics

---

Color	White
Form:	Powder/ Crystalline/ Beads
Odor:	Odorless
Water Solubility:	370 g/l
Boiling Point:	1560 °C
Melting Point:	963 °C
Flash Point:	N/A
Autoignition Temperature:	N/A
Density:	3.9 g/cc
Molecular weight:	208.23 g/mol

---

## 10. Reactivity

---

Stability:	Stable under recommended storage conditions
Reacts with:	Strong Oxidizing agents
Incompatible Conditions:	Water/moisture, Oxidizing agents
Hazardous Decomposition Products:	Barium oxide, Hydrogen Chloride

---

## 11. Toxicological Information

---

Potential Health Effects:	
Eyes:	Causes serious eye damage
Skin:	Causes skin irritation
Ingestion:	May cause irritation
Inhalation:	May cause irritation
Chronic:	N/A
Signs & Symptoms:	N/A
Aggravated Medical Conditions:	N/A
Median Lethal Dose:	150 mg/kg for rat by mouth
Carcinogen:	N/A

---

## 12. Ecological Information

---

Aquatic Toxicity:	Harmful if inhaled, Toxic if swallowed
Persistent Bioaccumulation Toxicity:	No
Very Persistent, Very Bioaccumulative:	No
Notes:	N/A

---

## 13. Disposal Considerations

---

Dispose of in accordance with local, state, national, and international regulations.

---

#### 14. Transportation Data

---

Hazardous: Hazardous for transportation.



Hazard Class: 6.1 Toxic Substances  
Packing Group: III  
UN Number: UN1564  
Proper Shipping Name: Barium compounds n.o.s (Barium Chloride)

---

#### 15. Regulatory Information

---

Sec 302 Extremely Hazardous: No  
Sec 304 Reportable Quantities: N/A  
Sec 313 Toxic Chemicals: No

---

#### 16. Other Information

---

This safety data sheet should be used in conjunction with technical sheets. It does not replace them. The information given is based on our knowledge of this product, at the time of publication. It is given in good faith. The attention of the user is drawn to the possible risks incurred by using the product for any other purpose other than that for which it was intended. This does not in any way excuse the user from knowing and applying all the regulations governing his activity. It is the sole responsibility of the user to take all precautions required in handling the product. The aim of the mandatory regulations mentioned is to help the user to fulfill his obligations regarding the use of hazardous products.

Document Last Revised:

07/08/2016

