

**Material Safety Data Sheet  
Barium Carbonate**

**Suppliers Name:** Westco Chemicals, Inc.

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North Hollywood, CA 9160

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**EMERGENCY TELEPHONE NUMBER: 800-424-9300 CHEMTREC**

**1. Identification**

**Product Name:** Barium Carbonate

**Chemical Name:** Barium Carbonate

**Formula:** BaCO<sub>3</sub>

**Molecular Weight:** 197.35

**CAS No.:** 513-77-9

**2. Composition / Information on Ingredients**

**Chemical Name:** Barium Carbonate

**CAS #:** 513-77-9

**ACGIH TLV:** 0.5 mg/m<sup>3</sup> for soluble Barium compounds as Barium (0.74 mg/m<sup>3</sup> as BaCO<sub>3</sub>).  
(1992-1993)

**3. Hazard Identification**

**Route of Exposure:** Ingestion, Inhalation, Skin or Eye

**Skin:** Barium is not likely to penetrate intact skin; penetration through cuts may cause symptoms of over-exposure. A slight irritation may result from the alkaline nature of the product.

**Eye:** Particles in the eye may cause pain, tearing and irritation.

**4. First Aid Measures**

**Inhalation:** Flush mouth and nasal passages with water. Have victim drink solution of 1 Tablespoon of Epsom Salt (Magnesium Sulfate) or Glauber's Sulfate (Sodium Sulfate) dissolved in water. Call for medical attention.

**Eyes:** Flush eyes with water until irritation subsides. Get medical attention if necessary.

**Skin:** Wash with water and soap is available. Remove contaminated clothing and wash before re-use.

**Ingestion:** Have victim drink solution of 1 Tablespoon of Epson Salt (Magnesium Sulfate) or Gluaber's Sulfate (Sodium Sulfate) dissolved in water. Induce vomiting if victim is completely conscious. Call for medical attention.

**Regulatory / Carcinogenicity:** Barium carbonate is not considered carcinogenic (1993 study of Barium Chloride showed no evidence).

**Medical Conditions Aggravated by Exposure:** Acute over-exposure will cause severe abdominal pain, violent purging with watery bloody stools, vomiting, muscle twitching and confusion, followed by muscle paralysis of the respiratory muscles, which may be fatal.

## 5. Fire Fighting Measures

**Common Extinguishing Methods:** Foam or Water

**Inappropriate Extinguishing Methods:** NA

**Specific Hazards:** Will decompose releasing Carbon Dioxide gas at extremely high temperatures.

**Protective Measures in case of Intervention:** NA

**Other Precautions:** Limit water runoff if it is likely to contain suspended product.

## 6. Accidental Release Measures

Try to keep material dry. Prevent runoff from entering sewers or ditches connected with natural waterways. Dispose of appropriately in compliance with local, state and federal laws and regulations.

## 7. Handling and Storage

General storage conditions are not critical. Keep material dry. Store separate from acids. Emptied containers may present a toxic hazard. Treat or dispose of empty containers in compliance with local, state and federal laws and regulations.

## 8. Exposure Controls / Personal Protection

**Engineering Controls:** Control airborne concentrations below the exposure limit. Use only with adequate ventilation.

**Respiratory Protection:** Use NIOSH approved dust mask.

**Hand Protection:** Wear impervious gloves.

**Eye Protection:** Wear safety glasses. Use chemical goggles if excessive dust is present.

**Skin Protection:** Cover exposed skin areas.

## 9. Physical and Chemical Properties

**Appearance:** Solid, white powder or granules

**Odor:** Usually odorless

**pH:** 9 (measures in a 1% suspension in water)

**Boiling Point / Range :** NA

**Melting Point / Range:** 1400 °C (2552°F) - near decomposition temperature.

**Flash Point:** NA

**Flammability:** NA

**Lower Limit:** NA

**Upper Limit:** NA

**Autoignition Temperature:** NA

**Danger of Explosion:** NA

**Combustible Characteristics:** NA

**Vapor Pressure:** NA

**Vapor Density (air=1):** 4.3

**Specific Gravity (H<sub>2</sub>O=1):** NA

**Solubility:**

**Water Solubility:** 0.02g/l

(Barium Chloride BaCl<sub>2</sub> 375 g/l)

(Barium Sulfate BaSO<sub>4</sub> 0.002 g/l)

**Viscosity:** NA

**Decomposition Temperature:** See Melting Point / Range

**Partition Coefficient p (n-octanol/water):** NA

**Other Data:** NA

## 10. Stability and Reactivity

**Stability:** Stable under normal conditions

**Conditions to Avoid:** Heat

**Materials to Avoid:** Acids

**Hazardous Decomposition Products:** Carbon dioxide, soluble Barium salts

## 11. Toxicological Information

**Acute Toxicity:**

**LD50-oral (rat):** 630 mg/kg

**Chronic Toxicity:** Chronic over-exposure may lead to varying degrees of paralysis of the extremities. A condition known as "Bartosis" will be observed (x-ray of lungs will be influenced). Symptoms of over-exposure will disappear with time as the body eliminates Barium.

## 12. Disposal Considerations

**Waste and Packaging Treatment:** Dispose of in compliance with local, state and federal laws and regulations.

## 13. Transport

**UN No.:** 1564

**DOT Classification**

**DOT Proper Shipping Name:** Barium compounds, n.o.s.

**Labels Required:** 6.1 (toxic)

**Packing Group:** PGIII

**Hazard Class:** NA

## 14. Regulatory Information

**Authorized Limit Values:**

**TLV (ACGIH) - TWA:** 0.5 mg/m<sup>3</sup> for soluble Barium compounds; Barium carbonate is not listed.

**Creation Date:** 9/17/01

**Review Date:** 6/25/07