SAFETY DATA SHEET

SECTION 1 · COMPANY AND PRODUCT IDENTIFICATION

PRODUCT
Product Name: BARIUM CHLORIDE
Control Number: 00118
Product Description: Barium Salt

COMPANY IDENTIFICATION
Supplier: COLONIAL CHEMICAL SOLUTIONS, INC.
916 West Lathrop Avenue
Savannah, Georgia 31415

24 Hour Emergency Telephone: (800)-424-9300 CHEMTREC
General Information: (912) 236-1331

SECTION 2 · HAZARDS IDENTIFICATION

GHS Classification:
[ Health ] [ Environmental ] [ Physical ]
Acute toxicity, Inhalation Category 4 Acute Aquatic Toxicity Category 1 None
Acute toxicity, Oral Category 3
Eye irritation Category 2A

GHS Label elements, including precautionary statements

Pictograms

Signal Word: Danger

Hazard statement(s)
H301 Toxic if swallowed.
H319 Causes serious eye irritation.
H332 Harmful if inhaled.

Precautionary statement(s)
P261 Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.
P264 Wash skin 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/ eye protection/ face protection.
P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician easy to do. Continue rinsing.
P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P312 Call a POISON CENTER or doctor/physician if you feel unwell.
P330 Rinse mouth.
P337 + P313 If eye irritation persists: Get medical advice/ attention.

SECTION 3 · COMPOSITION / INFORMATION ON INGREDIENTS

CHEMICAL NAME CAS Number %WT
Barium Chloride 10361-37-2 90-100
SECTION 4 · FIRST AID MEASURES

**FIRST AID PROCEDURES:**

**Eye Contact:** Remove contacts if present. Flush with large amounts of cool running water for at least 15 minutes with eyelids forced open. Seek medical attention.

**Skin Contact:** Wash with soap and water. Seek medical attention if irritation develops.

**Inhalation:** If inhaled, remove to fresh air. If not breathing, give artificial respiration. Seek medical attention.

**Ingestion:** Do NOT induce vomiting. Rinse mouth with water. Seek medical attention.

SECTION 5 · FIRE FIGHTING MEASURES

**Extinguishing Media:** Use any agent suitable for surrounding fire conditions and equipment.

**Hazardous combustion products:** Hydrogen chloride gas, Barium oxide

**Fire Fighting Procedures:** Wear self-contained breathing apparatus (SCBA) operated in pressure demand mode and structural firefighter’s protective clothing.

**Fire and Explosion Hazards:** None known or expected.

SECTION 6 · ACCIDENTAL RELEASE and DISPOSAL MEASURES

**Small Spill:** Stop source of spill. Salvage and recycle as much material as possible. Use appropriate tools to pick up dry material and collect into suitable container.

**Large Spill:** Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal. Use appropriate tools to pick up dry material and collect into suitable container. Avoid contaminating ground and surface water.

SECTION 7 · STORAGE AND HANDLING

**Precautions To Be Taken In Handling and Storage:** Avoid skin and eye contact with product. Do not breathe dust or aerosols. Avoid contact with water. Always store in tightly sealed and properly labeled original container. Store in a cool, dry well ventilated area. Segregate from oxidizers and metals.

**Other Precautions:** Follow Label Instructions and Precautions. Hygroscopic. Keep in a dry place.

SECTION 8 · EXPOSURE CONTROLS AND PERSONAL PROTECTION

**Engineering Controls:** Use explosion-proof ventilation equipment. Provide ventilation or other engineering controls to keep the airborne concentrations of vapor or mists below the applicable workplace exposure limits indicated below. The level of protection and types of controls will vary depending upon potential exposure conditions

**Exposure Limits:**

<table>
<thead>
<tr>
<th>Substance</th>
<th>Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barium Chloride</td>
<td>0.5 mg/m3 ACGIH; 0.5 mg/m3 OSHA</td>
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</table>

**Personal Protective Equipment (PPE):**

**Eyes:** Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA’s eye and face protection regulations in 29 CFR 1910.133.

**Skin:** If prolonged or repeated skin contact is likely, wear appropriate protective gloves.

**Clothing:** Selection of protective clothing depends on work conditions, potential exposure conditions and may include gloves, boots, suits and other protective items.

**Respirators:** Where adequate ventilation is not available an approved respirator must be worn. Respirator selection, use and maintenance should be in accordance with the requirements of OSHA Respiratory Protection Standard, 29 CFR 1920.134. In confined areas, use a self-contained breathing apparatus.
SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

- Flash Point: N/A
- Autoignition Temperature: No available data
- Boiling Point: 2840 °F
- Melting Point/Freezing Point: 1765 °F
- Vapor Pressure: No available data
- Vapor Density (Air-1): No available data
- Odor/Appearance: White odorless powder.
- Flammability Limits: N/A
- Relative Density: 3.856 g/mL
- Volatile %: N/A
- Evaporation Rate (Water=1): N/A
- pH: No available data
- Solubility in Water: 370 g/l

SECTION 10 - STABILITY AND REACTIVITY

- Stability: Stable under normal use conditions.
- Conditions to Avoid: Avoid excessive heat and moisture/water.
- Incompatibility: Strong oxidizing agents.
- Hazardous Decomposition Products: May release hydrogen chloride gas and Zinc Oxide upon combustion.
- Hazardous Polymerization: Will not occur.

SECTION 11 - TOXIOLOGICAL INFORMATION

- Signs and Symptoms of Overexposure:
  - Skin: Contact can be irritating, Prolonged contact could result in inflammation and blistering.
  - Eyes: Dust in eyes can be very irritating. Prolonged contact can result in tissue damage.
  - Inhalation: High dust concentrations can be very irritating and potentially harmful.
  - Ingestion: Not a normal route of entry. However, can be harmful or fatal if swallowed and aspirated into the lungs.

- Acute oral toxicity:
  - LD50 rat: 100 - 300 mg/kg
- Acute inhalation toxicity:
  - LD50 rat: No available data
- Acute dermal toxicity:
  - LD50 rabbit: No available data

SECTION 12 - ECOLOGICAL INFORMATION

- Aquatic Toxicity: Toxicity to fish LC50 static test LC50 - Danio rerio (zebra fish) - > 174 mg/l - 96 h
- Bio-accumulative potential: This product is not readily biodegradable.
- Mobility: No available information or data.

SECTION 13 - DISPOSAL CONSIDERATIONS

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.
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SECTION 14 · TRANSPORTATION

U.S. DEPARTMENT OF TRANSPORTATION (Road or Rail):

Proper Shipping Name: Barium compounds, n.o.s. (Barium chloride)
Hazard Class: 6.1
UN Number: 1564
Packaging Group: 3

SECTION 15 · REGULATORY INFORMATION

US FEDERAL REGULATIONS

Comprehensive Environmental Response and Liability Act (CERCLA)

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302. The reportable quantity (RQ) for this material has not been established.

Toxic Substance Control Act (TSCA): All components of this product are listed on the TSCA inventory list.

SARA Section 311/312 (40 CFR 370) Hazard Categories:
Acute Health Hazard, Chronic Health Hazard

SARA Section 313 (40 CFR 372) Hazard Categories: The following components are subject to reporting levels established by SARA Title III, Section 313: Barium Chloride

Clean Water Act: This product contains no chemicals that are listed under the CWA.

Clean Air Act: This product contains no chemicals that are listed under the CAA.

California Prop 65: This product contains no chemicals known by the State of California to cause cancer, birth defects or other reproductive harm.

SECTION 16 · OTHER INFORMATION

MSDS Revision Date: October 2014

National Fire Protection Association (NFPA) Ratings: This information is intended solely for the use of individuals trained in the NFPA system.

Health: 2
Flammability: 0
Reactivity: 0

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