Material Safety Data Sheet
Barium Chloride Solutions, 2.5% - 25%

Section 1 - Chemical Product and Company Identification

MSDS Name: Barium Chloride Solutions, 2.5% - 25%
Catalog Numbers: LC11600, LC11602, LC11605, LC11620, LC11622
Synonyms: None
Company Identification: LabChem Inc
200 William Pitt Way
Pittsburgh, PA 15238
Company Phone Number: (412) 826-5230
Emergency Phone Number: (800) 424-9300
CHEMTREC Phone Number: (800) 424-9300 or 011-703-527-3887

Section 2 - Composition, Information on Ingredients

<table>
<thead>
<tr>
<th>CAS#</th>
<th>Chemical Name:</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>7732-18-5</td>
<td>Water</td>
<td>&gt;75</td>
</tr>
<tr>
<td>10326-27-9</td>
<td>Barium chloride dihydrate</td>
<td>2.5 - 25</td>
</tr>
</tbody>
</table>

Section 3 - Hazards Identification

Emergency Overview
Appearance: clear, colorless solution
Warning! Toxic if swallowed. May cause cardiac arrhythmias and kidney failure. May cause irritation to eyes, skin, and gastrointestinal tract.
Target Organs: kidneys, heart, respiratory, muscular and cardiovascular systems

Potential Health Effects
Eye: May cause eye irritation.
Skin: May cause skin irritation.
Ingestion: Harmful if swallowed. May cause kidney damage. May cause digestive tract irritation with abdominal pain, nausea, vomiting, and diarrhea. May cause convulsions, numbness, muscle paralysis, respiratory failure, slow pulse rate, pulmonary edema, irregular heartbeat, and blood potassium deficiency.
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**Inhalation:**
May cause respiratory tract irritation.

**Chronic:**
May cause liver and kidney damage.

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**Section 4 - First Aid Measures**

**Eyes:**
Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower lids until no evidence of chemical remains. Get medical aid.

**Skin:**
Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if irritation develops or persists.

**Ingestion:**
Do not induce vomiting. Give conscious victim 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid at once.

**Inhalation:**
Move victim to fresh air immediately. If breathing is difficult, administer oxygen. Give artificial respiration if necessary. Get medical aid at once.

**Notes to Physician:**
Treat symptomatically and supportively.

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**Section 5 - Fire Fighting Measures**

**General Information:**
As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear.

**Extinguishing Media:**
For small fires, use dry chemical, carbon dioxide, water spray or alcohol-resistant foam.

**Autoignition Temperature:**
Not applicable

**Flash Point:**
Not applicable

**NFPA Rating:**
CAS# 7732-18-5: Health- 0, Flammability- 0, Instability- 0
CAS# 10326-27-9: Health- 2, Flammability- , Instability-

**Explosion Limits:**
Lower: n/a  Upper: n/a

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**Section 6 - Accidental Release Measures**

**General Information:**
Use proper personal protective equipment as indicated in Section 8.

**Spills/Leaks:**
Absorb spill with inert material such as sand, vermiculite, or diatomaceous earth, and transfer to a suitable container labeled for later disposal. Label reclaimed spill material as toxic.
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Section 7 - Handling and Storage

Handling:
Wash thoroughly after handling. Do not ingest or inhale. Do not get in eyes, on skin, or on clothing. Use with adequate ventilation.

Storage:
Store tightly capped in a cool, dry, well-ventilated area away from incompatible materials.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls:
Facilities using or storing this material should be equipped with an eyewash and safety shower. Provide local exhaust or general dilution ventilation to keep airborne levels below the permissible exposure limits.

Exposure Limits:

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH</th>
<th>NIOSH</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>None listed</td>
<td>None listed</td>
<td>None listed</td>
</tr>
<tr>
<td>Barium chloride</td>
<td>0.5 mg/m³ TWA (as Ba)</td>
<td>0.5 mg/m³ TWA (as Ba)</td>
<td>0.5 mg/m³ TWA (as Ba)</td>
</tr>
<tr>
<td></td>
<td>50 mg/m³ IDLH (as Ba)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

OSHA Vacated PELs:
None

Personal Protective Equipment

Eyes:
Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133. Do not wear contact lenses when working with chemicals.

Skin:
Wear appropriate protective gloves to prevent skin exposure.

Clothing:
Wear appropriate protective clothing to prevent skin exposure.

Respirators:
Follow the OSHA respirator regulations found in 29 CFR 1910.134. Always use a NIOSH-approved respirator when necessary.

Section 9 - Physical and Chemical Properties

Physical State: Liquid
Color: Colorless
Odor: Odorless
pH: 5-8
Vapor Pressure: Not available
Vapor Density: Not available
Evaporation Rate: Not available
Viscosity: Not available
Boiling Point: Not available
Freezing/Melting Point: Not available
Decomposition Temperature: Not available
Solubility in water: Soluble
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Section 10 - Stability and Reactivity

Chemical Stability:
Stable under normal temperatures and pressures

Conditions to Avoid:
Incompatible materials, excess heat

Incompatibilities with Other Materials:
Strong oxidizers, bromine trifluoride, 2-furan percarboxylic acid

Hazardous Decomposition Products:
Hydrogen chloride

Hazardous Polymerization:
Has not been reported

Section 11 - Toxicological Information

RTECS:
CAS# 7732-18-5: ZC0110000
CAS# 10326-27-9: CQ8751000

LD50/LC50:
CAS# 7732-18-5:
Oral, rat: LD50 = >90 mL/kg

CAS# 10326-27-9:
Oral, rat: LD50 = 118 mg/kg

Carcinogenicity:
CAS# 7732-18-5: Not listed as a carcinogen by ACGIH, IARC, NTP, OSHA, or California Proposition 65.
CAS# 10326-27-9: Not listed as a carcinogen by ACGIH, IARC, NTP, OSHA, or California Proposition 65.

Epidemiology:
Ingestion of barium chloride causes cardiac effects. Deaths from cardiac arrhythmia have been reported.

Teratogenicity:
No information found

Reproductive:
No information found

Mutagenicity:
Barium chloride is not mutagenic in the Ames test.

Neurotoxicity:
No information found

Section 12 - Ecological Information
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No information found.

Section 13 - Disposal Considerations

Dispose of in accordance with Federal, State, and local regulations.

Section 14 - Transport Information

US DOT
Shipping Name: Not regulated
Hazard Class: 
UN Number: 
Packing Group: 

Section 15 - Regulatory Information

US Federal
TSCA:
CAS# 7732-18-5 is listed on the TSCA Inventory.
CAS# 10326-27-9 is not listed on the TSCA Inventory because it is a hydrate. It is considered to be listed if the CAS number for the anhydrous form in on the Inventory (40CFR 720.3(u)(2)).

SARA Reportable Quantities (RQ):
None of the components of this product are listed.

CERCLA/SARA Section 313:
This material contains barium chloride dihydrate (listed as barium compounds, n.o.s.), 2.5 – 25%, which is subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR Part 373.

OSHA - Highly Hazardous:
None of the components of this product are listed.

US State
State Right to Know:
CAS # 10326-27-9 can be found on the following state Right-to-Know lists: New Jersey (listed as Barium compounds, n.o.s.), and Pennsylvania (listed as Barium compounds, n.o.s.).

California Regulations:
None of the components of this product are listed.

European/International Regulations
Canadian DSL/NDSL:
CAS# 7732-18-5 is listed on Canada's DSL List.
CAS# 10326-27-9 is not listed on Canada's DSL or NDSL Lists.

Canada Ingredient Disclosure List:
CAS# 7732-18-5 is not listed on Canada's Ingredient Disclosure List.
CAS# 10326-27-9 is listed on Canada's Ingredient Disclosure List as Barium, water-soluble compounds, n.o.s.
Section 16 - Other Information

MSDS Creation Date: February 19, 1998
Revision Date: March 31, 2011

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