Material Safety Data Sheet
Barium Hydroxide, Saturated

Section 1 - Chemical Product and Company Identification

MSDS Name:
Barium Hydroxide, Saturated
Catalog Numbers:
LC11640
Synonyms:
Barium dihydroxide octahydrate
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

Section 2 – Composition, Information on Ingredients

<table>
<thead>
<tr>
<th>CAS#</th>
<th>Chemical Name:</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>12230-71-6</td>
<td>Barium hydroxide, octahydrate</td>
<td>3</td>
</tr>
<tr>
<td>7732-18-5</td>
<td>Water</td>
<td>balance</td>
</tr>
</tbody>
</table>

Section 3 - Hazards Identification

Emergency Overview

**Appearance:** Colorless liquid

**Danger!** Causes burns by all exposure routes. Harmful if swallowed.

**Target Organs:** Kidneys, central nervous system, respiratory system, gastrointestinal system, muscles, cardiovascular system, eyes, skin.

Potential Health Effects

**Eye:**
Causes eye burns.

**Skin:**
Causes skin burns. May be harmful if absorbed through the skin.

**Ingestion:**
Harmful if swallowed. Causes gastrointestinal tract burns.

**Inhalation:**
Harmful if inhaled. Causes chemical burns to the respiratory tract.

**Chronic:**
No information found.
Section 4 - First Aid Measures

**Eyes:**
Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

**Skin:**
Get medical aid. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse.

**Ingestion:**
Call a poison control center. If swallowed, do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical aid.

**Inhalation:**
Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid. Do NOT use mouth-to-mouth resuscitation.

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

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:**
Use water spray, dry chemical, carbon dioxide, or chemical foam.

**Autoignition Temperature:**
Not applicable.

**Flash Point:**
Not applicable.

**NFPA Rating:**
Not applicable.

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

Section 6 - Accidental Release Measures

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

**Spills/Leaks:**
Vacuum or sweep up material and place into a suitable disposal container. Wear a self contained breathing apparatus and appropriate personal protection. (See Exposure Controls, Personal Protection section). Avoid generating dusty conditions. Provide ventilation. Do not let this chemical enter the environment.
Section 7 - Handling and Storage

Handling:
Do not get in eyes, on skin, or on clothing. Do not ingest or inhale. Use only in a chemical fume hood.

Storage:
Store in a cool, dry place. Store in a tightly closed container. Corrosives area. Store under nitrogen.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls:
Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use only under a chemical fume hood.

Exposure Limits:

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH</th>
<th>NIOSH</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barium hydroxide octahydrate</td>
<td>0.5 mg/m3 TWA (as Ba) (listed</td>
<td>0.5 mg/m3 TWA (as Ba, except barium sulfate)</td>
<td>0.5 mg/m3 TWA (as Ba) (listed under Barium,</td>
</tr>
<tr>
<td></td>
<td>under Barium, soluble compounds).</td>
<td>(listed under Barium, soluble compounds).</td>
<td>soluble compounds).</td>
</tr>
</tbody>
</table>

OSHA Vacated PELs:
Barium hydroxide octahydrate: No OSHA Vacated PELs are listed for this chemical.

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 or European Standard EN166.

Skin:
Wear appropriate 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 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Section 9 - Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Physical State:</th>
<th>Liquid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color:</td>
<td>Colorless</td>
</tr>
<tr>
<td>Odor:</td>
<td>Odorless</td>
</tr>
<tr>
<td>pH:</td>
<td>12.5</td>
</tr>
<tr>
<td>Vapor Pressure:</td>
<td>Not available</td>
</tr>
<tr>
<td>Vapor Density:</td>
<td>Not available</td>
</tr>
<tr>
<td>Evaporation Rate:</td>
<td>Not available</td>
</tr>
<tr>
<td>Viscosity:</td>
<td>Not available</td>
</tr>
<tr>
<td>Boiling Point:</td>
<td>Not available</td>
</tr>
<tr>
<td>Freezing/Melting Point:</td>
<td>Not available</td>
</tr>
</tbody>
</table>
Section 10 - Stability and Reactivity

Chemical Stability:
Absorbs carbon dioxide from the air.

Conditions to Avoid:
Incompatible materials, exposure to air.

Incompatibilities with Other Materials:
Acids, aluminum.

Hazardous Decomposition Products:
Barium oxide.

Hazardous Polymerization:
Has not been reported.

Section 11 - Toxicological Information

RTECS:
CAS# 12230-71-6: unlisted.

LD50/LC50:
Not available.

Carcinogenicity:
CAS# 12230-71-6: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

Epidemiology:
No information found

Teratogenicity:
No information found

Reproductive:
No information found

Mutagenicity:
No information found

Neurotoxicity:
No information found

Section 12 - Ecological Information

Do not empty into drains.
Material Safety Data Sheet
Barium Hydroxide, Saturated

Section 13 - Disposal Considerations

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

Section 14 - Transport Information

US DOT
Shipping Name: Corrosive liquid, basic, inorganic, nos
Hazard Class: 8
UN Number: UN3266
Packing Group: PGIII

Section 15 - Regulatory Information

US Federal
TSCA:
CAS# 12230-71-6 is not on the TSCA Inventory because it is a hydrate. It is considered to be listed if the CAS number for the anhydrous form is on the inventory (40CFR720.3(u)(2)).
SARA Reportable Quantities (RQ):
None of the chemicals in this material have an RQ.
CERCLA/SARA Section 313:
This material contains Barium hydroxide octahydrate (listed as Barium compounds, n.o.s.), 3%, (CAS# 12230-71-6) 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 chemicals in this product are considered highly hazardous by OSHA.

US State
State Right to Know: CAS# 12230-71-6 can be found on the following state right to know lists:
California, (listed as Barium, soluble compounds), New Jersey, (listed as Barium compounds, n.o.s.), Pennsylvania, (listed as Barium compounds, n.o.s.), Minnesota, (listed as Barium, soluble compounds).
California Regulations:
None.

European/International Regulations
Canadian DSL/NDSL:
CAS# 12230-71-6 is not listed on Canada's DSL List.
Canada Ingredient Disclosure List:
CAS# 12230-71-6 (listed as Barium, soluble compounds) is listed on the Canadian Ingredient Disclosure List.
Material Safety Data Sheet
Barium Hydroxide, Saturated

Section 16 - Other Information

MSDS Creation Date: October 23, 2007
Revision Date: November 7, 2007

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