1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION:
Product Name: Sodium Bromide
Date of Prep: 15 November 2011

2. COMPOSITION/INFORMATION ON INGREDIENTS:

<table>
<thead>
<tr>
<th>CHEMICAL INGREDIENT NAME</th>
<th>CAS NUMBER</th>
<th>EC NUMBER</th>
<th>% BY WT.</th>
<th>OSHA</th>
<th>ACGIH</th>
<th>HAZARD SYMBOL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium Bromide</td>
<td>7647-15-6</td>
<td>231-599-9</td>
<td>99+</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Notes:

3. HAZARDS IDENTIFICATION: Avoid contact and inhalation

4. FIRST AID MEASURES:

Inhalation: Remove to fresh air.
Skin Contact: Wash with soap and water.
Eye Contact: Immediately flush with water for a minimum of 15 minutes.
Ingestion: Get medical attention. Wash out mouth with water.

After following first aid measures, seek medical attention.

5. FIRE-FIGHTING MEASURES:

Flammable Properties: N/A
Extinguishing Media: Water spray, carbon dioxide, dry chemical powder
Unique Aspects Contributing To a Fire:
Special Fire Fighting Procedures:
   Note: As in any fire, wear self-contained breathing apparatus, and full protective gear.

6. ACCIDENTAL RELEASE MEASURES: Sweep up, place in bag and hold for waste disposal.

7. HANDLING AND STORAGE: Tightly sealed in a cool, dry place.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION:

Handle in accordance with good laboratory practices.

Respiratory Protection: Not normally needed. If exposure limits are exceeded, use approved respirator.
Eye Protection: Safety glasses with side shields.
Skin Protection: Neoprene or other chemical resistant gloves. Disposable nitrile are acceptable for light intermittent exposure.
Engineering Controls: No special requirements. Handle in an area with good general room ventilation.
9. PHYSICAL AND CHEMICAL PROPERTIES:

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>White crystalline</td>
</tr>
<tr>
<td>Physical State</td>
<td>Solid</td>
</tr>
<tr>
<td>Flash Point</td>
<td>1390°C</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>1mm Hg @ 800°C</td>
</tr>
<tr>
<td>Odor</td>
<td>N/A</td>
</tr>
<tr>
<td>Explosion Limits</td>
<td>N/A</td>
</tr>
<tr>
<td>pH</td>
<td>N/A</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>N/A</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>1g/mL</td>
</tr>
<tr>
<td>Melting Point</td>
<td>747°C</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>1mm Hg @ 800°C</td>
</tr>
<tr>
<td>Solubility in Water</td>
<td>Soluble</td>
</tr>
<tr>
<td>Other</td>
<td>NA</td>
</tr>
</tbody>
</table>

10. STABILITY AND REACTIVITY:

<table>
<thead>
<tr>
<th>Hazardous Polymerization</th>
<th>Will Not Occur</th>
<th>May Occur</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Hazardous Decomposition/Combustion Products</th>
<th>Conditions &amp; Materials to Avoid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrogen bromide gas</td>
<td>Strong acids. Strong oxidizing agents.</td>
</tr>
</tbody>
</table>

11. TOXICOLOGICAL INFORMATION:

<table>
<thead>
<tr>
<th>Primary Route(s) of Exposure Under Normal Use:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central nervous system</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Acute Effects:</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Chronic Effects:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin LD₅₀=&gt;2000mg/kg (rabbit), Oral LD₅₀=3500mg/kg (rat), Subcut LD₅₀=2900mg/kg (rat), Oral LD₅₀=7000mg/kg (mouse), Interper LD₅₀=5g/kg (mouse), Subcut LD₅₀=5020mg/kg (mouse), Repro Oral=47,520mg/kg (rat), Repro Oral=3600mg/kg (rat), Repro Oral=720mg/kg (rat), Repro Oral=1620mg/kg (rat)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Other Information:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemical Ingredient(s) not classified as carcinogen(s) by OSHA, IARC, NTP, ACGIH, or California.</td>
<td></td>
</tr>
</tbody>
</table>

12. ECOLOGICAL INFORMATION: LC₅₀ 160g/L 96 hr fish

EC₅₀ 5.8g/L 48 hr daphnia

13. DISPOSAL CONSIDERATIONS: Sweep up, place in bag and hold for waste disposal

14. TRANSPORT INFORMATION:

<table>
<thead>
<tr>
<th>U.S. DOT:</th>
<th>Shipping Name: None</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hazard Class:</td>
<td>Non-hazardous for transport</td>
</tr>
<tr>
<td>UN/NA #:</td>
<td></td>
</tr>
<tr>
<td>Packing Group #:</td>
<td></td>
</tr>
</tbody>
</table>

| IATA/ICAO: | Non-hazardous for air transport |

15. REGULATORY INFORMATION:

<table>
<thead>
<tr>
<th>U.S. TOSCA:</th>
<th>Yes</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Canada:</th>
<th>This product has been classified according to the hazard criteria of the CPR and this MSDS contains all the information required by the CPR.</th>
</tr>
</thead>
</table>

16. OTHER INFORMATION:

<table>
<thead>
<tr>
<th>U.S. EPA SARA</th>
<th>National Fire Protection Association Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>313 Chemicals</td>
<td>CERCLA RQ</td>
</tr>
<tr>
<td>No</td>
<td>1</td>
</tr>
</tbody>
</table>

Notes: Not Established (NE) means a value has not been set or there is no information available. Not Applicable (NA) means that the topic is not pertinent.

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