SECTION 1 : Identification of the substance/mixture and of the supplier

Product name : Sodium Bromide

Manufacturer/Supplier Trade name:

Manufacturer/Supplier Article number: S25538A

Recommended uses of the product and uses restrictions on use:

Manufacturer Details:
AquaPhoenix Scientific
9 Barnhart Drive, Hanover, PA 17331

Supplier Details:
Fisher Science Education
15 Jet View Drive, Rochester, NY 14624

Emergency telephone number:
Fisher Science Education    Emergency Telephone No.: 800-535-5053

SECTION 2 : Hazards identification

Classification of the substance or mixture:

Health hazard
Reproductive toxicity, category 1B

Reproductive toxicity 1

Signal word : Danger

Hazard statements:
May damage fertility or the unborn child

Precautionary statements:
If medical advice is needed, have product container or label at hand
Keep out of reach of children
Read label before use
Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Use personal protective equipment as required
If exposed or concerned: Get medical advice/attention
Store locked up
Dispose of contents/container to ...

Other Non-GHS Classification:

WHMIS
D2A
NFPA/HMIS

NFPA SCALE (0-4)  HMIS RATINGS (0-4)

Health 1  Flammability 1  Physical Hazard 1  Personal Protection X

SECTION 3 : Composition/information on ingredients

Ingredients:

<table>
<thead>
<tr>
<th>CAS 7647-15-6</th>
<th>Sodium Bromide</th>
<th>&gt;99 %</th>
</tr>
</thead>
</table>

Percentages are by weight

SECTION 4 : First aid measures

Description of first aid measures

After inhalation: Move exposed individual to fresh air. Loosen clothing as necessary and position individual in a comfortable position. Seek medical advice if discomfort or irritation persists. If breathing difficult, give oxygen. Give artificial respiration, if necessary.

After skin contact: Rinse thoroughly. Seek medical attention if irritation, discomfort or vomiting persists. Flush with water for 15 minutes.

After eye contact: Protect unexposed eye. Remove contact lens(es) if able to do so during rinsing. Immediately flush eyes with water for at least 15 minutes. Immediately get medical assistance.

After swallowing: Rinse mouth thoroughly. Do not induce vomiting. Seek medical attention immediately. Have exposed individual drink sips of water.

Most important symptoms and effects, both acute and delayed:

Indication of any immediate medical attention and special treatment needed:
If seeking medical attention, provide SDS document to physician. Note to physician: Treat symptomatically.

SECTION 5 : Firefighting measures

Extinguishing media

Suitable extinguishing agents: If in laboratory setting, follow laboratory fire suppression procedures. Use appropriate fire suppression agents for adjacent combustible materials or sources of ignition. Use water spray, dry chemical, carbon dioxide, or appropriate foam.

For safety reasons unsuitable extinguishing agents:

Special hazards arising from the substance or mixture:
Combustion products may include sodium oxides or other toxic vapors.

Advice for firefighters:
Protective equipment: Use NIOSH-approved respiratory protection/breathing apparatus. Wear protective clothing and equipment.
Additional information (precautions): Move product containers away from fire or keep cool with water spray as a protective measure, where feasible. Keep product and empty container away from heat and sources of ignition.

SECTION 6 : Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Wear protective equipment. Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air). Avoid contact with eyes, skin, and clothing. Use respiratory protective device against the effects of fumes/dust/aerosol. Keep unprotected persons away. Ensure adequate ventilation. Keep away from ignition sources. Protect from heat. Stop the spill, if possible. Contain spilled material by diking or using inert absorbent. Transfer to a disposal or recovery container.

Environmental precautions:

Prevent from reaching drains, sewer or waterway. Collect contaminated soil for characterization per Section 13. Should not be released into the environment. Always obey local regulations.

Methods and material for containment and cleaning up:

If in a laboratory setting, follow Chemical Hygiene Plan procedures. Place into properly labeled containers for recovery or disposal. If necessary, use trained response staff/contractor. Absorb and containerize for disposal. Avoid generating dust.

Reference to other sections:

SECTION 7 : Handling and storage

Precautions for safe handling:

Follow good hygiene procedures when handling chemical materials. Do not eat, drink, smoke, or use personal products when handling chemical substances. If in a laboratory setting, follow Chemical Hygiene Plan. Use only in well ventilated areas. Avoid generation of dust or fine particulate. Wash hands after handling. Avoid contact with skin and eyes.

Conditions for safe storage, including any incompatibilities:

Store in a cool location. Provide ventilation for containers. Avoid storage near extreme heat, ignition sources or open flame. Store away from foodstuffs. Store away from oxidizing agents. Store in cool, dry conditions in well sealed containers. Keep container tightly sealed. Protect from freezing and physical damage. Store locked up.

SECTION 8 : Exposure controls/personal protection

Control Parameters:

7647-15-6, Sodium Bromide, ACGIH TLV TWA (inhalable particles) 10 mg/m3
7647-15-6, Sodium Bromide, OSHA PEL TWA (Total Dust) 15 mg/m3 (50 mppcf*)

Appropriate Engineering controls:

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use/handling. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapor or dusts (total/respirable) below the applicable workplace exposure limits (Occupational Exposure Limits-OELs) indicated above.
**Respiratory protection:**
Not required under normal conditions of use. Use suitable respiratory protective device when high concentrations are present. Use suitable respiratory protective device when aerosol or mist is formed. For spills, respiratory protection may be advisable. Normal ventilation is adequate.

**Protection of skin:**
The glove material has to be impermeable and resistant to the product/the substance/the preparation being used/handled. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.

**Eye protection:**
Safety glasses with side shields or goggles.

**General hygienic measures:**
The usual precautionary measures are to be adhered to when handling chemicals. Keep away from food, beverages and feed sources. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work. Do not inhale gases/fumes/dust/mist/vapor/aerosols. Avoid contact with eyes, skin, and clothing.

### SECTION 9: Physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Appearance (physical state, color):</strong></td>
<td>White solid</td>
</tr>
<tr>
<td><strong>Explosion limit lower:</strong></td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>Explosion limit upper:</strong></td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>Odor:</strong></td>
<td>Odorless</td>
</tr>
<tr>
<td><strong>Vapor pressure:</strong></td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>Odor threshold:</strong></td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>Vapor density:</strong></td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>pH-value:</strong></td>
<td>5-8.8 (5% aq soln)</td>
</tr>
<tr>
<td><strong>Relative density:</strong></td>
<td>3.208</td>
</tr>
<tr>
<td><strong>Melting/Freezing point:</strong></td>
<td>755°C</td>
</tr>
<tr>
<td><strong>Solubilities:</strong></td>
<td>Soluble in water</td>
</tr>
<tr>
<td><strong>Boiling point/Boiling range:</strong></td>
<td>1390°C</td>
</tr>
<tr>
<td><strong>Partition coefficient (n-octanol/water):</strong></td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>Flash point (closed cup):</strong></td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>Auto/Self-ignition temperature:</strong></td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>Evaporation rate:</strong></td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>Decomposition temperature:</strong></td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>Flammability (solid, gaseous):</strong></td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>Viscosity:</strong></td>
<td>a. Kinematic: Not determined</td>
</tr>
<tr>
<td></td>
<td>b. Dynamic: Not determined</td>
</tr>
<tr>
<td><strong>Density:</strong></td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>Specific Gravity:</strong></td>
<td>2.165</td>
</tr>
<tr>
<td><strong>Additive property:</strong></td>
<td>Hygroscopic</td>
</tr>
<tr>
<td><strong>Specific Gravity:</strong></td>
<td>3.208</td>
</tr>
</tbody>
</table>

### SECTION 10: Stability and reactivity

**Reactivity:**
**Chemical stability:** No decomposition if used and stored according to specifications. Stable under normal temperatures and pressures.

**Possible hazardous reactions:**

**Conditions to avoid:** Store away from oxidizing agents, strong acids or bases. Incompatible materials. Dust generation. Moisture.

**Incompatible materials:** Strong oxidizers. Strong acids.

**Hazardous decomposition products:** Sodium/sodium oxides. Hydrogen bromide.

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SECTION 11 : Toxicological information

Acute Toxicity:

<table>
<thead>
<tr>
<th>Oral</th>
<th>4200 mg/kg bw</th>
<th>LD50 (rat) (7647-15-6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dermal</td>
<td>&gt;2000 mg/kg bw</td>
<td>LD50 dermal-rabbit (7647-15-6)</td>
</tr>
<tr>
<td>Oral</td>
<td>3500 mg/kg</td>
<td>LD50 oral-rat: 3500mg/kg (7647-15-6)</td>
</tr>
</tbody>
</table>

Chronic Toxicity: No additional information.

Corrosion Irritation: No additional information.

Sensitization: No additional information.

Single Target Organ (STOT): No additional information.

Numerical Measures: No additional information.

Carcinogenicity: NTP: Not listed; IARC: Not listed

Mutagenicity: No additional information.

Reproductive Toxicity: No additional information.

SECTION 12 : Ecological information

Ecotoxicity

Fish: NOEC (96h) Bluegill sunfish (L. macrochirus) (sodium bromide 7647-15-6): 1000 mg/L (equivalent to LC50 >776 mg(Br-)/L)
Fish: NOEC (124d) P. reticulata (sodium bromide 7647-15-6): 7.8 mg Br-/L (10.0 mg/L NaBr)
Crustacea: NOEC (16 d) D. magna (NaBr 7647-15-6) growth effects: 2.8 mg/L
Crustacea: EC50 (48 h) D. magna (sodium bromide 7647-15-6): >1000 mg/L, therefore NOEC (48 h) 1000 mg/L
Algae: EC50 (72h) and NOEC S. costatum (sodium bromide solution); microscopic analysis indicated no other adverse effects.: >1000.0 mg/L

Persistence and degradability: Readily degradable in the environment.

Bioaccumulative potential:

Mobility in soil:

Other adverse effects: Should not be released into environment

SECTION 13 : Disposal considerations

Waste disposal recommendations:

Product/containers must not be disposed together with household garbage. Do not allow product to reach sewage system or open water. It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities (US 40CFR262.11). Consult federal state/provincial and local regulations regarding the proper disposal of waste material that may incorporate some amount of this product.

SECTION 14 : Transport information
UN-Number
Not Regulated.

UN proper shipping name
Not Regulated.

Transport hazard class(es)
Packing group: Not Regulated
Environmental hazard:
Transport in bulk:

Special precautions for user:

SECTION 15 : Regulatory information

United States (USA)

SARA Section 311/312 (Specific toxic chemical listings):
Chronic

SARA Section 313 (Specific toxic chemical listings):
None of the ingredients is listed

RCRA (hazardous waste code):
None of the ingredients is listed

TSCA (Toxic Substances Control Act):
All ingredients are listed.

CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act):
None of the ingredients is listed

Proposition 65 (California):

Chemicals known to cause cancer:
None of the ingredients is listed

Chemicals known to cause reproductive toxicity for females:
None of the ingredients is listed

Chemicals known to cause reproductive toxicity for males:
None of the ingredients is listed

Chemicals known to cause developmental toxicity:
None of the ingredients is listed

Canada

Canadian Domestic Substances List (DSL):
All ingredients are listed.

Canadian NPRI Ingredient Disclosure list (limit 0.1%):
7647-15-6 Sodium Bromide

Canadian NPRI Ingredient Disclosure list (limit 1%):
None of the ingredients is listed

SECTION 16 : Other information

This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the
SDS contains all the information required by the Controlled Products Regulations. Note: The responsibility to provide a safe workplace remains with the user. The user should consider the health hazards and safety information contained herein as a guide and should take those precautions required in an individual operation to instruct employees and develop work practice procedures for a safe work environment. The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by the use of this material. It is the responsibility of the user to comply with all applicable laws and regulations applicable to this material.

**GHS Full Text Phrases:**

**Abbreviations and acronyms:**
- IMDG: International Maritime Code for Dangerous Goods
- PNEC: Predicted No-Effect Concentration (REACH)
- CFR: Code of Federal Regulations (USA)
- SARA: Superfund Amendments and Reauthorization Act (USA)
- RCRA: Resource Conservation and Recovery Act (USA)
- TSCA: Toxic Substances Control Act (USA)
- NPRI: National Pollutant Release Inventory (Canada)
- DOT: US Department of Transportation
- IATA: International Air Transport Association
- GHS: Globally Harmonized System of Classification and Labelling of Chemicals
- ACGIH: American Conference of Governmental Industrial Hygienists
- CAS: Chemical Abstracts Service (division of the American Chemical Society)
- NFPA: National Fire Protection Association (USA)
- HMIS: Hazardous Materials Identification System (USA)
- WHMIS: Workplace Hazardous Materials Information System (Canada)
- DNEL: Derived No-Effect Level (REACH)

**Effective date:** 12.05.2014

**Last updated:** 03.19.2015