1. PRODUCT AND COMPANY IDENTIFICATION

Product name: 3-Bromopropionitrile

Product Number: 18150
Brand: Fluka

Company: Sigma-Aldrich
3050 Spruce Street
SAINT LOUIS MO 63103
USA

Telephone: +18003255832
Fax: +18003255052
Emergency Phone #: (314) 776-6555

2. COMPOSITION/INFORMATION ON INGREDIENTS

Formula: C3H4BrN
Molecular Weight: 133.97 g/mol

<table>
<thead>
<tr>
<th>CAS-No.</th>
<th>EC-No.</th>
<th>Index-No.</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>2417-90-5</td>
<td>219-332-4</td>
<td>-</td>
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</tbody>
</table>

3. HAZARDS IDENTIFICATION

Emergency Overview
- OSHA Hazards
  - Highly toxic by inhalation, Toxic by ingestion, Toxic by skin absorption, Irritant

HMIS Classification
- Health Hazard: 2
- Flammability: 1
- Physical hazards: 0

NFPA Rating
- Health Hazard: 2
- Fire: 1
- Reactivity Hazard: 0

Potential Health Effects
- Inhalation: May be fatal if inhaled. Causes respiratory tract irritation.
- Skin: Toxic if absorbed through skin. Causes skin irritation.
- Eyes: Causes eye irritation.
- Ingestion: Toxic if swallowed.

4. FIRST AID MEASURES
General advice
Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

If inhaled
If breathed in, move person into fresh air. If not breathing give artificial respiration. Consult a physician.

In case of skin contact
Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.

In case of eye contact
Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed
Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

5. FIRE-FIGHTING MEASURES

Flammable properties
    Flash point 97 °C (207 °F) - closed cup
    Ignition temperature no data available

Suitable extinguishing media
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special protective equipment for fire-fighters
Wear self contained breathing apparatus for fire fighting if necessary.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions
Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

Environmental precautions
Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

Methods for cleaning up
Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE

Handling
Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.
Normal measures for preventive fire protection.

Storage
Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Light sensitive.
8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Contains no substances with occupational exposure limit values.

Personal protective equipment

Respiratory protection
Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand protection
Handle with gloves.

Eye protection
Safety glasses

Skin and body protection
Choose body protection according to the amount and concentration of the dangerous substance at the workplace.

Hygiene measures
Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance
Form liquid

Safety data
pH no data available
Melting point no data available
Boiling point 76 - 78 °C (169 - 172 °F) at 13 hPa (10 mmHg)
Flash point 97 °C (207 °F) - closed cup
Ignition temperature no data available
Lower explosion limit no data available
Upper explosion limit no data available
Density 1.615 g/mL at 25 °C (77 °F)
Water solubility no data available

10. STABILITY AND REACTIVITY

Storage stability
Stable under recommended storage conditions.

Materials to avoid
Strong oxidizing agents, Strong reducing agents

Hazardous decomposition products
Hazardous decomposition products formed under fire conditions. - Hydrogen bromide gas

11. TOXICOLOGICAL INFORMATION
Acute toxicity
LD50 Intraperitoneal - mouse - 50 mg/kg

Irritation and corrosion
no data available

Sensitisation
no data available

Chronic exposure
IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Signs and Symptoms of Exposure
Treat as cyanide poisoning., Always have on hand a cyanide first-aid kit, together with proper instructions., To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Potential Health Effects

Inhalation May be fatal if inhaled. Causes respiratory tract irritation.

Skin Toxic if absorbed through skin. Causes skin irritation.

Eyes Causes eye irritation.

Ingestion Toxic if swallowed.

Additional Information
RTECS: UG1050000

12. ECOLOGICAL INFORMATION

Elimination information (persistence and degradability)
no data available

Ecotoxicity effects
no data available

Further information on ecology
no data available

13. DISPOSAL CONSIDERATIONS

Product
Observe all federal, state, and local environmental regulations. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Contaminated packaging
Dispose of as unused product.

14. TRANSPORT INFORMATION
15. REGULATORY INFORMATION

OSHA Hazards
Highly toxic by inhalation, Toxic by ingestion, Toxic by skin absorption, Irritant

DSL Status
This product contains the following components listed on the Canadian NDSL list. All other components are on the Canadian DSL list.

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SARA 302 Components
SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components
SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards
Acute Health Hazard

Massachusetts Right To Know Components
No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know Components

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New Jersey Right To Know Components

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California Prop. 65 Components
This product does not contain any chemicals known to State of California to cause cancer, birth, or any other reproductive defects.

16. OTHER INFORMATION

Further information
Copyright 2008 Sigma-Aldrich Co. License granted to make unlimited paper copies for internal use only. The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Co., shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale.