1. PRODUCT AND COMPANY IDENTIFICATION

Product name: Benzyl bromide
Product Number: B17905
Brand: Aldrich
Company: Sigma-Aldrich
3050 Spruce Street
SAINT LOUIS MO 63003
USA
Telephone: +1 800-325-5832
Fax: +1 800-325-6052
Emergency Phone #: (314) 776-6555

2. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms: alpha-Bromotoluene
Formula: C7H7Br
Molecular Weight: 171.04 g/mol

<table>
<thead>
<tr>
<th>CAS-No.</th>
<th>EC-No.</th>
<th>Index-No.</th>
<th>Concentration</th>
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<tbody>
<tr>
<td>106-39-0</td>
<td>202-847-3</td>
<td>802-057-00-2</td>
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3. HAZARDS IDENTIFICATION

Emergency Overview
OSHA Hazards
- Combustible Liquid
- Harmful by Ingestion
- Corrosive
Target Organs
- Central nervous system

HMS Classification
- Health Hazard: 3
- Chronic Health Hazard: *
- Flammability: 2
- Physical hazards: 1

NFPA Rating
- Health Hazard: 3
- Fire: 2
- Reactivity Hazard: 1

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. Consult a physician.

In case of eye contact
Continue rinsing eyes during transport to hospital. Rinse thoroughly and wash out 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: 86 °C (187 °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.

Further Information
- Water hydrolyses material liberating acidic gas which in contact with metal surfaces can generate flammable and/or explosive hydrogen gas.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions
- Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation.

Environmental precautions
- 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.
- Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge.

Storage
- Keep container tightly closed in a dry and well-ventilated place.
- Light sensitive. Moisture 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) aspirator 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 work place.

Hygiene measures
Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance
Form liquid, clear
Colour light brown
Odour unpleasant

Safety data
pH no data available
Melting point -3 - 1 °C (27 - 30 °F)
Boiling point 196 - 198 °C (385 - 386 °F)
Flash point 88 °C (187 °F) - closed cup
Ignition temperature no data available
Lower explosion limit no data available
Upper explosion limit no data available
Density 1.440 g/cm³
Water solubility no data available
Relative vapour density 5.91

10. STABILITY AND REACTIVITY

Storage stability
Stable under recommended storage conditions.

Conditions to avoid
Exposure to moisture.

Materials to avoid
Bases, Alcohols, Amines, Oxidizing agents, Corrodes steel.

11. TOXICOLOGICAL INFORMATION

Acute toxicity
no data available

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.

Potential Health Effects

Inhalation May be harmful if inhaled. Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract. May cause respiratory tract irritation.

Skin May be harmful if absorbed through skin. Causes skin burns.

Eyes May cause eye irritation. Causes eye burns.

Ingestion Harmful if swallowed. Causes burns.

Target Organs Central nervous system.

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
This combustible material may be burned in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state, and local environmental regulators. Contact a licensed professional waste disposal service to dispose of this material.

Contaminated packaging
Dispose of as unused product.
14. TRANSPORT INFORMATION

DOT (US)
UN-Number: 1737  Class: 6.1 (8)  Packing group: II
Proper shipping name: Benzyl bromide

IMDG
UN-Number: 1737  Class: 6.1 (8)  Packing group: II
Proper shipping name: BENZYL BROMIDE
EMS No: F-A, S-B
Marine pollutant: No

IATA
UN-Number: 1737  Class: 6.1 (8)  Packing group: II
Proper shipping name: Benzyl bromide

15. REGULATORY INFORMATION

OSHA Hazards
Combustible Liquid, Target Organ Effect, Harmful by ingestion, Corrosive

TSCA Status
On TSCA Inventory

DSL Status
All components of this product are on the Canadian DSL list.

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
Fire Hazard, Acute Health Hazard, Chronic Health Hazard

Massachusetts Right To Know Components

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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 2006 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.