



SIGMA-ALDRICH

## Material Safety Data Sheet

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Version 1.30

### Section 1 - Product and Company Information

**Product Name** 1-Bromopentane, 99%  
**Product Number** 117811  
**Brand** Aldrich Chemical

**Company** Sigma-Aldrich  
**Street Address** 3050 Spruce Street  
**City, State, Zip, Country** SAINT LOUIS, MO 63103 US  
**Technical Phone:** 314 771 5765  
**Fax:** 800 325 5052

**Emergency Phone:** 414 273 3850 Ext. 5996

### Section 2 - Composition/Information on Ingredient

<u>Substance Name</u>	<u>CAS #</u>	<u>SARA 313</u>	<u>EC no</u>	<u>Annex I Index Number</u>
1-BROMOPENTANE	110-53-2	No	203-776-0	

**Formula** C5H11Br  
**Synonyms** Amyl bromide, n-Amyl bromide, 1-Bromopentane, Pentyl bromide, n-Pentyl bromide, 1-Pentyl bromide

### Section 3 - Hazards Identification

**Emergency Overview**  
Flammable, Irritant.  
Irritating to eyes, respiratory system and skin.

**HMS Rating**  
Health: 2 Flammability: 3 Reactivity: 0

**NFPA Rating**  
Health: 2 Flammability: 3 Reactivity: 0

For additional information on toxicity, please refer to Section 11.

### Section 4 - First Aid Measures

**Oral Exposure**  
If swallowed, wash out mouth with water provided person is conscious. Call a physician.

**Inhalation Exposure**  
If inhaled, remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen.

**Dermal Exposure**  
In case of contact, immediately wash skin with soap and copious amounts of water.

**Eye Exposure**  
In case of contact, immediately flush eyes with copious amounts of water for at least 15 minutes.

### Section 5 - Fire Fighting Measures

**Flammable Hazards:** Yes

**Explosion Hazards**  
Vapor may travel considerable distance to source of ignition and flash back.  
Container explosion may occur under fire conditions.

**Flash Point:** 89,6 °F 32 °C

**Autoignition Temp:** N/A **Flammability:** Yes

**Extinguishing Media**  
**Suitable**  
Carbon dioxide, dry chemical powder, or appropriate foam.  
**Unsuitable**  
Water may be effective for cooling, but may not effect extinguishment.

**Firefighting**  
**Protective Equipment**  
Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.  
**Specific Hazard(s)**  
Flammable liquid. Emits toxic fumes under fire conditions.

### Section 6 - Accidental Release Measures

**Procedure to be Followed in Case of Leak or Spill**  
Evacuate area. Shut off all sources of ignition. Use nonsparking tools.

**Procedure(s) of Personal Precaution(s)**  
Wear respirator, chemical safety goggles, rubber boots, and heavy rubber gloves.

**Methods for Cleaning Up**  
Cover with dry-lime, sand, or soda ash. Place in covered containers using non-sparking tools and transport outdoors. Ventilate area and wash spill site after material pickup is complete.

### Section 7 - Handling and Storage

**Handling**  
**User Exposure**  
Avoid breathing vapor. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure.

**Storage**  
**Suitable**  
Keep container closed. Keep away from heat, sparks, and open flame.

### Section 8 - Exposure Controls / PPE

**Engineering Controls**  
Safety shower and eye bath. Use nonsparking tools. Mechanical exhaust required.

**Personal Protective Equipment**  
**Respiratory**  
Government approved respirator.  
**Hand**  
Compatible chemical-resistant gloves.  
**Eye**  
Chemical safety goggles.

**General Hygiene Measures**

Wash thoroughly after handling. Wash contaminated clothing before reuse.

**Section 9 - Physical/Chemical Properties**

Appearance	Color
Physical State Clear liquid	Very faintly yellow-green

Molecular Weight: 151.05 AMU

pH	N/A
BP/BP Range	127 - 129 °C
MP/MP Range	-95 °C
Freezing Point	N/A
Vapor Pressure	N/A
Vapor Density	> 1 g/l
Saturated Vapor Conc.	N/A
SG/Density	1.221 g/cm <sup>3</sup>
Bulk Density	N/A
Odor Threshold	N/A
Volatile%	N/A
VOC Content	N/A
Water Content	N/A
Solvent Content	N/A
Evaporation Rate	N/A
Viscosity	N/A
Partition Coefficient	N/A
Decomposition Temp.	N/A
Flash Point °F	89.6 °F
Flash Point °C	32 °C
Explosion Limits	N/A

Method: closed cup  
Method: closed cup

Flammability	N/A
Autoignition Temp	N/A
Refractive Index	1.444
Solubility	N/A

N/A = not available

**Section 10 - Stability and Reactivity**

**Stability**  
Stable  
Stable  
**Materials to Avoid**  
Strong oxidizing agents, Strong bases.

**Hazardous Decomposition Products**  
**Hazardous Decomposition Products**  
Carbon monoxide, Carbon dioxide, Hydrogen bromide gas.

**Hazardous Polymerization**  
**Hazardous Polymerization**  
Will not occur.

**Section 11 - Toxicological Information**

**Route of Exposure**  
**Skin Contact**  
Causes skin irritation.  
**Skin Absorption**  
May be harmful if absorbed through the skin.  
**Eye Contact**  
Causes eye irritation.  
**Inhalation**  
May be harmful if inhaled. Material is irritating to mucous membranes and upper respiratory tract.  
**Ingestion**  
May be harmful if swallowed.

**RTECS Number:** RZ9770000

**Toxicity Data**

Intraperitoneal - Mouse: 1250 MG/KG (LD50)  
Inhalation - Mammal: 26,800 mg/m<sup>3</sup> (LC50)

**Section 12 - Ecological Information**

No data available.

**Section 13 - Disposal Considerations**

**Appropriate Method of Disposal of Substance or Preparation**  
Contact a licensed professional waste disposal service to dispose of this material.  
Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable.  
Observe all federal, state, and local environmental regulations.

**Section 14 - Transport Information**

**DOT**  
**Proper Shipping Name:** Flammable liquids, n.o.s.  
**UN#:** 1993  
**Class:** 3  
**Packing Group:** Packing Group III  
**Hazard Label:** Flammable liquid  
**PIH:** Not PIH

**IATA**  
**Proper Shipping Name:** Flammable liquid, n.o.s.  
**IATA UN Number:** 1993  
**Hazard Class:** 3  
**Packing Group:** III

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## Section 15 - Regulatory Information

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### EU Additional Classification

Symbol of Danger: Xi

Indication of Danger

Irritant.

Risk Statements R: 10 36/37/38

Flammable. Irritating to eyes, respiratory system and skin.

Safety Statements S: 26 36

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing.

### US Classification and Label Text

Indication of Danger

Flammable. Irritant.

Risk Statements

Irritating to eyes, respiratory system and skin.

Safety Statements

Keep away from sources of ignition - no smoking. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing, gloves, and eye/face protection.

### United States Regulatory Information

SARA Listed: No

TSCA Inventory Item: Yes

### Canada Regulatory Information

WHMIS Classification

This product has been classified in accordance with the hazard criteria of the CPR, and the MSDS contains all the information required by the CPR.

DSL: Yes

NDSL: No

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## Section 16 - Other Information

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### Disclaimer

For R&D use only. Not for drug, household or other uses.

### Warranty

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 Inc., 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. Copyright 2004 Sigma-Aldrich Co. License granted to make unlimited paper copies for internal use only.

