

### 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : Bromoacetic acid

Product Number : 259357  
Brand : Aldrich

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

Telephone : +1 800-325-5832  
Fax : +1 800-325-5052  
Emergency Phone # (For both supplier and manufacturer) : (314) 776-6555

Preparation Information : Sigma-Aldrich Corporation  
Product Safety - Americas Region  
1-800-521-8956

### 2. HAZARDS IDENTIFICATION

#### Emergency Overview

##### OSHA Hazards

Target Organ Effect, Toxic by inhalation., Highly toxic by ingestion, Highly toxic by skin absorption, Respiratory sensitiser, Corrosive

##### Target Organs

Kidney, Liver

##### Other hazards which do not result in classification

Lachrymator.

##### GHS Classification

Acute toxicity, Oral (Category 2)  
Acute toxicity, Inhalation (Category 3)  
Acute toxicity, Dermal (Category 2)  
Skin corrosion (Category 1A)  
Serious eye damage (Category 1)  
Respiratory sensitization (Category 1)  
Acute aquatic toxicity (Category 1)

##### GHS Label elements, including precautionary statements

Pictogram



Signal word

Danger

Hazard statement(s)

H300 + H310 Fatal if swallowed or in contact with skin  
H314 Causes severe skin burns and eye damage.  
H331 Toxic if inhaled.  
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
H400 Very toxic to aquatic life.

Precautionary statement(s)

P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.  
P264 Wash hands thoroughly after handling.  
P273 Avoid release to the environment.  
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.  
P302 + P350 IF ON SKIN: Gently wash with plenty of soap and water.  
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P310 Immediately call a POISON CENTER or doctor/ physician.

**HMIS Classification**

**Health hazard:** 3  
**Chronic Health Hazard:** \*  
**Flammability:** 1  
**Physical hazards:** 0

**NFPA Rating**

**Health hazard:** 3  
**Fire:** 1  
**Reactivity Hazard:** 0

**Potential Health Effects**

**Inhalation** Toxic if inhaled. Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract.  
**Skin** May be fatal if absorbed through skin. Causes skin burns.  
**Eyes** Causes eye burns. Causes severe eye burns.  
**Ingestion** May be fatal if swallowed.

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**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Formula : C<sub>2</sub>H<sub>3</sub>BrO<sub>2</sub>  
Molecular Weight : 138.95 g/mol

Component	Concentration
<b>Bromoacetic acid</b>	
CAS-No.	79-08-3
EC-No.	201-175-8
Index-No.	607-065-00-X

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**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**

Take off contaminated clothing and shoes immediately. 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. Continue rinsing eyes during transport to hospital.

**If swallowed**

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

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**5. FIREFIGHTING MEASURES**

**Conditions of flammability**

Not flammable or combustible.



Colour colourless

### Safety data

pH no data available

Melting point/freezing point Melting point/range: 47 - 49 °C (117 - 120 °F) - lit.

Boiling point 208 °C (406 °F) - lit.

Flash point 113 °C (235 °F) - closed cup

Ignition temperature no data available

Autoignition temperature no data available

Lower explosion limit no data available

Upper explosion limit no data available

Vapour pressure 40 hPa (30 mmHg) at 127 °C (261 °F)

Density 1.934 g/cm<sup>3</sup>

Water solubility soluble

Partition coefficient: n-octanol/water log Pow: 0.41

Relative vapour density no data available

Odour no data available

Odour Threshold no data available

Evaporation rate no data available

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## 10. STABILITY AND REACTIVITY

### Chemical stability

Stable under recommended storage conditions.

### Possibility of hazardous reactions

no data available

### Conditions to avoid

no data available

### Materials to avoid

Strong oxidizing agents, Strong bases

### Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides, Hydrogen bromide gas  
Other decomposition products - no data available

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## 11. TOXICOLOGICAL INFORMATION

### Acute toxicity

#### Oral LD50

LD50 Oral - rat - 50 mg/kg

Remarks: Behavioral:Somnolence (general depressed activity). Behavioral:Rigidity (includes catalepsy).

#### Inhalation LC50

#### Dermal LD50

LD50 Dermal - rabbit - 59.9 mg/kg

### Other information on acute toxicity

no data available

### Skin corrosion/irritation

no data available

**Serious eye damage/eye irritation**

no data available

**Respiratory or skin sensitization**

no data available

May cause sensitization by inhalation.

**Germ cell mutagenicity**

Genotoxicity in vitro - mouse - leukocyte  
DNA damage

**Carcinogenicity**

- 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.

**Reproductive toxicity**

no data available

**Teratogenicity**

no data available

**Specific target organ toxicity - single exposure (Globally Harmonized System)**

no data available

**Specific target organ toxicity - repeated exposure (Globally Harmonized System)**

no data available

**Aspiration hazard**

no data available

**Potential health effects**

- Inhalation** Toxic if inhaled. Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract.
- Ingestion** May be fatal if swallowed.
- Skin** May be fatal if absorbed through skin. Causes skin burns.
- Eyes** Causes eye burns. Causes severe eye burns.

**Signs and Symptoms of Exposure**

Cough, Shortness of breath, Headache, Nausea, Vomiting

**Synergistic effects**

no data available

**Additional Information**

RTECS: AF5950000

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**12. ECOLOGICAL INFORMATION**

**Toxicity**

Toxicity to algae EC50 - Desmodesmus subspicatus (green algae) - 0.02 - 14.00 mg/l - 72 h

**Persistence and degradability**

no data available

**Bioaccumulative potential**

no data available

**Mobility in soil**

no data available

**PBT and vPvB assessment**

no data available

**Other adverse effects**

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Very toxic to aquatic life.

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**13. DISPOSAL CONSIDERATIONS**

**Product**

Offer surplus and non-recyclable solutions to a licensed disposal company. 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.

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**14. TRANSPORT INFORMATION**

**DOT (US)**

UN number: 3425 Class: 8 Packing group: II  
Proper shipping name: Bromoacetic acid, solid  
Marine pollutant: No  
Poison Inhalation Hazard: No

**IMDG**

UN number: 3425 Class: 8 Packing group: II EMS-No: F-A, S-B  
Proper shipping name: BROMOACETIC ACID, SOLID  
Marine pollutant: No

**IATA**

UN number: 3425 Class: 8 Packing group: II  
Proper shipping name: Bromoacetic acid, solid

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**15. REGULATORY INFORMATION**

**OSHA Hazards**

Target Organ Effect, Toxic by inhalation., Highly toxic by ingestion, Highly toxic by skin absorption, Respiratory sensitiser, Corrosive

**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, Chronic Health Hazard

**Massachusetts Right To Know Components**

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

**Pennsylvania Right To Know Components**

Bromoacetic acid

CAS-No.  
79-08-3

Revision Date  
2007-03-01

**New Jersey Right To Know Components**

CAS-No.

Revision Date

**California Prop. 65 Components**

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

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**16. OTHER INFORMATION****Further information**

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