

**SIGMA-ALDRICH**

**Material Safety Data Sheet**

Version 3.0  
Revision Date 01/01/2009  
Print Date 01/27/2010

**1. PRODUCT AND COMPANY IDENTIFICATION**

Product name : **3-Bromopropionic acid**  
Product Number : 101281  
Brand : Aldrich  
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 :  $C_3H_5BrO_2$   
Molecular Weight : 152.97 g/mol

CAS-No.	EC-No.	Index-No.	Concentration
<b>3-Bromopropionic acid</b>			
590-92-1	209-694-1	-	-

**3. HAZARDS IDENTIFICATION**

**Emergency Overview**

**OSHA Hazards**  
Corrosive

**HMS Classification**

**Health Hazard:** 3  
**Flammability:** 0  
**Physical hazards:** 0

**NFPA Rating**

**Health Hazard:** 3  
**Fire:** 2  
**Reactivity Hazard:** 0

**Potential Health Effects**

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

Aldrich - 101281  
Delivery 0834481191-000010 Purchase Order CCS-6443

Sigma-Aldrich Corporation  
www.sigma-aldrich.com

Page 1 of 6

**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. Consult a physician.

**In case of eye contact**

Continue rinsing eyes during transport to hospital. Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

**If swallowed**

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

**5. FIRE-FIGHTING MEASURES**

**Flammable properties**

Flash point 66 °C (151 °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**

Use water spray to cool unopened containers.

**6. ACCIDENTAL RELEASE MEASURES**

**Personal precautions**

Use personal protective equipment. Avoid dust formation. Avoid breathing dust. Ensure adequate ventilation. Remove all sources of ignition. 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**

Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13). Keep in suitable, closed containers for disposal.

**7. HANDLING AND STORAGE**

**Handling**

Avoid formation of dust and aerosols.

Provide appropriate exhaust ventilation at places where dust is formed. 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. Store in cool place.

Aldrich - 101281  
Delivery 0834481191-000010 Purchase Order CCS-6443

Sigma-Aldrich Corporation  
www.sigma-aldrich.com

Page 2 of 6

FEB 08 2010  
Safety & Environmental  
Health

00001446

## 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 particle respirator type N100 (US) or type P3 (EN 143) 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 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 flakes  
Colour beige

### Safety data

pH no data available  
Melting point 58 - 62 °C (136 - 144 °F)  
Boiling point no data available  
Flash point 66 °C (151 °F) - closed cup  
Ignition temperature no data available  
Lower explosion limit no data available  
Upper explosion limit no data available  
Density 1.48 g/mL at 25 °C (77 °F)  
Water solubility no data available

## 10. STABILITY AND REACTIVITY

### Storage stability

Stable under recommended storage conditions.

### Conditions to avoid

Heat, flames and sparks.

### Materials to avoid

Bases, Reducing agents, Oxidizing agents

## Hazardous decomposition products

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

## 11. TOXICOLOGICAL INFORMATION

### Acute toxicity

no data available

### Irritation and corrosion

no data available

### Sensitisation

no data available

### Chronic exposure

Carcinogenicity - mouse - Intraperitoneal

Tumorigenic: Equivocal tumorigenic agent by RTECS criteria. Lungs, Thorax, or Respiration: Tumors.

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

Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin., Cough, Shortness of breath, Headache, Nausea

### Potential Health Effects

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

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

**Eyes** Causes eye burns.

**Ingestion** May be harmful if swallowed. Causes burns.

### Additional Information

RTECS: UE7875000

## 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**

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. 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: 3261 Class: 8 Packing group: II  
 Proper shipping name: Corrosive solid, acidic, organic, n.o.s. (3-Bromopropionic acid)  
 Marine pollutant: No  
 Poison Inhalation Hazard: No

**IMDG**

UN-Number: 3261 Class: 8 Packing group: II EMS-No: F-A, S-B  
 Proper shipping name: CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S. (3-Bromopropionic acid)  
 Marine pollutant: No

**IATA**

UN-Number: 3261 Class: 8 Packing group: II  
 Proper shipping name: Corrosive solid, acidic, organic n.o.s. (3-Bromopropionic acid)

**15. REGULATORY INFORMATION****OSHA Hazards**

Corrosive

**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**

Acute Health Hazard

**Massachusetts Right To Know Components**

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

**Pennsylvania Right To Know Components**

	CAS-No.	Revision Date
3-Bromopropionic acid	590-92-1	

**New Jersey Right To Know Components**

	CAS-No.	Revision Date
3-Bromopropionic acid	590-92-1	

**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.

Aldrich - 101281	Sigma-Aldrich Corporation	Page 5 of 6
Delivery 0834481191-000010 Purchase Order CCS-6443	www.sigma-aldrich.com	

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.

Sigma-Aldrich Corporation  
 www.sigma-aldrich.com

Aldrich - 101281  
 Delivery 0834481191-000010 Purchase Order CCS-6443

Page 6 of 6

RECEIVED  
 FEB 08 2010  
 Safety & Environmental  
 Health

00001447

