# Bromoacetic acid: sc-210962



## MATERIAL SAFETY DATA SHEET

The Power to Question

## 1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Bromoacetic acid

Product Number: sc-210962

Supplier: Santa Cruz Biotechnology, Inc.

2145 Delaware Avenue Santa Cruz, CA 95060

800.457.3801 or 831.457.3800

**Emergency:** ChemWatch

Within the US & Canada: 877-715-9305

Outside the US & Canada: +800 2436 2255 (1-800-CHEMCALL) or call +613 9573 3112

## 2. HAZARDS IDENTIFICATION

# **Emergency Overview**

## **OSHA Hazards**

Target Organ Effect, Toxic by inhalation., Highly toxic by ingestion, Highly toxic by skin absorption, Respiratory sensitizer. 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/ vapors/ 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.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Formula: C2H3BrO2 Molecular Weight: 138.95

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

## 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.

## 5. FIREFIGHTING MEASURES

## **Conditions of flammability**

Not flammable or combustible.

## Suitable extinguishing media

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

## Special protective equipment for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

#### **Hazardous combustion products**

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

## 6. ACCIDENTAL RELEASE MEASURES

## **Personal precautions**

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

#### **Environmental precautions**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

## Methods and materials for containment and cleaning up

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

## 7. HANDLING AND STORAGE

#### Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed.

#### Conditions for safe storage

Keep container tightly closed in a dry and well-ventilated place. Light sensitive. Hygroscopic. Handle and store under inert gas. Desiccate at room temperature.

## 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. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

#### Eve protection

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

#### Skin and body protection

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

#### Hygiene measures

n-octanol/water

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

## 9. PHYSICAL AND CHEMICAL PROPERTIES

| Form                     | crystalline        | рН                    | no data available |
|--------------------------|--------------------|-----------------------|-------------------|
| Melting point/range      | 47 - 49 °C - lit   | Boiling point         | 208 °C - lit      |
| Flash point              | 113 °C- closed cup | Ignition temperature  | no data available |
| Autoignition temperature | no data available  | Lower explosion limit | no data available |
| Upper explosion limit    | no data available  | Vapor pressure        | 40 hPa at 127 °C  |
| Density                  | 1.934 g/cm3        | Water solubility      | soluble           |
| Relative vapor density   | no data available  | Odor                  | no data available |
| Odor Threshold           | no data available  | Evaporation rate      | no data available |
| Partition coefficient    | log Pow: 0.41      |                       |                   |

## 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

## 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 no data available

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

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

Additional Information RTECS: AF5950000

## 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.

## 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.

## 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

#### 15. REGULATORY INFORMATION

#### **OSHA Hazards**

Target Organ Effect, Toxic by inhalation, Highly toxic by ingestion, Highly toxic by skin absorption, Respiratory sensitizer, 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

## **New Jersey Right To Know Components**

Bromoacetic acid CAS-No.: 79-08-3

## 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.

## **16. OTHER INFORMATION**

The above information is believed to be correct but does not purport to be complete and should be used only as a guide. The burden of safe use of this material rests entirely with the user.

7/11/2012