

β -Bromoethylphosphoryl Dichloride: sc-210963



The Power to Question

MATERIAL SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

Catalog Number:

sc-210963

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

WHMIS Classification

E

Corrosive Material

Corrosive

HMIS Classification

Health Hazard: 3

Flammability: 1

Physical Hazards: 2

Potential health effects

Inhalation: Harmful if inhaled. Material is extremely irritating to the respiratory tract.

Skin: Harmful if absorbed through skin. Causes severe skin burns.

Eyes: Causes severe eye burns.

Ingestion: Harmful if swallowed.

GHS Classification

Acute toxicity, Inhalation (Category 4)

Acute toxicity, Dermal (Category 4)

Acute toxicity, Oral (Category 4)

Skin corrosion (Category 1B)

Serious eye damage (Category 1)

GHS Label elements, including precautionary statements

Signal word

Danger

Hazard statement

H302/H312

Harmful if swallowed or in contact with skin.

H314

Causes severe skin burns and eye damage.

H332

Harmful if inhaled.

Precautionary statements

P280

Wear protective gloves/ protective clothing/ eye protection/ face protection.

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.

GHS Label Pictogram



3. COMPOSITION/INFORMATION ON INGREDIENTS

Molecular Formula:

C₂H₄BrCl₂O₂P

Molecular Weight:

241.84

CAS Registry #:

4167-02-6

EC#:

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Synonyms: Phosphorodichloridic Acid 2-Bromoethyl Ester; 2-Bromoethyl Dichlorophosphate; 2-Bromoethyl Phosphorodichloridate; β -Bromoethyl Phosphoric Acid Dichloride; β -Bromoethyl Phosphoryl Dichloride

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

Rinse thoroughly 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

Conditions of flammability

May emit a flammable gas in the presence of water or water vapor. Keep away from heat/sparks/open flame/hot surface/air/water. No smoking.

Suitable extinguishing media

Dry powder Carbon dioxide (CO₂)

Extinguishing media which shall not be used for safety reasons

Water

Special protective equipment for fire-fighters

Wear self contained breathing apparatus for fire fighting if necessary.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

Use personal protective equipment. Avoid dust or aerosol formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation.

Environmental precautions

Do not let product enter drains.

Methods and materials for containment and cleaning up

Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). 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 or aerosols. Provide appropriate exhaust ventilation at places where dust/aerosol is formed. Normal measures for preventative fire protection.

Conditions for safe storage

Keep container tightly close in a dry and well-ventilated place. Moisture sensitive. Store at 2-8° C under inert atmosphere.

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) 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.

Eye protection

Tightly fitting safety goggles. Faceshield (8-inch minimum). 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, Flame retardant protective clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Hygiene measures

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

Specific engineering controls

Use mechanical exhaust or laboratory fumehood to avoid exposure.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	liquid	pH	N/A
Boiling point	N/A	Ignition temperature	N/A
Upper explosion limit	N/A	Density	N/A
Melting point	75-78° C	Flash point	N/A
Lower explosion limit	N/A	Vapor pressure	N/A
Water solubility	N/A		

10. STABILITY AND REACTIVITY**Chemical stability**

Stable under recommended storage conditions.

Conditions to avoid

no data available

Materials to avoid

Strong oxidizing agents. Strong bases. Amines. Water.

Hazardous decomposition products

Hazardous decomposition products formed under fire conditions: carbon oxides, phosphorous oxides, hydrogen chloride, hydrogen bromide.

11. TOXICOLOGICAL INFORMATION**Acute toxicity**

no data available

Irritation and corrosion

no data available

Sensitization

no data available

Carcinogenicity

IARC: To the best of our knowledge, this compound has not been identified as a possible or potential human carcinogen by IARC.

Reproductive toxicity

no data available

Potential health effects

Inhalation: Harmful if inhaled. Material is extremely irritating to the respiratory tract.

Skin: Harmful if absorbed through skin. Causes severe skin burns.

Eyes: Causes severe eye burns.

Ingestion: Harmful if swallowed.

Signs and Symptoms of Exposure

Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin, spasm, inflammation and edema of the larynx, spasm, inflammation and edema of the bronchi, pneumonitis, pulmonary edema, burning sensation, cough, wheezing, laryngitis, shortness of breath, headache, nausea. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Additional Information

RTECS: substance is not listed

12. ECOLOGICAL INFORMATION

Toxicity

no data available

Bioaccumulative potential

no data available

PBT and vPvB assessment

no data available

Persistence and degradability

no data available

Mobility in soil

no data available

Other adverse effects

no data available

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.

Contaminated packaging

Dispose of as unused product.

14. TRANSPORT INFORMATION

DOT (US)

UN-Number: 3265

Class: 8

Packing group: II

Proper shipping name: Corrosive liquid, acidic, organic, n.o.s. (β -Bromoethylphosphoryl Dichloride)

Marine pollutant: No

Poison Inhalation Hazard: No

IMDG

UN-Number: 3265

Class: 8

Packing group: II

EMS-No: F-A, S-B

Proper shipping name: CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (β -Bromoethylphosphoryl Dichloride)

Marine pollutant: No

IATA

UN-Number: 3265

Class: 8

Packing group: II

Proper shipping name: Corrosive liquid, acidic, organic, n.o.s. (β -Bromoethylphosphoryl Dichloride)

15. REGULATORY INFORMATION

DSL Status

Product is not on the Canadian DSL or NDSL list.

WHMIS Classification

E

Corrosive Material

Corrosive

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.

6/12/2012