# 4-Hydroperoxy Cyclophosphamide: sc-206885



# MATERIAL SAFETY DATA SHEET

# 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** 4-Hydroperoxy Cyclophosphamide

Catalog Number: sc-206885

Supplier: Santa Cruz Biotechnology, Inc.

> 2145 Delaware Avenue Santa Cruz, California 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**

D<sub>1</sub>B Toxic material causing immediate and serious toxic effects Toxic if ingested D2B Mutagen

#### **GHS Hazard Class**

Acute toxicity, oral (category 4) Germ cell mutagenicity (category 2)

## GHS Label elements, including precautionary statements

Signal Word Warning

**Hazard Statements** 

H302 Harmful if swallowed

H341 Suspected of causing genetic defects

**Precautionary Statements** 

P301/P312 IF SWALLOWED: call a POISON CENTER or doctor/physician if you feel unwell

P202 Do not handle until all safety precautions have been read and understood

Use personal protective equipment as required

P308/P313 If exposed or concerned: Get medical advice/attention

#### **HMIS Classification**

**Health Hazard:** 3 Flammability: 1 **Physical Hazards:** 0

## Potential health effects

May be harmful if inhaled. May cause respiratory tract irritation. Inhalation

Ingestion Toxicl if swallowed.

Skin May be harmful if absorbed through skin. May cause skin irritation.

Eyes May cause eye irritation.

# 3. COMPOSITION/INFORMATION ON INGREDIENTS

Molecular Formula:  $C_7H_{15}CI_2N_2O_4P$ 

293.08 Molecular Weight:

**CAS Registry #:** 39800-16-3

EC#:

2-[Bis(2-chloroethyl)amino]tetrahydro-2-oxido-2H-1,3,2-oxazaphosphorin-4-yl

**Synonyms:** Hydroperoxide□; 4-Hydroperoxycyclofosfamide; □Asta 6496□;

# 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

## 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.

## 6. ACCIDENTAL RELEASE MEASURES

## Personal precautions

Use personal protective equipment. Avoid dust or aerosol formation. Avoid breathing vapours, 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. Store at -85°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 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.

#### Eye 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

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

## Specific engineering controls

Use mechanical exhaust or laboratory fumehood to avoid exposure.

# 9. PHYSICAL AND CHEMICAL PROPERTIES

#### **Appearance**

White solid

## Safety data

pН	N/A	Melting point	N/A
Boiling point	N/A	Flash point	N/A
Ignition temperature	N/A	Lower explosion limit	N/A
Upper explosion limit	N/A	Vapour pressure	N/A
Density	N/A	Water solubility	N/A

# 10. STABILITY AND REACTIVITY

#### **Chemical stability**

Stable under recommended storage conditions.

#### Conditions to avoid

Handle at cold temperatures, unstable at room temperature for extended periods

#### Materials to avoid

Strong oxidizing agents. Strong reducing agents.

#### Hazardous decomposition products

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

## 11. TOXICOLOGICAL INFORMATION

#### **Acute toxicity**

LD50 (intraperitoneal - mouse) 76 mg/kg

#### 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

#### **Germ Cell Mutagenicity**

Studies have shown mutagenic effects in mammals.

#### Potential health effects

**Inhalation** May be harmful if inhaled. May cause respiratory tract irritation.

**Ingestion** Toxic if swallowed.

**Skin** May be harmful if absorbed through skin. May cause skin irritation.

**Eyes** May cause eye irritation.

## Signs and Symptoms of Exposure

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

#### **Additional Information**

RTECS: RP5900000

# 12. ECOLOGICAL INFORMATION

#### **Toxicity**

no data available

## 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

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: 3464 Class: 6.1 Packing group: III

Proper shipping name: Organophosphorous compound, toxic, solid n.o.s. (4-Hydroperoxy Cyclophosphamide)

Marine pollutant: No

Poison Inhalation Hazard: No

MDG

UN-Number: 3464 Class: 6.1 Packing group: III EMS-No: F-A, S-A

Proper shipping name: Organophosphorous compound, toxic, solid n.o.s. (4-Hydroperoxy Cyclophosphamide)

Marine pollutant: No

**IATA** 

UN-Number: 3464 Class: 6.1 Packing group: III

Proper shipping name: Organophosphorous compound, toxic, solid n.o.s. (4-Hydroperoxy Cyclophosphamide)

# 15. REGULATORY INFORMATION

# **DSL Status**

Product is not on the Canadian DSL list.

## WHMIS Classification

Not WHMIS

# **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.

12/06/2010