# Cyclophosphamide-d4: sc-211153



#### The Power to Question

# MATERIAL SAFETY DATA SHEET

## 1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Cyclophosphamide-d4

Product Number: sc-211153

**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

Classification of the Substance or Mixture and Label Elements

GHS Hazards Classification (According to EU Regulation 1272/2008 and US OSHA 1910.1200)

Acute toxicity, Oral (Category 3) Carcinogenicity (Category 1B)

GHS Hazards Identification (According to EU Regulation 1272/2008 and US OSHA 1910.1200)

Pictogram



Signal Word Danger

**GHS Hazard Statements** 

H301 Toxic if swallowed. H350 May cause cancer.

**GHS Precautionary Statements** 

P201 Obtain special instructions before use.

P301/310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

**HMIS Classification** 

Health Hazard: 2
Chronic Health Hazard: \*
Flammability: 1
Physical Hazards: 0

WHMIS Classification (Canada)

D1B Toxic material causing immediate and serious toxic effects.

D2A Toxic by ingestion, teratogen, carcinogen.

**Potential Health Effects** 

Inhalation May be harmful if inhaled. May cause respiratory tract irritation.Skin May be harmful if absorbed through the skin. May cause skin irritation.

**Eyes** May cause eye irritation. **Ingestion** Toxic if swallowed.

# 3. COMPOSITION/INFORMATION ON INGREDIENTS

Formula: C7H11D4Cl2N2O2P

Chemical Weight: 265.11 CAS #: 173547-45-0

# 4. FIRST AID MEASURES

#### **General Advice**

Consult a physician. If medical attention is required, show this safety data sheet to the doctor. Move out of the dangerous area.

#### If Inhaled

If inhaled, move person to fresh air. If not breathing, give artificial respiration and consult a physician.

#### In Case of Skin Contact

Wash affected area with soap and water. Consult a physician.

#### In Case of Eye Contact

Immediately rinse eyes with plenty of water for at least 15 minutes. Consult a physician.

#### If Swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

## **5. FIREFIGHTING MEASURES**

## Suitable extinguishing media

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

#### **Advice for Firefighters**

Wear self contained breathing apparatus for fire fighting if necessary.

## 6. ACCIDENTAL RELEASE MEASURES

#### Personal Precautions, Protective Equipment and Emergency Procedures

Use recommended personal protective equipment (see Section 8). Prevent the formation of dusts and mists. Avoid breathing vapors.

#### **Environmental Precautions**

Do not let product enter drains.

## Methods and Materials for Containment and Cleaning Up

Contain the spill and then collect using non-combustible absorbent material (such as clay, diatomaceous earth, vermiculite or other appropriate material). Place material in a suitable, sealable container and then dispose according to local/national regulations and guidance (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, Including any Incompatibilities

Keep container tightly closed in a dry and well ventilated place. Store at -20°C.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Contains no components with established occupational exposure limits.

#### **Appropriate Engineering Controls**

A laboratory fumehood or other appropriate form of local exhaust ventilation should be used to avoid exposure.

# **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 or 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, if needed after risk assessment. 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 practices. Wash hands before breaks and at the end of the workday.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

| Form                         | Solid             | Odor                         | No data available |
|------------------------------|-------------------|------------------------------|-------------------|
| Odor Threshold               | No data available | pH                           | No data available |
| Melting Point/Freezing Point | 41-45 °C          | Boiling Point/Boiling Range  | No data available |
| Flash point                  | No data available | Evaporation Rate             | No data available |
| Flammability (Solid/Gas)     | No data available | Upper/Lower Explosive Limits | No data available |
| Vapor Pressure               | No data available | Vapor Density                | No data available |
| Relative Density             | No data available | Auto-Ignition Temperature    | No data available |
| Decomposition Temperature    | No data available | Viscosity                    | No data available |
| Explosive Properties         | No data available | Oxidizing Properties         | No data available |
| Solubility                   | No data available |                              |                   |

# 10. STABILITY AND REACTIVITY

#### **Chemical Stability**

Stable under recommended storage conditions.

#### **Conditions to Avoid**

No data available

# **Incompatible Materials**

Strong oxidizing materials.

## **Hazardous Decomposition Products**

Hazardous decomposition product formed under fire conditions: carbon oxides, nitrogen oxides, phosphorus oxides, hydrogen chloride

# 11. TOXICOLOGICAL INFORMATION

# **Acute Toxicity**

LD50 (oral - rat) 94 mg/kg LD50 (oral - mouse) 350 mg/kg LD50 (oral - dog) 44 mg/kg

# Corrosion/Irritation

no data available

# Sensitization

no data available

#### Carcinogenicity

IARC: 1 - Group 1: Carcinogenic to humans (Cyclophosphamide monohydrate)

## Reproductive Toxicity/Teratogenicity

May cause congenital malformation in the fetus.

#### **Potential Health Effects**

Inhalation May be harmful if inhaled. May cause respiratory tract irritation.Skin May be harmful if absorbed through the skin. May cause skin irritation.

**Eyes** May cause eye irritation. **Ingestion** Toxic if swallowed.

## Signs and Symptoms of Exposure

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

Additional Information RTECS: RP6157750

# 12. ECOLOGICAL INFORMATION

Toxicity Persistence and degradability

no data available

Bioaccumulative potential
no data available

PBT and vPvB assessment
no data available

no data available

Other adverse effects
no data available

no data available

#### 13. DISPOSAL CONSIDERATIONS

#### **Product**

Offer surplus and non-recyclable solutions to 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: Organophosphorus compound, toxic, solid, n.o.s. (Cyclophosphamide monohydrate)

Reportable Quantity (RQ): 10 lbs

Marine pollutant: No

Poison Inhalation Hazard: No

IMDG

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

Proper shipping name: ORGANOPHOSPHORUS COMPOUND, TOXIC, SOLID, N.O.S. (Cyclophosphamide

monohydrate) Marine pollutant: No

**IATA** 

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

Proper shipping name: Organophosphorus compound, toxic, solid, n.o.s. (Cyclophosphamide monohydrate)

## 15. REGULATORY INFORMATION

## Canada-DSL/NDSL Status

Product is on the Canadian DSL/NDSL.

#### **WHMIS Classification**

D1B Toxic material causing immediate and serious toxic effects.

D2A Toxic by ingestion, teratogen, carcinogen.

## 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.

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