



# SZABO SCANDIC

Part of Europa Biosite

## Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten!  
See the following pages for more information!



### Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

### Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

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# Cadmium chloride hemi(pentahydrate): sc-210997



The Power to Question

## MATERIAL SAFETY DATA SHEET

### 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** Cadmium chloride hemi(pentahydrate)  
**Product Number:** sc-210997  
**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

Carcinogen, Target Organ Effect, Highly toxic by inhalation, Toxic by ingestion, Teratogen, Reproductive hazard, Mutagen

#### Target Organs

Lungs, Kidney, Nerves.

#### GHS Classification

Acute toxicity, Oral (Category 3)  
Acute toxicity, Inhalation (Category 1)  
Germ cell mutagenicity (Category 1B)  
Carcinogenicity (Category 1B)  
Reproductive toxicity (Category 1B)  
Specific target organ toxicity - repeated exposure (Category 1)  
Acute aquatic toxicity (Category 1)

#### GHS Label elements, including precautionary statements

Pictogram



Signal word Danger

#### Hazard statement(s)

H301 Toxic if swallowed.  
H330 Fatal if inhaled.  
H340 May cause genetic defects.  
H350 May cause cancer.  
H360 May damage fertility or the unborn child.  
H372 Causes damage to organs through prolonged or repeated exposure.  
H400 Very toxic to aquatic life.

#### Precautionary statement(s)

P201 Obtain special instructions before use.  
P260 Do not breathe dust/ fume/ gas/ mist/ vapors/ spray.  
P273 Avoid release to the environment.  
P284 Wear respiratory protection.  
P310 Immediately call a POISON CENTER or doctor/ physician.

**HMIS Classification**

**Health hazard:** 4  
**Chronic Health Hazard:** \*  
**Flammability:** 0  
**Physical hazards:** 0

**NFPA Rating**

**Health hazard:** 4  
**Fire:** 0  
**Reactivity Hazard:** 0

**Potential Health Effects**

**Inhalation** May be fatal if inhaled. May cause respiratory tract irritation.  
**Skin** May be harmful if absorbed through skin. May cause skin irritation.  
**Eyes** May cause eye irritation.  
**Ingestion** Toxic if swallowed.

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

**Formula:** CdCl<sub>2</sub>·21/2H<sub>2</sub>O

**Molecular Weight:** 228.36

<i>CAS-No.</i>	<i>EC-No.</i>	<i>Index-No.</i>	<i>Concentration</i>
<b>Cadmium chloride hemipentahydrate</b> 7790-78-5	233-296-7	048-008-00-3	-

**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. Take victim immediately to hospital. Consult a physician.

**In case of eye contact**

Flush eyes with water as a precaution.

**If swallowed**

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: hydrogen chloride gas, cadmium/cadmium oxides

**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. Hygroscopic. Handle under inert gas. Protect from moisture. Air sensitive. Desiccate at room temperature.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Components with workplace control parameters

Components	CAS-No.	Value	Control parameters	Basis
Cadmium chloride hemipentahydrate	7790-78-5	TWA	0.0020 mg/m <sup>3</sup>	USA. ACGIH Threshold Limit Values (TLV)
Remarks	Suspected human carcinogen			
		TWA	0.01 mg/m <sup>3</sup>	USA. ACGIH Threshold Limit Values (TLV)
	Kidney damage Substances for which there is a Biological Exposure Index or Indices (see BEI® section) Suspected human carcinogen varies			
		TWA	0.002 mg/m <sup>3</sup>	USA. ACGIH Threshold Limit Values (TLV)
	Kidney damage Substances for which there is a Biological Exposure Index or Indices (see BEI® section) Suspected human carcinogen varies			
	Potential Occupational Carcinogen See Appendix A			
	Potential Occupational Carcinogen See Appendix A			

### 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. If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an Industrial Hygienist familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

#### 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

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

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Form	solid	pH	no data available
Boiling point	no data available	Flash point	no data available
Ignition temperature	no data available	Lower explosion limit	no data available
Vapor pressure	13 hPa at 656 °C	Upper explosion limit	no data available
Density	3.327 g/cm <sup>3</sup>	Water solubility	no data available
Relative vapor density	no data available	Odor	no data available
Odor Threshold	no data available	Evaporation rate	no data available
Auto-ignition temperature	no data available	Partition coefficient	no data available
Melting point	no data available	n-octanol/water	
Freezing point	no data available		

## 10. STABILITY AND REACTIVITY

### Chemical stability

Stable under recommended storage conditions.

### Possibility of hazardous reactions

no data available

### Conditions to avoid

Air Avoid moisture.

### Materials to avoid

Oxidizing agents

### Hazardous decomposition products

Hazardous decomposition products formed under fire conditions: hydrogen chloride gas, cadmium/cadmium oxides

### Other decomposition products

no data available

## 11. TOXICOLOGICAL INFORMATION

### Acute toxicity

**LD50 Oral** - rat - 665 mg/kg

**Inhalation LC50** no data available

**Dermal LD50** no data available

**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

no data available

### Germ cell mutagenicity

May alter genetic material. In vivo tests showed mutagenic effects

### Carcinogenicity

IARC: 1 - Group 1: Carcinogenic to humans (Cadmium chloride hemipentahydrate)

ACGIH: 1 - Group 1: Carcinogenic to humans (Cadmium chloride hemipentahydrate)

NTP: Known to be human carcinogen (Cadmium chloride hemipentahydrate)  
Known to be human carcinogen The reference note has been added by TD based on the background information of the NTP. (Cadmium chloride hemipentahydrate)

OSHA: 1910.1027 (Cadmium chloride hemipentahydrate)

### Reproductive toxicity

May cause reproductive disorders.

### Teratogenicity

May cause congenital malformation in the fetus. Presumed human reproductive toxicant

### Specific target organ toxicity - single exposure (Globally Harmonized System)

no data available

**Specific target organ toxicity - repeated exposure (Globally Harmonized System)**

Causes damage to organs through prolonged or repeated exposure.

**Aspiration hazard**

no data available

**Potential health effects**

**Inhalation** May be fatal 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.

**Synergistic effects**

no data available

**Additional Information**

**RTECS:** EV0178000

**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**

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: 2570

Class: 6.1

Packing group: III

Proper shipping name: Cadmium compounds (Cadmium chloride hemipentahydrate)

Reportable Quantity (RQ): 10 lbs

Marine pollutant: No

Poison Inhalation Hazard: No

**IMDG**

UN number: 2570

Class: 6.1

Packing group: III

EMS-No: F-A, S-A

Proper shipping name: CADMIUM COMPOUND (Cadmium chloride hemipentahydrate)

Marine pollutant: No

**IATA**

UN number: 2570

Class: 6.1

Packing group: III

Proper shipping name: Cadmium compound (Cadmium chloride hemipentahydrate)

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

Carcinogen, Target Organ Effect, Highly toxic by inhalation, Toxic by ingestion, Teratogen, Reproductive hazard, Mutagen

**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**

The following components are subject to reporting levels established by SARA Title III, Section 313:

Cadmium chloride hemipentahydrate CAS-No. 7790-78-5

**SARA 311/312 Hazards**

Acute Health Hazard, Chronic Health Hazard

**Massachusetts Right To Know Components**

Cadmium chloride hemipentahydrate CAS-No. 7790-78-5

**Pennsylvania Right To Know Components**

Cadmium chloride hemipentahydrate CAS-No. 7790-78-5

**New Jersey Right To Know Components**

Cadmium chloride hemipentahydrate CAS-No. 7790-78-5

**California Prop. 65 Components**

WARNING! This product contains a chemical known to the State of California to cause cancer.

Cadmium chloride hemipentahydrate CAS-No. 7790-78-5

**California Prop. 65 Components**

Cadmium chloride hemipentahydrate CAS-No. 7790-78-5

WARNING! This product contains a chemical known to the State of California to cause birth defects or 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.*

11/14/2013