

# 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 oxide: sc-239460



## MATERIAL SAFETY DATA SHEET

The Power to Question

## 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** Cadmium oxide **Product Number:** sc-239460

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, Mutagen

#### **Target Organs**

Kidney injury may occur, Damage to the lungs, Kidney, Lungs

#### **GHS Classification**

Acute toxicity, Oral (Category 3)
Acute toxicity, Inhalation (Category 2)
Germ cell mutagenicity (Category 2)
Carcinogenicity (Category 1B)

Reproductive toxicity (Category 2)

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.

H341 Suspected of causing genetic defects.

H350 May cause cancer.

H361 Suspected of damaging 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.

P281 Use personal protective equipment as required.

P284 Wear respiratory protection.

P310 Immediately call a POISON CENTER or doctor/ physician.

**HMIS Classification** 

Health hazard: 3
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

**Synonyms:** Cadmium fume

Formula: CdO Molecular Weight: 128.41

CAS-No. EC-No. Index-No. Concentration

Cadmium oxide

1306-19-0 215-146-2 048-002-00-0

Included in the Candidate List of Substances of Very High Concern (SVHC) according to Regulation (EC) No.

1907/2006 (REACH)

#### 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: 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. Keep in a dry place. Store at room temperature.

#### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Components with workplace control parameters

Components	CAS-No.	Value	Control parameters	Basis		
Cadmium oxide non-pyrophoric	1306-19-0	TWA	0.0020 mg/m3	USA. ACGIH Threshold Limit Values (TLV)		
Remarks	Suspected human carcinogen					
		TWA	0.01 mg/m3	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/m3	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					

#### 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

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

#### 9. PHYSICAL AND CHEMICAL PROPERTIES

Form	powder	рН	no data available
Melting point/freezing point	no data available	Boiling point	no data available
Flash point	not applicable	Ignition temperature	no data available
Auto-ignition temperature	no data available	Lower explosion limit	no data available
Upper explosion limit	no data available	Vapor pressure	no data available

Density (25 °C ) 8.15 g/cm3 Water solubility no data available Odor Threshold no data available Evaporation rate no data available

Partition coefficient: no data available

n-octanol/water

#### 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

Oxidizing agents

### Hazardous decomposition products

Hazardous decomposition products formed under fire conditions: cadmium/cadmium oxides

## Other decomposition products

no data available

#### 11. TOXICOLOGICAL INFORMATION

#### **Acute toxicity**

Oral LD50 - rat - 72 mg/kg

Inhalation LC50 - mouse - 2 h - 250 mg/m3

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

In vitro tests showed mutagenic effects

#### Carcinogenicity

Carcinogen

IARC: 1 - Group 1: Carcinogenic to humans (Cadmium oxide non-pyrophoric)

NTP: Known to be human carcinogen (Cadmium oxide non-pyrophoric)

The reference note has been added by TD based on the background information of the NTP.

OSHA: 1910.1027 (Cadmium oxide non-pyrophoric)

#### Reproductive toxicity

no data available

#### **Teratogenicity**

Suspected 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.

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

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

## Signs and Symptoms of Exposure

Kidney injury may occur, Damage to the lungs.

Synergistic effects no data available

**Additional Information RTECS:** EV1925000

#### 12. ECOLOGICAL INFORMATION

PBT and vPvB assessment

no data available

Bioaccumulative potential

no data available

**Toxicity** 

Toxicity to fish

LC50- Pimephales promelas (fathead minnow)

7.029 mg/l - 96.0 h

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 oxide non-pyrophoric)

Reportable Quantity (RQ): 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 oxide non-pyrophoric)

Marine pollutant: No

IATA

UN number: 2570 Class: 6.1 Packing group: III

Proper shipping name: Cadmium compound (Cadmium oxide non-pyrophoric)

#### 15. REGULATORY INFORMATION

#### **OSHA Hazards**

Carcinogen, Target Organ Effect, Highly toxic by inhalation, Toxic by ingestion, Teratogen, Mutagen **SARA 302 Components** 

The following components are subject to reporting levels established by SARA Title III, Section 302: CAS-No. 1306-19-0

Cadmium oxide non-pyrophoric

#### **SARA 313 Components**

The following components are subject to reporting levels established by SARA Title III. Section 313: Cadmium oxide non-pyrophoric CAS-No. 1306-19-0

#### SARA 311/312 Hazards

Acute Health Hazard, Chronic Health Hazard

**Massachusetts Right To Know Components** 

Cadmium oxide non-pyrophoric CAS-No. 1306-19-0

## Pennsylvania Right To Know Components

Cadmium oxide non-pyrophoric CAS-No. 1306-19-0

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

Cadmium oxide non-pyrophoric CAS-No. 1306-19-0

#### California Prop. 65 Components

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

Cadmium oxide non-pyrophoric CAS-No. 1306-19-0

## California Prop. 65 Components

WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

Cadmium oxide non-pyrophoric CAS-No. 1306-19-0

## **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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