

# Sodium selenite pentahydrate: sc-229317



The Power to Question

## MATERIAL SAFETY DATA SHEET

### 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** Sodium selenite pentahydrate  
**Product Number:** sc-229317  
**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. COMPOSITION/INFORMATION ON INGREDIENTS

**Formula:** Na<sub>2</sub>SeO<sub>3</sub> · 5H<sub>2</sub>O

**Molecular Weight:** 263.01 g/mol

<u>CAS-No.</u>	<u>EC-No.</u>	<u>Index-No.</u>	<u>Concentration</u>
<b>Sodium selenite pentahydrate</b> 26970-82-1	233-267-9	034-003-00-3	-

### 3. HAZARDS IDENTIFICATION

#### Emergency Overview

#### OSHA Hazards

Target Organ Effect, Highly toxic by inhalation, Highly toxic by ingestion, Skin sensitizer

#### Target Organs

Liver, Blood, Kidney, Eyes

#### 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. May be fatal if absorbed through skin.  
**Eyes** May cause eye irritation.  
**Ingestion** May be fatal if swallowed.

### 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****Flammable properties**

Flash point not applicable

Ignition temperature no data available

**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**

Wear respiratory protection. Avoid dust formation. Avoid breathing dust. Ensure adequate ventilation. Evacuate personnel to safe areas.

**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 for cleaning up**

Pick up and arrange disposal without creating dust. Keep in suitable, closed containers for disposal.

**7. HANDLING AND STORAGE****Handling**

Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

**Storage**

Keep container tightly closed in a dry and well-ventilated place. Do not store near acids. Hygroscopic. Store at room temperature.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION****Components with workplace control parameters**

Components	CAS-No.	Value	Control parameters	Update	Basis
Sodium selenite pentahydrate	26970-82-1	TWA	0.2 mg/m <sup>3</sup>	1993-06-30	US. Department of Labor - Occupational Safety and Health Administration (OSHA) Permissible Exposure Limits (PEL) 29 CFR 1910.1000 Air Contaminants.
		TWA	0.2 mg/m <sup>3</sup>	1989-03-01	US. Department of Labor - Occupational Safety and Health Administration (OSHA) 29 CFR 1910.1000 Z-1-A

**Personal protective equipment****Respiratory protection**

Where risk assessment shows air-purifying respirators are appropriate use a dust mask type N95 (US) or type P1 (EN 143) respirator. Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N99 (US) or type P2 (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.

**Eye protection**

Safety glasses

**Skin and body protection**

Choose body protection according to the amount and concentration of the dangerous substance at the work place.

**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	crystalline	Melting point	no data available
Boiling point	no data available	Flash point	not applicable
Ignition temperature	no data available	Lower explosion limit	no data available
Upper explosion limit	no data available	Water solubility	soluble
pH	9 at 50 g/l at 20 °C (68 °F)		

**10. STABILITY AND REACTIVITY**

**Storage stability**

Stable under recommended storage conditions.

**Materials to avoid**

Strong oxidizing agents, Strong acids

**Hazardous decomposition products**

Hazardous decomposition products formed under fire conditions – Sodium oxides, selenium/selenium oxides

**Thermal decomposition**

> 300 °C (> 572 °F)

**11. TOXICOLOGICAL INFORMATION**

**Acute toxicity**

no data available

**Irritation and corrosion**

no data available

**Sensitization**

May cause allergic skin reaction.

**Chronic exposure**

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**Genotoxicity in vitro – mouse – mammary gland**

DNA damage

**Genotoxicity in vitro – mouse – mammary gland**

DNA inhibition

**Developmental Toxicity – mouse – Oral**

**Effects on Embryo or Fetus:** Fetotoxicity (except death, e.g., stunted fetus). Specific Developmental

**Abnormalities:** Musculoskeletal system.

**Reproductive toxicity – mouse – Subcutaneous**

**Effects on Fertility:** Abortion.

**Reproductive toxicity – mouse – Subcutaneous**

**Effects on Newborn:** Live birth index (# fetuses per litter; measured after birth).

**Signs and Symptoms of Exposure**

Nausea, dizziness, headache, anemia, salivation, tremors, alopecia., vomiting, dermatitis. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

**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. May be fatal if absorbed through skin.

**Eyes** May cause eye irritation.

**Ingestion** May be fatal if swallowed.

**Target Organs** Liver, Blood, Kidney, Eyes,

**Additional Information**

**RTECS:** VS7420000

## 12. ECOLOGICAL INFORMATION

**Elimination information (persistence and degradability)**

no data available

**Ecotoxicity effects**

**Toxicity to fish LC50** - *Cyprinodon variegatus* (sheepshead minnow) – 4.5 – 12.0 mg/l – 96 h

**Toxicity to daphnia and other aquatic invertebrates**

**EC50 – *Daphnia magna*** (Water flea) – 7.9 mg/l – 48 h

**Toxicity to algae EC50** – *Pseudokirchneriella subcapitata* (green algae) – 3.2 – 10.0 mg/l – 72 h

**Further information on ecology**

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

## 13. DISPOSAL CONSIDERATIONS

**Product**

Observe all federal, state, and local environmental regulations. 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: 2630 Class: 6.1 Packing group: I

Proper shipping name: Selenites

Marine pollutant: No

Poison Inhalation Hazard: No

**IMDG**

UN-Number: 2630 Class: 6.1 Packing group: I

EMS-No: F-A, S-A

Proper shipping name: SELENITES

Marine pollutant: No

**IATA**

UN-Number: 2630 Class: 6.1 Packing group: I

Proper shipping name: Selenites

## 15. REGULATORY INFORMATION

**OSHA Hazards**

Target Organ Effect, Highly toxic by inhalation, Highly toxic by ingestion, Skin sensitizer

**DSL Status**

All components of this product are on the Canadian DSL list.

**SARA 302 Components**

Sodium selenite pentahydrate

CAS-No.: 26970-82-1

**SARA 313 Components**

Sodium selenite pentahydrate

CAS-No.: 26970-82-1

**SARA 311/312 Hazards**

Acute Health Hazard, Chronic Health Hazard

**Massachusetts Right To Know Components**

Sodium selenite pentahydrate

CAS-No.: 26970-82-1

**Pennsylvania Right To Know Components**

Sodium selenite pentahydrate

CAS-No.: 26970-82-1

**New Jersey Right To Know Components**

Sodium selenite pentahydrate

CAS-No.: 26970-82-1

**California Prop. 65 Components**

This product does not contain any chemicals known to State of California to cause cancer, birth, or any other reproductive defects.

**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.*

3/27/2012