

# SAFETY DATA SHEET

Date Printed: 04/23/2024

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## SECTION 1. IDENTIFICATION

**Product Identifier:** (5N) 99.999% Sodium Selenite Pentahydrate

**Product Code:** NA-SEIT-05-C.5HYD

**CAS Number:** 26970-82-1

**Relevant identified uses of the substance:** Scientific research and development

Supplier details:

American Elements  
10884 Weyburn Ave.  
Los Angeles, CA 90024  
Tel: +1 310-208-0551  
Fax: +1 310-208-0351  
Emergency telephone number:  
+1 800-424-9300

## SECTION 2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Acute toxicity, Oral(Category 2), H300

Acute toxicity, Inhalation(Category 3), H331

Skin sensitisation(Category 1), H317

Acute aquatic toxicity(Category 2), H401

Chronic aquatic toxicity(Category 2), H411

GHS Label elements, including precautionary statements

Pictogram



Signal word

Danger

Hazard statement(s)

H300

Fatal if swallowed.

H317

May cause an allergic skin reaction.

H331

Toxic if inhaled.

H411

Toxic to aquatic life with long lasting effects.

Precautionary statement(s)

P261

Avoid breathing dust/ fume/ gas/ mist/ Vapors/ spray.

P264

Wash skin thoroughly after handling.

P270

Do not eat, drink or smoke when using this product.

P271

Use only outdoors or in a well-ventilated area.

P272

Contaminated work clothing should not be allowed out of the workplace.

P273

Avoid release to the environment.

P280

Wear protective gloves/ protective clothing/ eye protection/ face protection.

P301 + P310 + P330

IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician. Rinse mouth.

P302 + P352

IF ON SKIN: Wash with plenty of soap and water.

P304 + P340 + P311

IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/ physician.

P333 + P313

If skin irritation or rash occurs: Get medical advice/ attention.

P363

Wash contaminated clothing before reuse.

P391

Collect spillage.

P403 + P233

Store in a well-ventilated place. Keep container tightly closed.

P405

Store locked up.

P501

Dispose of contents/ container to an approved waste disposal plant.

Hazards not otherwise classified (HNOC) or not covered by GHS

Contact with acids liberates toxic gas.

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## SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substances

Formula:  $\text{Na}_2\text{O}_3\text{Se} \cdot 5\text{H}_2\text{O}$

Molecular weight: 263.01 g/mol

CAS-No.: 26970-82-1

EC-No.: 233-267-9

Index-No.: 034-003-00-3

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## **SECTION 4. FIRST AID MEASURES**

Description of 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.

Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11

Indication of any immediate medical attention and special treatment needed

No data available

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## **SECTION 5. FIREFIGHTING MEASURES**

Extinguishing media

Suitable extinguishing media

Dry powder

Special hazards arising from the substance or mixture

Sodium oxides, Selenium/selenium oxides

Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

Further information

No data available

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## **SECTION 6. ACCIDENTAL RELEASE MEASURES**

Personal precautions, protective equipment and emergency procedures

Wear respiratory protection. Avoid dust formation.

Avoid breathing Vapors, mist or gas. Ensure adequate ventilation.

Evacuate personnel to safe areas. Avoid breathing dust.

For personal protection see section 8.

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. Do not flush with water.

Keep in suitable, closed containers for disposal.

Reference to other sections

For disposal see section 13.

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## SECTION 7. HANDLING AND STORAGE

Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols.

Further processing of solid materials may result in the formation of combustible dusts. The potential for combustible dust formation should be taken into consideration before additional processing occurs.

Provide appropriate exhaust ventilation at places where dust is formed.

For precautions see section 2.

Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place.

Never allow product to get in contact with water during storage. Do not store near acids.

hygroscopic

Storage class (TRGS 510): Non-combustible, acute toxic Cat. 1 and 2 / very toxic hazardous materials

Specific end use(s)

Apart from the uses mentioned in section 1 no other specific uses are stipulated

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## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure controls

Appropriate engineering controls

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

Personal protective equipment

Eye/face 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 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.

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.

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).

Control of environmental exposure

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

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## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance

Form: crystalline

Color: white

Odor  
No data available  
Odor Threshold  
No data available  
pH  
9 at 50 g/l at 20 °C (68 °F)  
Melting point/freezing point  
No data available  
Initial boiling point and boiling range  
No data available  
Flash point  
N/A  
Evaporation rate  
No data available  
Flammability (solid, gas)  
No data available  
Upper/lower flammability or explosive limits  
No data available  
Vapor pressure  
No data available  
Vapor density  
No data available  
Relative density  
No data available  
Water solubility  
soluble  
Partition coefficient: n-octanol/water  
No data available  
Auto-ignition temperature  
No data available  
Decomposition temperature  
> 300 °C (> 572 °F)-  
Viscosity  
No data available  
Explosive properties  
No data available  
Oxidizing properties  
No data available  
Other safety information  
No data available

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## **SECTION 10. STABILITY AND REACTIVITY**

Reactivity  
No data available  
Chemical stability  
Stable under recommended storage conditions.  
Possibility of hazardous reactions  
No data available  
Conditions to avoid  
No data available  
Incompatible materials  
Strong oxidizing agents, Strong acids

Hazardous decomposition products  
Other decomposition products-No data available  
In the event of fire: see section 5

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## SECTION 11. TOXICOLOGICAL INFORMATION

Information on toxicological effects

Acute toxicity

LD50 Oral-Rat-7 mg/kg

Dermal: No data available

No data available

Skin corrosion/irritation

No data available

Serious eye damage/eye irritation

No data available

Respiratory or skin sensitisation

Germ cell mutagenicity

Mouse

mammary gland

DNA damage

Mouse

mammary gland

DNA inhibition

Carcinogenicity

This product is or contains a component that is not classifiable as to its carcinogenicity based on its IARC, ACGIH, NTP, or EPA classification.

IARC:

3-Group 3: Not classifiable as to its carcinogenicity to humans(Sodium selenite pentahydrate)

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.

Reproductive toxicity

No data available

Reproductive toxicity-Mouse-Subcutaneous

Effects on Fertility: Abortion.

Reproductive toxicity-Mouse-Subcutaneous

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

No data available

Developmental Toxicity-Mouse-Oral

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

Specific target organ toxicity -single exposure

No data available

Specific target organ toxicity -repeated exposure

No data available

Aspiration hazard

No data available

#### Additional Information

RTECS: VS7420000

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.

Stomach-Irregularities-Based on Human Evidence

Stomach-Irregularities-Based on Human Evidence

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## SECTION 12. ECOLOGICAL INFORMATION

#### Toxicity

##### Toxicity to fish

LC50-Cyprinodon variegatus (sheepshead minnow)-4.5 -12.0 mg/l-96.0 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

##### Persistence and degradability

No data available

##### Bioaccumulative potential

No data available

##### Mobility in soil

No data available

##### Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

##### Other adverse effects

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Toxic to aquatic life with long lasting effects.

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## SECTION 13. DISPOSAL CONSIDERATIONS

#### Waste treatment methods

##### 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.

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## SECTION 14. TRANSPORT INFORMATION

#### DOT (US)

UN number: 2630

Class: 6.1

Packing group: I

Proper shipping name: Selenites(Sodium selenite pentahydrate)

Reportable Quantity(RQ):

Poison Inhalation Hazard: No

IMDG

UN number: 2630  
Class: 6.1  
Packing group: I  
EMS-No: F-A, S-A  
Proper shipping name: SELENITES(Sodium selenite pentahydrate)  
Marine pollutant: yes  
IATA  
UN number: 2630  
Class: 6.1  
Packing group: I  
Proper shipping name: Selenites(Sodium selenite pentahydrate)

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## **SECTION 15. REGULATORY INFORMATION**

### **SARA 302 Components**

The following components are subject to reporting levels established by SARA Title III, Section 302:

Sodium selenite pentahydrate

CAS-No.

26970-82-1

Revision Date

2007-07-01

### **SARA 313 Components**

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

Sodium selenite pentahydrate

CAS-No.

26970-82-1

Revision Date

2007-07-01

### **SARA 311/312 Hazards**

Acute Health Hazard, Chronic Health Hazard

Massachusetts Right To Know Components

Sodium selenite pentahydrate

CAS-No.

26970-82-1

Revision Date

2007-07-01

### **Pennsylvania Right To Know Components**

Sodium selenite pentahydrate

CAS-No.

26970-82-1

Revision Date

2007-07-01

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

Sodium selenite pentahydrate

CAS-No.

26970-82-1

Revision Date

2007-07-01

### **California Prop. 65 Components**

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



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## 16. OTHER INFORMATION

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH). The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. American Elements shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. COPYRIGHT 1997-2022 AMERICAN ELEMENTS. LICENSED GRANTED TO MAKE UNLIMITED PAPER COPIES FOR INTERNAL USE ONLY.