

## Safety Data Sheet

### Section 1. Product and Company Identification

Product Identification: 1000 µg/mL Selenium +4 in H<sub>2</sub>O  
MSDS Number: 100049-6  
Recommended Use: For Laboratory Use.  
Company Identification: High-Purity Standards  
P.O. Box 41727  
Charleston, SC 29423  
Telephone: (843) 767-7900  
FAX: (843) 767-7906  
In case of emergency call INFOTRAC: 800-535-5053

### Section 2. Hazard Identification

**Classification:**

None

**Labeling:**

**Symbol:** None

**Signal Word:** None

**Hazard Statement:** None

**Precautionary Statement:** None

### Section 3. Composition

Component	CAS/EINECS Registry #	Percent Concentration
Sodium Selenite, anhydrous (Na <sub>2</sub> SeO <sub>3</sub> )	10102-18-8/233-267-9	0.1 (as Se +4)
Water, deionized	7732-18-5/231-791-2	Balance

### Section 4. First Aid Measures

Emergency Overview: May cause irritation. Wash areas of contact with water.

Skin/eye Contact: May cause slight irritation. Remove contaminated shoes and clothing. Flush contaminated area with plenty of water for at least 15 minutes. Call a physician if irritation develops.

Inhalation: Not likely to be hazardous by inhalation.

Ingestion: May cause irritation to stomach if ingested in large quantities. Rinse mouth with water. Dilute with water or milk.

### Section 5. Fire Fighting Measures

Fire & Explosion hazards: Not considered to be a fire or explosion hazard.

Extinguishing Media: Use any means suitable for extinguishing surrounding fire.

Specific Methods: Firefighters should wear proper protective equipment and breathing apparatus for surrounding fire.

### Section 6. Accidental Release Measures

Ventilate area of leak or spill. Wear appropriate personal protective equipment as specified in Section 8. Dilute with water and mop up or absorb spills with absorbent (vermiculite, sand, fuller's

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earth) and place in plastic bags for later disposal. Always dispose of in accordance with local regulations.

#### Section 7. Handling and Storage

Store in a cool, dry, ventilated storage area. Keep away from incompatible materials. Keep container tightly sealed. Refer to Section 8 for personal handling instructions.

#### Section 8. Exposure Controls and Personal Protection

Engineering Controls: No specific controls are needed. Normal room ventilation is adequate.

Personal Protection: Wear proper gloves, safety glasses with side shields, lab coat/apron.

##### Exposure Limits:

Component	ACGIH TLV
Sodium Selenite, anhydrous	0.2mg/m <sup>3</sup>
Water, deionized	Not Available

:

#### Section 9. Physical and Chemical Properties

Physical State: Liquid

Color: Clear, colorless liquid

Odor: Odorless

Odor threshold: None

pH: 5-8

Melting point: N/A

Freezing Point: N/A

Boiling Point: Approximately 100°C

Flash point: N/A

Evaporation rate: N/A

Flammability: N/A

Explosion limits: N/A

Vapor Pressure (mm): N/A

Vapor Density (air+1): N/A

Relative density: (H<sub>2</sub>O = 1): Approximately 1.0

Solubility in H<sub>2</sub>O: Complete

Auto ignition temperature: N/A

Decomposition temperature: N/A

Molecular Weight: 78.96 g/mole (Se)

#### Section 10. Stability and Reactivity

Stability Indicator: YES

Conditions to Avoid: None

Incompatibles: Strong oxidizing agents.

Hazardous Decomposition Products: Sodium oxides, Selenium/selenium oxides

Hazardous Polymerization: Will not occur.

#### Section 11. Toxicological Information

##### Toxicity Data:

Na<sub>2</sub>SeO<sub>3</sub>-RTECS# VS7350000

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LD<sub>50</sub> Oral, Rat: 7 mg/kg

#### Section 12. Ecological Information

Toxicity to fish LC50 - Oncorhynchus mykiss (rainbow trout) - 2.75 mg/l - 96.0 h

##### **Bioaccumulative potential**

Bioaccumulation Lepomis macrochirus - 120 d

Bioconcentration factor (BCF): 1,850

#### Section 13. Disposal Considerations

General: Follow Federal, state and local regulations for waste.

#### Section 14. Transport Information

D.O.T. Classification: Not hazardous by DOT regulations (based on concentration of Selenites)

#### Section 15. Regulations (Not meant to be all inclusive-selected regulation listed)

TSCA Status: Components of this solution are listed on the TSCA Inventory.

RCRA Status: No.

SARA: Subject to the reporting requirements of Section 302/313/311/312 of SARA Title III and of 40 CFR 372

Risk Phrases: R22 Harmful if swallowed

Safety Phrases: S36/37/39 Wear suitable protective clothing, gloves and eye/face protection

WHMIS Information (Canada): Not controlled at this concentration.

#### Section 16. Other Information

HPS products are intended for laboratory use only. All products should be handled and used by trained professional personnel only. The responsibility for the safe handling and use of these products rests solely with the buyer and/or user. The MSDS was prepared carefully and represents the best data currently available to us; however, HPS does not certify the data on the MSDS. Certified values for this material are given only on the Certificate of Analysis.

Theodore C. Rains, Ph.D.