



Health2Fire0Reactivity0Personal<br/>ProtectionH

# Material Safety Data Sheet Selenium (VI) Std 1.00ml=1.00mg Se MSDS

Section 1: Chemical Product and Company Identification		
Product Name: Selenium (VI) Std 1.00ml=1.00mg Se	Contact Information:	
Catalog Codes: SLS1207	Sciencelab.com, Inc. 14025 Smith Rd.	
CAS#: Mixture.	Houston, Texas 77396	
RTECS: Not applicable.	US Sales: <b>1-800-901-7247</b> International Sales: <b>1-281-441-4400</b>	
<b>TSCA:</b> TSCA 8(b) inventory: Sodium selenate; Nitric acid, 70%; Water	Order Online: ScienceLab.com	
Cl#: Not applicable.	CHEMTREC (24HR Emergency Telephone), call: 1-800-424-9300	
Synonym:	International CHEMTREC, call: 1-703-527-3887	
Chemical Name: Selenium (VI) Std 1.00ml=1.00mg Se	For non-emergency assistance, call: 1-281-441-4400	
Chemical Formula: Not applicable.		

# Section 2: Composition and Information on Ingredients

#### **Composition:**

Name	CAS #	% by Weight
Sodium selenate	13410-01-0	0.239
Water	7732-18-5	99.1
Nitric acid, fuming	7697-37-2	0.7

**Toxicological Data on Ingredients:** Sodium selenate: ORAL (LD50): Acute: 1.6 mg/kg [Rat]. Nitric acid, fuming: VAPOR (LC50): Acute: 67 ppm 4 hour(s) [Rat].

# **Section 3: Hazards Identification**

#### Potential Acute Health Effects:

Hazardous in case of skin contact (corrosive, irritant, permeator), of eye contact (irritant), of ingestion, of inhalation.

#### **Potential Chronic Health Effects:**

Hazardous in case of skin contact (corrosive, irritant, permeator), of eye contact (irritant), of ingestion, of inhalation. Non-sensitizer for skin. CARCINOGENIC EFFECTS: Not available. MUTAGENIC EFFECTS: Not available. TERATOGENIC EFFECTS: Not available. DEVELOPMENTAL TOXICITY: Not available.

The substance is toxic to blood, kidneys, lungs, liver, mucous membranes.

Repeated or prolonged exposure to the substance can produce target organs damage.

# **Section 4: First Aid Measures**

#### Eye Contact:

Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Cold water may be used. Do not use an eye ointment. Seek medical attention.

#### Skin Contact:

If the chemical got onto the clothed portion of the body, remove the contaminated clothes as quickly as possible, protecting your own hands and body. Place the victim under a deluge shower. If the chemical got on the victim's exposed skin, such as the hands : Gently and thoroughly wash the contaminated skin with running water and non-abrasive soap. Be particularly careful to clean folds, crevices, creases and groin. Cold water may be used. If irritation persists, seek medical attention. Wash contaminated clothing before reusing.

#### Serious Skin Contact:

Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek immediate medical attention.

Inhalation: Allow the victim to rest in a well ventilated area. Seek immediate medical attention.

Serious Inhalation: Not available.

#### Ingestion:

Do not induce vomiting. Examine the lips and mouth to ascertain whether the tissues are damaged, a possible indication that the toxic material was ingested; the absence of such signs, however, is not conclusive. Loosen tight clothing such as a collar, tie, belt or waistband. If the victim is not breathing, perform mouth-to-mouth resuscitation. Seek immediate medical attention.

Serious Ingestion: Not available.

# Section 5: Fire and Explosion Data

Flammability of the Product: Non-flammable.

Auto-Ignition Temperature: Not applicable.

Flash Points: Not applicable.

Flammable Limits: Not applicable.

Products of Combustion: Not available.

Fire Hazards in Presence of Various Substances: Not applicable.

**Explosion Hazards in Presence of Various Substances:** 

Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available.

Fire Fighting Media and Instructions: Not applicable.

Special Remarks on Fire Hazards: Not available.

Special Remarks on Explosion Hazards: Not available.

### **Section 6: Accidental Release Measures**

#### Small Spill:

Dilute with water and mop up, or absorb with an inert dry material and place in an appropriate waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

#### Large Spill:

Absorb with an inert material and put the spilled material in an appropriate waste disposal. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities.

### Section 7: Handling and Storage

#### **Precautions:**

Keep container dry. Do not ingest. Do not breathe gas/fumes/ vapour/spray. Never add water to this product In case of insufficient ventilation, wear suitable respiratory equipment If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes

#### Storage:

No specific storage is required. Use shelves or cabinets sturdy enough to bear the weight of the chemicals. Be sure that it is not necessary to strain to reach materials, and that shelves are not overloaded.

### Section 8: Exposure Controls/Personal Protection

#### **Engineering Controls:**

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.

#### **Personal Protection:**

Splash goggles. Lab coat. Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.

#### Personal Protection in Case of a Large Spill:

Splash goggles. Full suit. Vapor respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

#### **Exposure Limits:**

Nitric acid, fuming TWA: 2 CEIL: 4 (ppm) TWA: 5 CEIL: 10 (mg/m3) Consult local authorities for acceptable exposure limits.

### **Section 9: Physical and Chemical Properties**

#### Physical state and appearance: Liquid.

Odor: Not available.

Taste: Not available.

Molecular Weight: Not applicable.

Color: Not available.

pH (1% soln/water): Neutral.

Boiling Point: The lowest known value is 100°C (212°F) (Water).
Melting Point: Not available.
Critical Temperature: Not available.
Specific Gravity: The only known value is 1 (Water = 1) (Water).
Vapor Pressure: The highest known value is 17.535 mm of Hg (@ 20°C) (Water).
Vapor Density: The highest known value is 0.62 (Air = 1) (Water).
Volatility: Not available.
Odor Threshold: Not available.
Water/Oil Dist. Coeff.: Not available.
Ionicity (in Water): Not available.
Dispersion Properties: See solubility in water.
Solubility: Easily soluble in cold water.

# Section 10: Stability and Reactivity Data

Stability: The product is stable.

Instability Temperature: Not available.

Conditions of Instability: Not available.

Incompatibility with various substances: Slightly reactive to reactive with alkalis.

Corrosivity: Non-corrosive in presence of glass.

Special Remarks on Reactivity: Not available.

Special Remarks on Corrosivity: Not available.

Polymerization: No.

### Section 11: Toxicological Information

Routes of Entry: Absorbed through skin. Dermal contact. Eye contact. Inhalation. Ingestion.

**Toxicity to Animals:** LD50: Not available. LC50: Not available.

Chronic Effects on Humans: The substance is toxic to blood, kidneys, lungs, liver, mucous membranes.

Other Toxic Effects on Humans: Hazardous in case of skin contact (corrosive, irritant, permeator), of ingestion, of inhalation.

Special Remarks on Toxicity to Animals: Not available.

Special Remarks on Chronic Effects on Humans: Not available.

Special Remarks on other Toxic Effects on Humans: Not available.

# **Section 12: Ecological Information**

Ecotoxicity: Not available.

BOD5 and COD: Not available.

#### Products of Biodegradation:

Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

Toxicity of the Products of Biodegradation: The products of degradation are less toxic than the product itself.

Special Remarks on the Products of Biodegradation: Not available.

# Section 13: Disposal Considerations

Waste Disposal:

### **Section 14: Transport Information**

DOT Classification: Not a DOT controlled material (United States).

Identification: Not applicable.

Special Provisions for Transport: Not applicable.

# **Section 15: Other Regulatory Information**

#### Federal and State Regulations:

Pennsylvania RTK: Sodium selenate; Nitric acid, 70% Massachusetts RTK: Sodium selenate; Nitric acid, 70% TSCA 8(b) inventory: Sodium selenate; Nitric acid, 70%; Water SARA 302/304/311/312 extremely hazardous substances: Sodium selenate; Nitric acid, 70% SARA 313 toxic chemical notification and release reporting: Sodium selenate; Nitric acid, 70% CERCLA: Hazardous substances.: Sodium selenate; Nitric acid, 70%;

Other Regulations: OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).

Other Classifications:

WHMIS (Canada): CLASS D-2A: Material causing other toxic effects (VERY TOXIC).

**DSCL (EEC):** R20/22- Harmful by inhalation and if swallowed.

HMIS (U.S.A.):

Health Hazard: 2

Fire Hazard: 0

Reactivity: 0

Personal Protection: h

National Fire Protection Association (U.S.A.):

Health: 2

#### Flammability: 0

Reactivity: 0

Specific hazard:

#### Protective Equipment: Gloves. Lab coat. Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate. Splash goggles.

# **Section 16: Other Information**

References: Not available.

Other Special Considerations: Not available.

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