

# FLINN SCIENTIFIC, INC.

## Material Safety Data Sheet (MSDS)

MSDS #: 683.80

Revision Date: July 13, 2011

### SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

#### Selenium

Flinn Scientific, Inc. P.O. Box 219 Batavia, IL 60510 (800) 452-1261

CHEMTREC Emergency Phone Number: (800) 424-9300

### SECTION 2 — COMPOSITION, INFORMATION ON INGREDIENTS

Selenium

CAS#: 7782-49-2

### SECTION 3 — HAZARDS IDENTIFICATION

Reddish black powder.

Slightly toxic by ingestion, inhalation or absorbed through the skin. Body tissue irritant. Avoid all body tissue contact.

#### FLINN AT-A-GLANCE

Health-1

Flammability-1

Reactivity-0

Exposure-1

Storage-0

0 is low hazard, 3 is high hazard

### SECTION 4 — FIRST AID MEASURES

Call a physician and seek medical attention for further treatment, observation, and support after first aid.

Inhalation: Remove to fresh air at once. If breathing has stopped, give artificial respiration immediately.

Eye or External: Immediately flush with fresh water for at least 15 minutes.

Internal: Rinse mouth. Give large quantities of water for dilution. Call a physician or poison control at once.

### SECTION 5 — FIRE FIGHTING MEASURES

Combustible powder.

Fire and explosion risk in finely divided form. When heated, it will burn and emit highly toxic SeO<sub>x</sub> fumes.

**Fire Fighting Instructions:** Use triclass, dry chemical fire extinguisher. Firefighters should wear PPE and SCBA with full facepiece operated in positive pressure mode.

#### NFPA CODE

None

established

### SECTION 6 — ACCIDENTAL RELEASE MEASURES

Restrict unprotected personnel from area. Sweep up, place in sealed bag or container and dispose. Ventilate area and wash spill site after material pickup is complete. See Sections 8 and 13 for further information.

### SECTION 7 — HANDLING AND STORAGE

Flinn Suggested Chemical Storage Pattern: Inorganic #10. Store with sulfur and phosphorus.

### SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION

Avoid contact with eyes, skin, and clothing. Wear chemical splash goggles, chemical-resistant gloves, and chemical-resistant apron. Use exhaust ventilation to keep airborne concentrations low.

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**SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES**

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Reddish black powder.  
Solubility: Insoluble in water.  
Formula: Se  
Formula weight: 78.96

Melting point: 217 °C  
Specific gravity: 4.81

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**SECTION 10 — STABILITY AND REACTIVITY**

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Avoid contact with oxidizers and contact with acids.  
Shelf life: Indefinite, if stored properly.

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**SECTION 11 — TOXICOLOGICAL INFORMATION**

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Acute effects: Slightly toxic.  
Chronic effects: Dermatitis, loss of hair.  
Target organs: Spleen, lungs, skin, liver.

ORL-RAT LD<sub>50</sub>: 6700 mg/kg  
IHL-RAT LC<sub>50</sub>: N.A.  
SKN-RBT LD<sub>50</sub>: N.A.

N.A. = Not available, not all health aspects of this substance have been fully investigated.

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**SECTION 12 — ECOLOGICAL INFORMATION**

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**SECTION 13 — DISPOSAL CONSIDERATIONS**

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Please review all federal, state and local regulations that may apply, before proceeding.  
Flinn Suggested Disposal Method #26a is one option.

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**SECTION 14 — TRANSPORT INFORMATION**

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Shipping name: Selenium  
Hazard class: 9  
UN number:  
N/A = Not applicable

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**SECTION 15 — REGULATORY INFORMATION**

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TSCA-listed, EINECS-listed (231-957-4).

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**SECTION 16 — OTHER INFORMATION**

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**Consult your copy of the *Flinn Science Catalog/Reference Manual*  
for additional information about laboratory chemicals.**