

SDS #: 683.8

Revision Date: February 1, 2016

2/10/2025: File reviewed, more currrent MSDS/SDS not available. CAS

Safety Data Sheet (SDS)

SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Signal Word DANGER

Selenium

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

Chemtrec Emergency Phone Number: (800) 424-10242

Pictograms

SECTION 2 — HAZARDS IDENTIFICATION

Hazard class: Acute toxicity, oral and inhalation (Category 3). Toxic if swallowed or inhaled (H301+H331). Do not eat, drink or smoke when using this product (P270). Avoid breathing dust or fumes (P261).



Hazard class: Specific target organ toxicity, repeated exposure (Category 2). May cause damage to organs through prolonged or repeated exposure (H373). Do not eat, drink or smoke when using this product (P270).



SECTION 3 — COMPOSITION, INFORMATION ON INGREDIENTS

Component Name	CAS Number	Formula	Formula Weight	Concentration
Selenium	7782-49-2	Se	78.96	
Synonyms: Vandex				

SECTION 4 — FIRST AID MEASURES

Call a POISON CENTER or physician (P311).

If inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breathing (P304+P340). Immediately call a POISON CENTER or physician (P301+P330+P310).

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so. Continue rinsing.

If on skin: Wash with plenty of water.

If swallowed: Rinse mouth. Immediately call a POISON CENTER or physician (P301+P330+P310).

SECTION 5 — FIRE FIGHTING MEASURES

Combustible powder. Fire and explosion risk in finely divided form.

NFPA Code

When heated to decomposition, may emit toxic fumes.

None established

In case of fire: Use a tri-class dry chemical fire extinguisher.

SECTION 6 — ACCIDENTAL RELEASE MEASURES

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. Keep container tightly closed (P233). Use only in a hood or well-ventilated area (P271).

SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION

Wear protective gloves, protective clothing, and eye protection. Wash hands thoroughly after handling. Use only in a hood or well-ventilated area (P271). Wear respiratory protection (P284).

Exposure guidelines: PEL/TLV 0.2 mg/m³ (OSHA/ACGIH)

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

Reddish black powder. Odorless. Melting point: 217 °C Soluble: Insoluble in water. Specific gravity: 4.81

SECTION 10 — STABILITY AND REACTIVITY

Avoid contact with oxidizers and contact with acids.

Shelf life: Indefinite, if stored properly.

SECTION 11 — TOXICOLOGICAL INFORMATION

Acute effects: Slightly toxic. ORL-RAT LD $_{50}$: N.A. Chronic effects: Dermatitis, loss of hair. IHL-RAT LC $_{50}$: N.A. Target organs: Spleen, lungs, skin, liver. SKN-RBT LD $_{50}$: N.A.

SECTION 12 — ECOLOGICAL INFORMATION

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SECTION 13 — DISPOSAL CONSIDERATIONS

Please review all federal, state and local regulations that may apply before proceeding.

Flinn Suggested Disposal Method #27d is one option.

SECTION 14 — TRANSPORT INFORMATION

Shipping name: Selenium. Hazard class: 9. UN number: 3077.

SECTION 15 — REGULATORY INFORMATION

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

SECTION 16 — OTHER INFORMATION

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

N/A = Not applicable

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

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