



# SAFETY DATA SHEET

ProChemOnline.com



## SECTION 1 PRODUCT AND COMPANY INFORMATION

PRODUCT NAME: **Selenium, shot**

PRODUCT NUMBER: 3163

CAS NUMBER: 7782-49-2

### MANUFACTURER:

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## SECTION 2 HAZARDS IDENTIFICATION

### CLASSIFICATION OF SUBSTANCE OR MIXTURE

Pictogram



Signal Word

**Danger**

### Hazard Statements

H301+H331	Toxic if swallowed or if inhaled
H373	May cause damage to organs through prolonged or repeated exposure

### Precautionary Phrases

P260	Do not breathe dust or mist.
P261	Avoid breathing dust/fume/gas/mist/vapours/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.
P301+P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P304+P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

### HMIS CLASSIFICATION:

Health: 1      Fire: 0      Reactivity Hazard: 0

### NFPA RATING:

Health: 1      Flammability: 0      Reactivity Hazard: 0

**EYE CONTACT:** May cause mild to moderate irritation of the eyes.

**SKIN CONTACT:** May cause irritation of the skin.

**INHALATION:** Toxic if inhaled. Inhalation of dust can cause garlic odor and shortness of breath, chills, headache, and delayed pulmonary edema.

**INGESTION:** Toxic if swallowed. Ingestion may lead to nausea, vomiting, bloody diarrhea, weakness, and chronic disease.

## SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Formula: Se

Molecular Weight: 78.96

CHEMICAL NAME	CAS#	%
Selenium	7782-49-2	100

## SECTION 4 FIRST AID MEASURES

**EYE EXPOSURE:** Immediately flush the eyes with copious amounts of water for at least 15 minutes. Assure flushing under eyelids. A victim may need assistance in keeping their eyelids open. Get immediate competent medical attention.

**SKIN EXPOSURE:** Wash affected area with water. Remove contaminated clothes if necessary. Seek medical assistance if irritation persists.

**INHALATION:** Remove to fresh air and keep at rest. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention if necessary.

**INGESTION:** Do NOT induce vomiting. Never give anything by mouth to an unconscious person. If conscious, wash out mouth with water. Get medical attention if necessary.

## SECTION 5 FIREFIGHTING MEASURES

**FLASH POINT:** Product is not flammable

**AUTO IGNITION TEMPERATURE:** Not available

**EXPLOSION LIMITS:** Not available

**EXTINGUISHING MEDIUM:** Use fire fighting measures that suit the surrounding fire.

**SPECIAL FIRE FIGHTING PROCEDURES:** Wear self-contained, approved breathing apparatus and full protective clothing, including eye protection and boots.

**HAZARDOUS COMBUSTION AND DECOMPOSITION PRODUCTS:** Selenium oxides

## SECTION 6 ACCIDENTAL RELEASE MEASURES

**PERSONAL PRECAUTIONS:** Wear all appropriate equipment when using this material. Ensure adequate ventilation.

**ENVIRONMENTAL PRECAUTIONS:** Prevent spillage from entering drains or allowing to be released into the environment.

**METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP:** Small spills can be mixed with vermiculite or sodium carbonate and swept up.

## SECTION 7 HANDLING AND STORAGE

**PRECAUTIONS FOR SAFE HANDLING:** Wear appropriate personal protective equipment. Avoid contact with skin and eyes. Use with adequate ventilation. Wash thoroughly after using. Keep container closed when not in use. Avoid formation of dusts and aerosols. Open and handle with care.

**CONDITIONS FOR SAFE STORAGE:** Store in cool, dry, and well-ventilated area. Keep away from incompatible materials. Store under inert gas.

## SECTION 8 EXPOSURE CONTROLS AND PERSONAL PROTECTION

**EXPOSURE CONTROLS:** Contains no substances with occupational exposure limit values.

Component	Exposure Limits	Basis	Entity
Selenium	0.2 mg/m <sup>3</sup>	TLV	ACGIH
	0.2 mg/m <sup>3</sup>	PEL	OSHA
	0.2 mg/m <sup>3</sup>	REL	NIOSH

TLV: Threshold Limit Value over 8 hours of work.

REL: Recommended Exposure Limit

PEL: Permissible Exposure Limit

**EYE PROTECTION:** Wear chemical safety glasses or goggles and face shield

**SKIN PROTECTION:** Wear nitrile or rubber gloves, and a complete suit protecting against chemicals

**VENTILATION:** Provide local exhaust, preferably mechanical.

**RESPIRATOR:** Use an approved respirator

## SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

**COLOR AND FORM:** Gray pellets  
**ODOR:** None  
**MOLECULAR WEIGHT:** 78.96  
**BOILING POINT:** 685° C  
**MELTING POINT:** 217° C  
**SPECIFIC GRAVITY:** 4.81 gm/ml  
**VAPOR DENSITY:** No data available  
**SOLUBILITY:** Insoluble

## SECTION 10 STABILITY AND REACTIVITY

**STABILITY:** Stable  
**HAZARDOUS POLYMERIZATION:** Will not occur  
**CONDITIONS TO AVOID:** Excess heat  
**INCOMPATIBILITY:** Strong oxidizing agents, active metals, and halogens.  
**DECOMPOSITION PRODUCTS:** Selenium Oxides.

## SECTION 11 TOXICOLOGICAL DATA

**ACUTE TOXICITY:** LD50 Oral – rat – 6700 mg/kg. LCLo Inhalation – rat – 33 mg/kg/8H. LD50 Intravenous – rat – 6mg/kg. LDLo Intravenous – rabbit – 2500µg/kg. TDLo Oral – mouse – 480mg/kg/60D-C. TDLo Oral – mouse – 134 mg/kg.  
**CARCINOGENIC EFFECTS:** Tumorigenic. According to ACGIH, NTP, and OSHA, no components of this product present at levels greater than or equal to 0.1% is identified a carcinogen. According to EPA, this product is not classifiable as to human carcinogenicity: inadequate human and animal evidence of carcinogenicity or no data are available. According to IARC, this is no classifiable to human carcinogenicity.  
**MUTAGENIC EFFECTS:** Not available  
**TETRAOGENIC EFFECTS:** Reproductive effector.  
**RTECS:** VS7700000

To the best of our knowledge the toxicological effects of this compound have not been fully investigated.

## SECTION 12 ECOLOGICAL DATA

**AQUATIC VERTEBRATE:** Mortality NOEC – Cyprinodon Variegatus (Sheepshead minnow) – 2mg/L – 96h. Mortality LOEC – Oncorhynchus mykiss (rainbow trout) – 7.8mg/L – 96h  
**AQUATIC INVERTEBRATE:** LC50 Daphnia Magna (Water flea) – 0.43 mg/L – 48h  
**TERRESTRIAL:** EC50 – Pseudokirchneriella Subcapitata – 99mg/L – 72h.  
**BIOACCUMULATIVE POTENTIAL:** Lepomis macrochirus – 60d – 640µg/L. Bioconcentration Factor (BCF): 7.7

## SECTION 13 DISPOSAL CONSIDERATIONS

Dispose of in according to local, state, and federal regulations.

## SECTION 14 TRANSPORTATION DATA

UN 3283  
Selenium compound, solid, n.o.s.  
Class 6.1  
PG III  
  
Marine Pollutant: No

## **SECTION 15 REGULATORY INFORMATION**

**TSCA:** Listed in the TSCA inventory

**DSCL (EEC):** Listed on the DSCL inventory

**SARA 302/304:** Not Listed

**SARA 311/312:** Acute Health Hazard, Chronic Health Hazard

**SARA (TITLE 313):** Selenium

**CALIFORNIA PROP. 65:** Not Listed

**WHMIS CANADA:** Not Listed

**MASSACHUSETTS RIGHT TO KNOW COMPONENTS:** Selenium

**NEW JERSEY RIGHT TO KNOW COMPONENTS:** Selenium

**PENNSYLVANIA RIGHT TO KNOW COMPONENTS:** Selenium

## **SECTION 16 OTHER INFORMATION**

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