



#### 1 - Product

Product Name **PHENYL SELENOCYANATE, 96%**

Product Number 498254

#### 2 - Hazards Identification

**SPECIAL INDICATION OF HAZARDS TO HUMANS AND THE ENVIRONMENT**

Toxic by inhalation and if swallowed. Danger of cumulative effects. Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

#### 3 - Composition/Information on Ingredients

Product Name CAS # EC no Annex I

Index Number

PHENYL SELENOCYANATE, 96% 2179-79-5 None 034-002-00-8

Formula C<sub>7</sub>H<sub>5</sub>NSe

Molecular Weight 182.1 AMU

#### 4 - First Aid Measures

**AFTER INHALATION**

If inhaled, remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen.

**AFTER SKIN CONTACT**

In case of skin contact, flush with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes.

Call a physician.

**AFTER EYE CONTACT**

In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

**AFTER INGESTION**

If swallowed, wash out mouth with water provided person is conscious. Call a physician immediately.

#### 5 - Fire Fighting Measures

**EXTINGUISHING MEDIA**

Suitable: Water spray. Carbon dioxide, dry chemical powder, or

appropriate foam.

#### **SPECIAL RISKS**

Specific Hazard(s): Emits toxic fumes under fire conditions.

#### **SPECIAL PROTECTIVE EQUIPMENT FOR FIREFIGHTERS**

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

#### **6 - Accidental Release Measures**

##### **PERSONAL PRECAUTION PROCEDURES TO BE FOLLOWED IN CASE OF LEAK OR SPILL**

Evacuate area.

##### **PROCEDURE(S) OF PERSONAL PRECAUTION(S)**

Wear self-contained breathing apparatus, rubber boots, and heavy rubber gloves.

##### **METHODS FOR CLEANING UP**

Absorb on sand or vermiculite and place in closed containers for disposal. Ventilate area and wash spill site after material pickup is complete.

#### **7 - Handling and Storage**

##### **HANDLING**

Directions for Safe Handling: Do not breathe vapor. Avoid prolonged or repeated exposure. Do not get in eyes, on skin, on clothing.

##### **STORAGE**

Conditions of Storage: Keep tightly closed.

Store at 2-8°C

**SPECIAL REQUIREMENTS:** Stench.

#### **8 - Exposure Controls / Personal Protection**

##### **ENGINEERING CONTROLS**

Use only in a chemical fume hood. Safety shower and eye bath.

##### **GENERAL HYGIENE MEASURES**

Wash contaminated clothing before reuse. Wash thoroughly after handling.

##### **PERSONAL PROTECTIVE EQUIPMENT**

**Respiratory Protection:** Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator.

**Hand Protection:** Compatible chemical-resistant gloves.

**Eye Protection:** Chemical safety goggles.

#### **9 - Physical and Chemical Properties**

**Appearance Physical State:** Liquid

**Property Value At Temperature or Pressure**

pH N/A

BP/BP Range 116.0 - 117.0 °C 12 mmHg

MP/MP Range N/A

Flash Point 109 °C Method: closed cup

Flammability N/A

Autoignition Temp N/A

Oxidizing Properties N/A

Explosive Properties N/A

Explosion Limits N/A

Vapor Pressure N/A

SG/Density N/A

Partition Coefficient N/A

Viscosity N/A

Vapor Density N/A

Saturated Vapor Conc. N/A

Evaporation Rate N/A

Bulk Density 1.484 kg/l

Decomposition Temp. N/A

Solvent Content N/A

Water Content N/A

Surface Tension N/A

Conductivity N/A

Miscellaneous Data N/A

Solubility N/A

**10 - Stability and Reactivity**

**STABILITY**

Stable: Stable.

Materials to Avoid: Strong oxidizing agents Avoid contact with acid.

**HAZARDOUS DECOMPOSITION PRODUCTS**

Hazardous Decomposition Products: Carbon monoxide, Carbon dioxide, Nitrogen oxides, Selenium/selenium oxides.

**HAZARDOUS POLYMERIZATION**

Hazardous Polymerization: Will not occur

**11 - Toxicological Information**

**SIGNS AND SYMPTOMS OF EXPOSURE**

Stomach pains, vomiting, diarrhea. Coughing, chest pains, difficulty in breathing. Acute selenium poisoning produces central nervous system effects, which include nervousness, convulsions, and drowsiness. Other signs of intoxication can include skin eruptions, lassitude, gastrointestinal distress, teeth that are discolored or decayed, odorous ("garlic") breath, and partial loss of hair and nails. Chronic exposure by inhalation can produce symptoms that include pallor, coating of the tongue, anemia, irritation of the mucosa, lumbar pain, liver

and spleen damage, as well as any of the other previously mentioned symptoms. Exposure can cause: Nausea. Anemia.

**ROUTE OF EXPOSURE**

**Skin Contact:** May cause skin irritation.

**Skin Absorption:** May be harmful if absorbed through the skin.

**Eye Contact:** May cause eye irritation.

**Inhalation:** Material may be irritating to mucous membranes and upper respiratory tract.

**Multiple Routes:** Toxic if inhaled or swallowed.

**TARGET ORGAN INFORMATION**

Central nervous system. Liver. Spleen. G.I. System. Teeth.

**CHRONIC EXPOSURE - TERATOGEN**

**Result:** Possible risk of congenital malformation in the fetus.

**12 - Ecological Information**

No data available.

**13 - Disposal Considerations**

**SUBSTANCE DISPOSAL**

Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state, and local environmental regulations.

**14 - Transport Information**

**RID/ADR UN#:** 3440 **Class:** 6.1

**PG:** II

**Proper Shipping Name:** Selenium compound , liquid, n.o.s.

**IMDG UN#:** 3440

**Class:** 6.1 **PG:** II

**Proper Shipping Name:** Selenium compound , liquid,n.o.s.

**Marine Pollutant:** No **Severe Marine Pollutant:** No

**IATA UN#:** 3440

**Class:** 6.1 **PG:** II

**Proper Shipping Name:** Selenium compound , liquid,n.o.s.

**Inhalation Packing Group I:** No

**15 - Regulatory Information**

**CLASSIFICATION AND LABELING ACCORDING TO EU DIRECTIVES**

**ANNEX I INDEX NUMBER:** 034-002-00-8

**NOTA:** A

**INDICATION OF DANGER:** T-N

**Toxic.** Dangerous for the environment.

**R-PHRASES:** 23/25-33-50/53

**Toxic by inhalation and if swallowed.** Danger of cumulative effects. Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**S-PHRASES: 20/21-28-45-60-61**

**When using do not eat, drink, or smoke. After contact with skin, wash immediately with plenty of soap-suds. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). This material and its container must be disposed of as hazardous waste. Avoid release to the environment. Refer to special instructions/safety data sheets.  
Caution: Substance not yet fully tested (EU).**

**16 - Other Information**

**WARRANTY**

**The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions.**

**shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. paper copies for internal use only.**

**DISCLAIMER**

**For R&D use only. Not for drug, household or other uses.**

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