

# MATERIAL SAFETY DATA SHEET

FILE NO.: Selenophene

NAME OF PRODUCT Selenophene

MSDS DATE: 9/4 /13

---

## SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

---

PRODUCT NAME: **Selenophene 99%**

SYNONYMS: none

PRODUCT CODES: none

MANUFACTURER: Synectic Corporation

ADDRESS: P.O. Box 611

Nitro, WV 25143 USA

EMERGENCY PHONE: Chemtrec

CHEMTREC PHONE: (800) 424-9300 (U.S.)

OTHER CALLS: (304) 727-6796

FAX PHONE: (304) 727-6797

CHEMICAL NAME: Selenophene

CHEMICAL FAMILY:

CHEMICAL FORMULA: C<sub>4</sub>H<sub>4</sub>Se

PRODUCT USE: Chemical intermediate

PREPARED BY: Synectic Corporation

### SECTION 1 NOTES:

Hazard Symbols: F

Risk Phrases 11 (highly Slammable)

---

## SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

---

INGREDIENT: Selenophene

<u>CAS NO.</u>	288-05-1	99 % <u>WT</u>	99 % <u>VOL</u>	<u>SARA 313 REPORTABLE</u> no
----------------	----------	----------------	-----------------	-------------------------------

	<u>ppm</u>	<u>mg/m3</u>
OSHA PEL-TWA:	none	
OSHA PEL STEL :	none	
OSHA PEL CEILING:	none	
ACGIH TLV-TWA:	none	
ACGIH TLV STEL:	none	
ACGIH TLV CEILING:	none	

### SECTION 2 NOTES:

---

## SECTION 3: HAZARDS IDENTIFICATION

---

EMERGENCY OVERVIEW: Flammable liquid

**ACUTE HEALTH HAZARDS:** Toxic if ingested or inhaled. Avoid prolonged contact with this material. Overexposure may result in serious illness or death.

Follow safe industrial hygiene practices and always wear proper protective equipment when handling this compound

**CHRONIC HEALTH HAZARDS:** **CARCINOGENIC EFFECTS** : Not available.

**MUTAGENIC EFFECTS** : Not available.

**TERATOGENIC EFFECTS** : Not Avail

**DEVELOPMENTAL TOXICITY:** Not available.

# MATERIAL SAFETY DATA SHEET

FILE NO.: Selenophene

NAME OF PRODUCT **Selenophene**

**MSDS DATE:** 9/4 /13

Repeated exposure to an highly toxic material may produce general deterioration of health by an accumulation in one or many human organs.

**MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE:** None Noted

---

## CARCINOGENICITY

OSHA: no

ACGIH:

no

NTP:

no

IARC: no

OTHER:

## SECTION 3 NOTES:

---

## SECTION 4: FIRST AID MEASURES

**EYES:**Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention

**SKIN:**In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately

**INGESTION:**INDUCE VOMITING by sticking finger in throat. Lower the head so that the vomit will not reenter the mouth and throat. Loosen tight clothing such as a collar , tie , belt or waist band. If the victim is not breathing , perform mouth-to-mouth resuscitation. 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.

**INHALATION:**If the victim is not breathing, perform mouth-to-mouth resuscitation. Loosen tight clothing such as a collar, tie, belt or waistband. If breathing is difficult, oxygen can be administered. Seek medical attention if respiration problems do not improve

## NOTES TO PHYSICIANS OR FIRST AID PROVIDERS:

## SECTION 4 NOTES:

---

## SECTION 5: FIRE-FIGHTING MEASURES

**FLAMMABLE LIMITS IN AIR, UPPER:** N/A  
(% BY VOLUME) **LOWER:** N/A

**FLASH POINT:** -3°C (26.6°F)

**METHOD USED:**

**AUTOIGNITION TEMPERATURE:** Not available

**NFPA HAZARD CLASSIFICATION** Not published

**HEALTH:**

**FLAMMABILITY:**

**REACTIVITY:**

**OTHER:**

**HMIS HAZARD CLASSIFICATION** Not published

**HEALTH:**

**FLAMMABILITY:**

**REACTIVITY:**

**PROTECTION:**

**EXTINGUISHING MEDIA:** Dry powder, Foam, Water Fog CO2

## SPECIAL FIRE FIGHTING PROCEDURES:

Wear full firefighting ensemble, including SCBA.

# MATERIAL SAFETY DATA SHEET

FILE NO.: Selenophene

NAME OF PRODUCT **Selenophene**

**MSDS DATE:** 9/4 /13

**UNUSUAL FIRE AND EXPLOSION HAZARDS:** None

**HAZARDOUS DECOMPOSITION PRODUCTS:** None

## SECTION 5 NOTES:

---

## SECTION 6: ACCIDENTAL RELEASE MEASURES

---

**ACCIDENTAL RELEASE MEASURES:**Flammable material. Toxic material. Environmentally hazardous material.

Keep away from heat. Mechanical exhaust required. Stop leak if without risk. Absorb with DRY earth, sand or other non-combustible material. DO NOT get water inside container. DO NOT touch spilled material. Use water spray to reduce vapors. Prevent entry into sewers , basements or confined areas ; dike if needed . Consult federal, state, and / or local authorities for assistance on disposal.

## SECTION 6 NOTES:

---

## SECTION 7: HANDLING AND STORAGE

---

**HANDLING AND STORAGE:**FLAMMABLE. TOXIC. ENVIRONMENTAL HAZARD. Keep locked up. Keep away from heat. Mechanical exhaust required. Avoid excessive heat and light. DO NOT ingest. Do not breathe gas/fumes/ vapor/spray. Wear suitable protective clothing. If ingested, seek medical advice immediately and show the container or the label. Treat symptomatically and supportively. Always store away from incompatible compounds such as oxidizing agents.

## SECTION 7 NOTES:

---

## 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 station and safety shower is proximal to the work-station location.

**VENTILATION :** Mechanical ventilation

**PROTECTIVE CLOTHING OR EQUIPMENT:**Splash goggles. Lab coat. Vapor respirator. Boots. Gloves. A MSHA/NIOSH approved respirator must be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

**WORK HYGIENIC PRACTICES:** Use good standard practice

**EXPOSURE GUIDELINES:** Not available

## SECTION 8 NOTES:

---

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

---

**APPEARANCE:** Clear, colorless to pale yellow liquid

# MATERIAL SAFETY DATA SHEET

FILE NO.: Selenophene

NAME OF PRODUCT **Selenophene**

**MSDS DATE:** 9/4 /13

**ODOR:** Characteristic

**PHYSICAL STATE:** Liquid

**BOILING POINT:** 110°C (230°F)

**MELTING POINT:** -30°C (-22°F)

**VAPOR PRESSURE (mmHg):** Not available

**VAPOR DENSITY (AIR = 1):** >1

**SPECIFIC GRAVITY (H<sub>2</sub>O = 1):** 1.43

**EVAPORATION RATE:** Not available

---

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES (con't)

---

**SOLUBILITY IN WATER:** nil

**PERCENT SOLIDS BY WEIGHT:** none

**MOLECULAR WEIGHT:** 131.03

**VISCOSITY:** Not available

**SECTION 9 NOTES:**

---

## SECTION 10: STABILITY AND REACTIVITY

---

STABLE      X

UNSTABLE

**STABILITY:** This material is stable if stored under proper conditions. (See Section VII for instructions)

**CONDITIONS TO AVOID (STABILITY):** Excessive heat

**INCOMPATIBILITY (MATERIAL TO AVOID):** Oxidizing agents

**HAZARDOUS DECOMPOSITION OR BY-PRODUCTS:** None, Normal products of combustion plus selenium oxides

**HAZARDOUS POLYMERIZATION:** Will not occur

**CONDITIONS TO AVOID (POLYMERIZATION):** N/a

**SECTION 10 NOTES:**

---

## SECTION 11: TOXICOLOGICAL INFORMATION

---

**TOXICOLOGICAL INFORMATION:** None available.

**SECTION 11 NOTES:**

---

## SECTION 12: ECOLOGICAL INFORMATION

---

**ECOLOGICAL INFORMATION:** None available

**SECTION 12 NOTES:**

# MATERIAL SAFETY DATA SHEET

FILE NO.: Selenophene

NAME OF PRODUCT **Selenophene**

MSDS DATE: 9/4 /13

---

## SECTION 13: DISPOSAL CONSIDERATIONS

---

**WASTE DISPOSAL METHOD:** Recycle to process, if possible. Consult your local regional authorities. You may be able to dissolve or mix material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber system. Observe all federal, state and local regulations when disposing of the substance.

**RCRA HAZARD CLASS:** Ignitable

---

## SECTION 13: DISPOSAL CONSIDERATIONS (con't)

---

SECTION 13 NOTES:

---

## SECTION 14: TRANSPORT INFORMATION

---

### U.S. DEPARTMENT OF TRANSPORTATION

**PROPER SHIPPING NAME:** Flammable Liquid, NOS

**HAZARD CLASS:** 3

**ID NUMBER:** UN1993

**PACKING GROUP:** II

SECTION 14 NOTES:

---

## SECTION 15: REGULATORY INFORMATION

---

### U.S. FEDERAL REGULATIONS

**TSCA (TOXIC SUBSTANCE CONTROL ACT):** Not listed on TSCA Inventory- R&D use only

**CERCLA (COMPREHENSIVE RESPONSE COMPENSATION, AND LIABILITY ACT):** Not listed

**SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT):** Not listed

**311/312 HAZARD CATEGORIES:** Not listed

**313 REPORTABLE INGREDIENTS:** none

**STATE REGULATIONS:**

**INTERNATIONAL REGULATIONS:**

### SECTION 15 NOTES:

**Safety Phrases:** S 20/21 When using, do not eat, drink or smoke.

S 45 In case of accident or if you feel unwell, seek medical attention immediately- show label if possible

S 28A After contact with skin, wash immediately with plenty of water.

---

## SECTION 16: OTHER INFORMATION

---

**OTHER INFORMATION:**

**PREPARATION INFORMATION:**

**DISCLAIMER:**