



LTS Research Laboratories, Inc.
Safety Data Sheet
Europium Selenide

1. Product and Company Identification

Trade Name: Europium Selenide
Chemical Formula: EuSe
Recommended Use: Scientific research and development

Manufacturer/Supplier: LTS Research Laboratories, Inc.
Street: 37 Ramland Road
City: Orangeburg
State: New York
Zip Code: 10962
Country: USA
Tel #: 855-587-2436 / 855-lts-chem

24-Hour Emergency Contact: 800-424-9300 (US & Canada)
+1-703-527-3887 (International)

2. Hazards Identification

Signal Word:

Danger



Hazard Statements:

H301+H331: Toxic if swallowed or if inhaled

Precautionary Statements:

P260: Do not breathe dust/fume/gas/mist/vapours/spray
P261: Avoid breathing dust/fume/gas/mist/vapours/spray
P301+P310: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing
P405: Store locked up
P501: Dispose of contents/container in accordance with local/regional/national/international regulations

HMIS Health Ratings (0-4):

Health: 2
Flammability: 0
Physical: 1

3. Composition

Chemical Family: Alloy
Additional Names:

Europium Selenide (EuSe):
Percentage: 100 wt%
CAS #: 12020-66-5
EC #: 234-662-9

4. First Aid Procedures

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| General Treatment: | Immediately remove any clothing soiled by the product. Remove breathing apparatus only after contaminated clothing has been completely removed. In case of irregular breathing or respiratory arrest provide artificial respiration. Seek medical attention. |
| Special Treatment: | None |
| Important Symptoms: | None |
| Inhalation: | Remove victim to fresh air. Supply oxygen if breathing is difficult. Keep patient warm. Seek immediate medical advice. |
| Ingestion: | Do not induce vomiting; immediately call for medical help. |
| Skin: | Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Seek immediate medical advice. |
| Eyes: | Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing |

5. Firefighting Measures

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| Flammability: | Non-flammable |
| Extinguishing Media: | No special restrictions – use suitable extinguishing agent for surrounding material and type of fire. |
| Spec. Fire Fighting Procedure: | Use full-face, self-contained breathing apparatus with full protective clothing to prevent contact with skin and eyes. See section 10 for decomposition products. |

6. Accidental Release Measures

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| If Material Is Released/Spilled: | Wear appropriate respiratory and protective equipment specified in special protection information. Isolate spill area and provide ventilation. Vacuum up spill using a high efficiency particulate absolute (HEPA) air filter and place in a closed container for disposal. Take care not to raise dust. |
| Environmental Precautions: | Isolate runoff to prevent environmental pollution. |

7. Handling and Storage

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| Handling Conditions: | Wash thoroughly after handling. |
| Storage Conditions: | Store in a cool dry place in a tightly sealed container. Ensure good ventilation at the workplace. Open and handle container with care. Store apart from materials and conditions listed in section 10. |
| Work/Hygienic Maintenance: | Do not use tobacco or food in work area. Wash thoroughly before eating and smoking. Do not blow dust off clothing or skin with compressed air. |
| Ventilation: | Provide sufficient ventilation to maintain concentration at or below threshold limit. |

8. Exposure Controls and Personal Protection

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| Permissible Exposure Limits: | 0.2 mg/m ³ as Se, long-term value |
| Threshold Limit Value: | 0.2 mg/m ³ as Se |
| Special Equipment: | None |
| Respiratory Protection: | Use a respirator with type P100 (USA) or P3 (EN143) cartridges as a backup to engineering controls. Risk assessment should be performed to determine if air-purifying respirators are appropriate. Only use equipment tested and approved under appropriate government standards. |

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| Protective Gloves: | Nitrile rubber, NBR 0.6 mm thick. |
| Penetration time of glove material: | N/A |
| Eye Protection: | Safety glasses or goggles, Full face protection |
| Body Protection: | Protective work clothing. Wear close-toed shoes and long sleeves/pants. |

9. Physical and Chemical Characteristics

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|---------------------------|--|
| Color | Brown |
| Form: | Powder, Granules, Pellets, Sputtering target, Custom parts |
| Odor: | N/A |
| Water Solubility: | N/A |
| Boiling Point: | N/A |
| Melting Point: | N/A |
| Flash Point: | N/A |
| Autoignition Temperature: | N/A |
| Density: | N/A |
| Molecular weight: | N/A |

10. Reactivity

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|-----------------------------------|---|
| Stability: | Stable under recommended storage conditions. Product decomposes when heated in air. |
| Reacts With: | N/A |
| Incompatible Conditions: | None |
| Hazardous Decomposition Products: | Hydrogen selenide, Toxic metal oxide fume |

11. Toxicological Information

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| Potential Health Effects: | |
| Eyes: | Irritating effect |
| Skin: | Irritant to skin and mucous membranes |
| Ingestion: | Toxic if swallowed |
| Inhalation: | Toxic if inhaled |
| Chronic: | Lanthanons can cause delayed blood clotting leading to hemorrhages. Exposure may also lead to sensitivity to heat, itching, increased awareness of odor and taste, and liver damage. Selenium may cause amyotrophic lateral sclerosis, bronchial irritation, gastrointestinal distress, vasopharyngeal irritation, garlic odor on breath and sweat, metallic taste, pallor, irritability, excessive fatigue, loss of fingernails and hair, pulmonary edema, anemia, and weight loss |
| Signs & Symptoms: | N/A |
| Aggravated Medical Conditions: | N/A |
| Median Lethal Dose: | N/A |
| Carcinogen: | NTP-R: Reasonably anticipated to be a carcinogen: limited evidence from studies in humans or sufficient evidence from studies in experimental animals. |

12. Ecological Information

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| Aquatic Toxicity: | High |
| Persistent Bioaccumulation Toxicity: | No |
| Very Persistent, Very Bioaccumulative: | No |
| Notes: | Do not allow material to be released to the environment without proper governmental permits. |

Do not allow product to reach ground water, water course, or sewage system, even in small quantities.
Danger to drinking water if even extremely small quantities leak into the ground.
Also poisonous for fish and plankton in water bodies.
May cause long lasting harmful effects to aquatic life.
Avoid transfer into the environment.
Very toxic for aquatic organisms.

13. Disposal Considerations

Dispose of in accordance with local, state, national, and international regulations.

14. Transportation Data

Hazardous:

Hazardous for transportation



Hazard Class:
Packing Group:
UN Number:
Proper Shipping Name:

6.1 Toxic substances
PG III
UN3238
Selenium compound, solid, n.o.s. (Europium Selenide)

15. Regulatory Information

Sec 302 Extremely Hazardous:
Sec 304 Reportable Quantities:
Sec 313 Toxic Chemicals:

No
N/A
Yes

16. Other Information

This safety data sheet should be used in conjunction with technical sheets. It does not replace them. The information given is based on our knowledge of this product, at the time of publication. It is given in good faith. The attention of the user is drawn to the possible risks incurred by using the product for any other purpose other than that for which it was intended. This does not in any way excuse the user from knowing and applying all the regulations governing his activity. It is the sole responsibility of the user to take all precautions required in handling the product. The aim of the mandatory regulations mentioned is to help the user to fulfill his obligations regarding the use of hazardous products.

Document Last Revised:

2/13/17