



LABORATORY CHEMICALS AND CONSUMABLES

MATERIAL SAFETY DATA SHEET

SELENIUM

1. Chemical Product and Company information.

Product name: Selenium

Contact Information:

Radchem cc
PO Box 166982
Brackendowns
Alberton 1454
Telephone : **011 867 3726 / 2864**

2. Hazard Identification

Hazardous in case of eye contact (irritant), of ingestion, of inhalation. Slightly hazardous in case of skin contact (irritant).

3. Composition / information on ingredients

CAS #: 7782-49-2

Synonym:

Chemical Name: Not applicable

Chemical Formula: Se

4. First Aid Measures

Eye Contact: Check for and remove any contact lenses. Do not use an eye ointment. Seek medical attention.

Skin Contact: After contact with skin, wash immediately with plenty of water. Gently and thoroughly wash the contaminated skin with running water and non-abrasive soap. Be particularly careful to clean folds, crevices, creases and groin. Cover the irritated skin with an emollient. If irritation persists, seek medical attention. Wash contaminated clothing before reusing.

Serious Skin Contact: Not available

Inhalation: Allow the victim to rest in a well ventilated area. Seek immediate medical attention.

Serious Inhalation: Evacuate the victim to a safe area as soon as possible. Loosen tight clothing such as a collar, tie, belt or waistband. If breathing is difficult, administer oxygen. If the victim is not breathing, perform



mouth-to-mouth resuscitation. Seek medical attention.

Ingestion: Do not induce vomiting. Loosen tight clothing such as a collar, tie, belt or waistband. If the victim is not breathing, perform mouth-to-mouth resuscitation. Seek immediate medical attention.

Serious Ingestion: Not available

5. Fire-fighting measures

Flammability of the Product: May be combustible at high temperature

Fire Hazards in Presence of Various Substances: Not applicable

Explosion Hazards in Presence of Various Substances: Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available.

Fire Fighting Media and Instructions: SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use water spray, fog or foam. Do not use water jet.

Special Remarks on Fire Hazards: Material in powder form, capable of creating a dust explosion.

Special Remarks on Explosion Hazards: Not available

6. Accidental release measures

Small Spill: Use appropriate tools to put the spilled solid in a convenient waste disposal container.

Large Spill: Use a shovel to put the material into a convenient waste disposal container. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities.

7. Handling and storage

Precautions: Keep away from heat. Keep away from sources of ignition. Empty containers pose a fire risk; evaporate the residue under a fume hood. Ground all equipment containing material. Do not ingest. Do not breathe dust. Avoid contact with eyes Wear suitable protective clothing In case of insufficient ventilation, wear suitable respiratory equipment If ingested, seek medical advice immediately and show the container or the label.

Storage: Keep container dry. Keep in a cool place. Ground all equipment containing material. Keep container tightly closed. Keep in a cool, well-ventilated place. Combustible materials should be stored away from extreme heat and away from strong oxidizing agents.

8. Exposure controls/personal protection

Engineering Controls: Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Personal Protection: Splash goggles. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.

Personal Protection in Case of a Large Spill: Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

9. Physical and chemical properties

Physical state and appearance: Solid (Solid metallic powder)

Odour Threshold: Not available



<p>Odour: Odourless</p> <p>Taste: Not available</p> <p>Colour: Not available</p> <p>Boiling Point: 684.9°C</p> <p>Melting Point: 217°C</p> <p>Critical Temperature: Not available</p> <p>Specific Gravity: 4.81 (Water = 1)</p> <p>Vapour Density: Not available</p> <p>Volatility: Not available</p>	<p>Ionicity (in Water): Not available.</p> <p>Dispersion Properties: Not available</p> <p>Solubility: Insoluble in cold water.</p>
<p><u>10. Stability and reactivity</u></p> <p>Stability: The product is stable.</p> <p>Instability Temperature: Not available.</p> <p>Conditions of Instability: Not available</p> <p>Incompatibility with various substances: Not available</p> <p>Corrosivity: Non-corrosive in presence of glass</p> <p>Special Remarks on Reactivity: Not available</p> <p>Special Remarks on Corrosivity: Not available</p> <p>Polymerization: Will not occur.</p>	
<p><u>11. Toxicological information</u></p> <p>Routes of Entry: Eye contact. Inhalation. Ingestion</p> <p>Toxicity to Animals: Acute oral toxicity (LD50): 6700 mg/kg [Rat].</p> <p>Chronic Effects on Humans: Not available</p> <p>Other Toxic Effects on Humans: Hazardous in case of ingestion, of inhalation. Slightly hazardous in case of skin contact (irritant).</p> <p>Special Remarks on Toxicity to Animals: Not available</p> <p>Special Remarks on Chronic Effects on Humans: Passes through the placental barrier in animal. Excreted in maternal milk in human.</p> <p>Special Remarks on other Toxic Effects on Humans: Not available</p>	
<p><u>12. Ecological information</u></p> <p>Ecotoxicity: Not available</p>	



BOD5 and COD: Not available

Products of Biodegradation: Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

Toxicity of the Products of Biodegradation: The products of degradation are more toxic.

Special Remarks on the Products of Biodegradation: Not available

13. Disposal considerations

Waste Disposal: Waste must be disposed of in accordance with federal, state and local environmental control regulations.

14. Transport information

DOT Classification: CLASS 6.1: Poisonous material

Identification: : Selenium powder : UN2658 PG: III

Special Provisions for Transport: Not available

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