1. IDENTIFICATION

Product Name: SELENIUM DIOXIDE
Synonyms: Selenium (IV) oxide; Selenious anhydride
Formula and Formula Weight: SeO₂  110.96
Integra numbers beginning with: S138.50
Recommended Use: Commercial/industrial use
Restrictions on Use: No information available

INTEGRA Chemical Company
24 Hour Emergency Response: CHEMTREC 800-424-9300 (Outside USA 703-527-3887)
1216 6th Ave N
Kent WA 98032
Phone: 253-479-7000

2. HAZARDS IDENTIFICATION

<table>
<thead>
<tr>
<th>OSHA Classification</th>
<th>Hazard Category</th>
<th>Hazard Statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Toxicity - Oral</td>
<td>3</td>
<td>Toxic if swallowed.</td>
</tr>
<tr>
<td>Acute Toxicity - Inhalation</td>
<td>3</td>
<td>Toxic if inhaled.</td>
</tr>
<tr>
<td>Specific Target Organ Toxicity (repeated exposure)</td>
<td>2</td>
<td>May cause damage to organs through prolonged or repeated exposure.</td>
</tr>
</tbody>
</table>

Signal Word: Danger

Precautionary Statements
Prevention:  
Do not breathe dust, fume, gas, mist, vapors, spray.  
Wash thoroughly after handling.  
Do not eat, drink or smoke when using this product.  
Use only outdoors or in a well-ventilated area.

Response:  
If swallowed: Immediately call a poison center, doctor.  
If inhaled: Remove person to fresh air and keep comfortable for breathing.  
Call a poison center, doctor.  
Get medical advice, attention if you feel unwell.  
Specific treatment (see first aid section on this label)  
Rinse mouth.

Storage:  
Store in a well ventilated place. Keep container tightly closed.  
Store locked up.

Disposal:  
Dispose of contents, container in accordance with all governmental regulations.

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Component</th>
<th>Synonyms</th>
<th>CAS #</th>
<th>% Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Selenium dioxide</td>
<td>Selenium (IV) oxide; Selenious anhydride</td>
<td>07746-08-4</td>
<td>100</td>
</tr>
</tbody>
</table>

4. FIRST AID MEASURES

Inhalation: Remove person to fresh air and keep comfortable for breathing. If not breathing, give artificial respiration. If breathing is difficult administer oxygen. Seek medical attention. Beware of delayed pneumonitis.
Eye Contact: Flush eyes with water for at least 15 minutes. Seek immediate medical attention.  
Skin Contact: Immediately remove contaminated clothing. Flush skin with water for at least 15 minutes. Seek immediate medical attention.  
Ingestion: Rinse mouth and give victim large quantities of water. Never give anything by mouth to an unconscious person. Seek immediate medical attention.  
Additional Notes: Symptoms and effects include irritation of eyes, skin, nose, throat; visual disturbance; headache; chills, fever; breathing difficulty, bronchitis; metallic taste, garlic breath, gastrointestinal disturbance; dermatitis; eye, skin burns.

5. FIRE-FIGHTING MEASURES

Extinguishing Media: Material is not flammable. Use extinguishing media suitable to surrounding materials.
Special Equipment and Precautions: Use water to cool nearby containers and structures. Wear full protective equipment, including suitable...
PHYSICAL AND CHEMICAL PROPERTIES

- **Vapor Pressure:** 12.5 mm Hg @70°C
- **Odor:** Pungent, sour odor
- **Odor Threshold:** Not available
- **pH:** Not available
- **Partition Coefficient:** n-octanol/water: Not available
- **Decomposition Temperature:** 340 °C
- **Viscosity:** Not available
- **Appearance:** White crystals, turn slightly pink with trace decomposition
- **Melting/Freezing Point:** 340 °C
- **Initial Boiling Point and Boiling Range:** Not available
- **Flash Point:** Not available
- **Evaporation Rate:** Not available
- **Flammability:** Not available
- **Upper Flammable Limits (% by volume in air):** Not available
- **Lower Flammable Limits (% by volume in air):** Not available
- **Vapor Pressure:** 12.5 mm Hg @70°C
- **Vapor Density:** Not available
- **Relative Density:** 3.95 g/cc
- **Solubility:** 38.4 g in 100 ml water @14°C
- **Partition Coefficient:** n-octanol/water: Not available
- **Auto-Ignition Temperature:** Not available
- **Decomposition Temperature:** Not available
- **Viscosity:** Not available

EXPOSURE CONTROLS AND PERSONAL PROTECTION

- **OSHA & ACGIH Exposure Limits:**
  - Selenium dioxide
  - OSHA TWA: 0.2 mg/m3 (as Se)
  - ACGIH TWA: 0.2 mg/m3 (as Se)

- **Engineering Controls:** Use general or local exhaust ventilation to meet TLV and PEL requirements.
- **Respiratory Protection:** Respiratory protection required if airborne concentrations exceed PEL or TLV. Use a NIOSH-approved respirator with a particulate filter.
- **Skin/Eye Protective Equipment:** Safety goggles, protective clothing and gloves appropriate for the risk of exposure. Rubber gloves are recommended. Facilities storing or utilizing this material should have readily accessible eyewash stations and safety showers. Select respirators and other safety equipment in accordance with regulations and based upon the particular conditions of use and risk of exposure. Always use safe chemical-handling and good industrial hygiene practices.

HANDLING AND STORAGE

- **Incompatible Materials:** Incompatible with strong acids. Alcohols, ammonia, nitric acid, organic materials, halogen acids, phosphorous trichloride.
- **Storage and Handling:** Keep in a cool, dry, well-ventilated area dedicated to the storage of poisons. Protect from incompatible materials. Use handling procedures to minimize dust generation. Protect containers from physical damage. Do not breathe dust, fume, gas, mist, vapors, spray. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area.

6. ACCIDENTAL RELEASE MEASURES

- **Spill Procedures:** Remove all potential ignition sources. Prevent spread of spill. Wear suitable protective equipment. Sweep or scoop into disposal container in a manner that minimizes dust dispersion. Do not allow material to enter drains or the environment.

7. HANDLING AND STORAGE

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

9. PHYSICAL AND CHEMICAL PROPERTIES

10. STABILITY AND REACTIVITY

11. TOXICOLOGICAL INFORMATION

- **Effects of Over Exposure:**
  - **Inhalation:** Harmful or fatal if inhaled. Severe irritant with immediate and delayed effects. Coughing, difficult breathing, chills, garlic breath, fever, headache, chemical pneumonia and bronchial spasms.
  - **Skin Contact:** Contact may cause irritation or burns. May lead to dermatitis and skin sensitization. May be harmful or fatal if absorbed through the skin. Absorption produces symptoms similar to ingestion or inhalation.
  - **Eye Contact:** Dust or solution will severely irritate or burn the eyes. An allergic reaction, seen as redness and puffiness, may occur. Do

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15. REGULATORY INFORMATION

Selenium dioxide is listed in the TSCA inventory and in SARA 313 (as selenium compounds).

16. OTHER INFORMATION

OSHA SDS #: 26294 rev 101 3/27/2015

NE = Not established, NA = Not applicable or Not available

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***** END OF SDS *****