Material Safety Data Sheet  
Cholecalciferol MSDS

Section 1: Chemical Product and Company Identification

Product Name: Cholecalciferol  
Catalog Codes: SLC2533  
CAS#: 67-97-0  
RTECS: VS2900000  
TSCA: TSCA 8(b) inventory: Cholecalciferol  
CI#: Not available.  
Synonym: Vitamin D3;  
Chemical Formula: C27H44O  

Contact Information:  
Sciencelab.com, Inc.  
14025 Smith Rd.  
Houston, Texas 77396  
US Sales: 1-800-901-7247  
International Sales: 1-281-441-4400  
Order Online: ScienceLab.com  
CHEMTREC (24HR Emergency Telephone), call: 1-800-424-9300  
International CHEMTREC, call: 1-703-527-3887  
For non-emergency assistance, call: 1-281-441-4400

Section 2: Composition and Information on Ingredients

Composition:

<table>
<thead>
<tr>
<th>Name</th>
<th>CAS #</th>
<th>% by Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cholecalciferol</td>
<td>67-97-0</td>
<td>100</td>
</tr>
</tbody>
</table>

Toxicological Data on Ingredients: Cholecalciferol: ORAL (LD50): Acute: 42 mg/kg [Rat]. 42.5 mg/kg [Mouse]. 80 mg/kg [Dog].

Section 3: Hazards Identification

Potential Acute Health Effects:  
Very hazardous in case of eye contact (irritant), of ingestion. Hazardous in case of inhalation. Severe over-exposure can result in death. Inflammation of the eye is characterized by redness, watering, and itching.

Potential Chronic Health Effects:  
Very hazardous in case of ingestion. Hazardous in case of eye contact (irritant), of inhalation. CARCINOGENIC EFFECTS: Not available. MUTAGENIC EFFECTS: Not available. TERATOGENIC EFFECTS: Not available. DEVELOPMENTAL TOXICITY: Not available. Repeated exposure to an highly toxic material may produce general deterioration of health by an accumulation in one or many human organs.

Section 4: First Aid Measures

Eye Contact: Check for and remove any contact lenses. Do not use an eye ointment. Seek medical attention.
Skin Contact: No known effect on skin contact, rinse with water for a few minutes.

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. 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. 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.

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Section 5: Fire and Explosion Data

Flammability of the Product: May be combustible at high temperature.

Auto-Ignition Temperature: Not available.

Flash Points: Not available.

Flammable Limits: Not available.

Products of Combustion: These products are carbon oxides (CO, CO2).

Fire Hazards in Presence of Various Substances: Not available.

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.

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Section 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.

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Section 7: Handling and Storage

Precautions:
Keep locked up. 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. 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. Highly toxic or infectious materials should be stored in a separate locked safety storage cabinet or room.
### Section 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.

**Personal Protection in Case of a Large Spill:**
Splash goggles. Full suit. Boots. Gloves. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

**Exposure Limits:** Not available.

### Section 9: Physical and Chemical Properties

- **Physical state and appearance:** Solid.
- **Odor:** Not available.
- **Taste:** Not available.
- **Molecular Weight:** 384.65 g/mole
- **Color:** Not available.
- **pH (1% soln/water):** Not applicable.
- **Boiling Point:** Decomposes.
- **Melting Point:** 84.5°C (184.1°F)
- **Critical Temperature:** Not available.
- **Specific Gravity:** Not available.
- **Vapor Pressure:** Not applicable.
- **Vapor Density:** Not available.
- **Volatility:** Not available.
- **Odor Threshold:** Not available.
- **Water/Oil Dist. Coeff.:** Not available.
- **Ionicity (in Water):** Not available.
- **Dispersion Properties:** Not available.
- **Solubility:** Insoluble in cold water.

### Section 10: Stability and Reactivity Data

- **Stability:** The product is stable.
- **Instability Temperature:** Not available.
- **Conditions of Instability:** Not available.
- **Incompatibility with various substances:** Not available.
- **Corrosivity:** Non-corrosive in presence of glass.
- **Special Remarks on Reactivity:** Not available.
Special Remarks on Corrosivity: Not available.
Polymerization: No.

Section 11: Toxicological Information

**Routes of Entry:** Eye contact. Inhalation. Ingestion.

**Toxicity to Animals:** Acute oral toxicity (LD50): 42 mg/kg [Rat].

**Chronic Effects on Humans:** Not available.

**Other Toxic Effects on Humans:**
Very hazardous in case of ingestion. Hazardous in case of inhalation.

**Special Remarks on Toxicity to Animals:** Not available.

**Special Remarks on Chronic Effects on Humans:** Human: passes through the placenta, excreted in maternal milk.

**Special Remarks on other Toxic Effects on Humans:** Nuisance dust.

Section 12: Ecological Information

**Ecotoxicity:** Not available.

**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.

Section 13: Disposal Considerations

**Waste Disposal:**

Section 14: Transport Information

**DOT Classification:** CLASS 6.1: Poisonous material.

**Identification:** Toxic solid, organic, n.o.s. (Choleciferol) : UN2811 PG: II

**Special Provisions for Transport:** Not available.

Section 15: Other Regulatory Information

**Federal and State Regulations:** TSCA 8(b) inventory: Cholecalciferol


**Other Classifications:**

**WHMIS (Canada):**
CLASS D-1A: Material causing immediate and serious toxic effects (VERY TOXIC). CLASS D-2B: Material causing other toxic effects (TOXIC).
DSCL (EEC):
R25- Toxic if swallowed. R41- Risk of serious damage to eyes.

HMIS (U.S.A.):

- Health Hazard: 3
- Fire Hazard: 1
- Reactivity: 0
- Personal Protection: j

National Fire Protection Association (U.S.A.):

- Health: 3
- Flammability: 1
- Reactivity: 0
- Specific hazard:

Protective Equipment:
Not applicable. Lab coat. Wear appropriate respirator when ventilation is inadequate. Splash goggles.

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**Section 16: Other Information**

**References:** Not available.

**Other Special Considerations:** Not available.

**Created:** 10/09/2005 04:54 PM

**Last Updated:** 05/21/2013 12:00 PM

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