



# SAFETY DATA SHEET

## 1. CHEMICAL IDENTIFICATION AND COMPANY INFORMATION

PRODUCT NAME: Cholecalciferol, USP Grade  
PRODUCT NUMBER: V883  
COMPANY INFO: *PhytoTechnology Laboratories*®  
PO Box 12205, Shawnee, KS 66282-2205  
Phone: 1-888-749-8682 or 1-913-341-5343; Fax: 1-888-449-8682 or 1-913-341-5442  
www.phytotechlab.com

EMERGENCY PHONE NUMBER 1-800-535-5053 - US Only  
(INFOTRAC): 1-352-323-3500 - International

RECOMMENDED USE: For Research Use Only

RESTRICTIONS ON USE: Products sold by *PhytoTechnology Laboratories*® are intended for research and laboratory use only. Products are not to be used as human or animal therapeutics, cosmetics, agricultural or pesticidal products, food additives, or as household chemicals.

## 2. HAZARDS IDENTIFICATION

### Classification of the substance or mixture:

GHS Classification:

- H301 - Acute toxicity, Oral (Category 3)
- H330 - Acute toxicity, Inhalation (Category 2)
- H311 - Acute toxicity, Dermal (Category 3)
- H372 - Specific target organ toxicity - repeated exposure, Oral (Category 1)

### GHS Label elements, including hazard and precautionary statements:



Signal Word: **Danger**

Hazard Statements:

- H301 + H311 - Toxic if swallowed or in contact with skin
- H330 - Fatal if inhaled.
- H372 - Causes damage to organs through prolonged or repeated exposure if swallowed.

Precautionary Statements:

- P260 – Do not breathe dust.
- P280 – Wear protective gloves/protective clothing/eye protection/face protection.
- P305 + P351 + P338 – IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P314 – Get medical advice/attention if you feel unwell.

Hazards not otherwise classified (HNOC) or not covered by GHS: - none

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms: (3 $\beta$ ,5Z,7E)-9,10-Secocholesta-5,7,10(19)-trien-3-ol; Vitamin D<sub>3</sub>  
CAS No.: 67-97-0  
Formula: C<sub>27</sub>H<sub>44</sub>O  
Molecular Weight: 384.65 g/mol  
EC No.: 200-673-2

Ingredient	CAS Number	Percent	Hazardous
Cholecalciferol	67-97-0	>99 %	No exposure limits established by OSHA or ACGIH

#### 4. FIRST AID MEASURES

General Advice: Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

Route of Entry	Symptoms	First Aid Procedures
Ingestion	May cause irritation if swallowed	If swallowed, wash out mouth with water. Never give anything by mouth to an unconscious person. <b>Get medical attention.</b>
Inhalation	May cause irritation to respiratory tract	Safely remove victim to fresh air. If not breathing, institute cardiopulmonary resuscitation (CPR). If breathing is difficult, ensure clear airway and give oxygen. <b>Get medical attention.</b>
Eye Contact	Direct contact may cause irritation. May cause redness, tearing, or blurred vision.	Flush immediately with large amounts of water for at least 15 minutes. Eyelids should be held away from the eyeball to ensure thorough rinsing. <b>Get medical attention if irritation persists.</b>
Skin Contact	Irritating. May cause reddening, itching or inflammation.	Wash area thoroughly with soap and water. Remove and wash contaminated clothing. <b>Get medical attention if irritation persists.</b>

Most Important Symptoms or Effects, Both Acute and Delayed:

See section 2 and/or section 11

Recommendation for Immediate Medical Care and Special Treatment Needed:

No data available

#### 5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media: Water spray, carbon dioxide, dry chemical powder, or appropriate foam. Use extinguishing media suitable for surrounding fire.

Special Protective Equipment and Precaution for Firefighters: In the event of a fire, wear full protective clothing and NIOSH approved self-contained breathing apparatus. Evacuate the area and fight fire from a safe distance.

Hazardous Combustion Products: May emit toxic fumes under fire conditions.

#### 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures:

Use personal protection recommended in Section 8. Avoid dust formation. Avoid breathing dust, vapors, mist or gas. Ensure adequate ventilation, especially in confined areas. Evacuate personnel to safe areas.

Environmental Precautions: Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

Method of Containment and Cleanup: Wear suitable protective clothing. Avoid dust formation. Carefully sweep up and remove. Place material in a dry container and cover. Remove from the area. Flush spill area with water. Do not let product enter drains.

#### 7. HANDLING AND STORAGE

Precaution for Safe Handling: Avoid contact with skin and eyes. Avoid dust formation and aerosols. Avoid incompatible substances. Wash thoroughly after use.

Conditions for Safe Storage: Keep in a tightly closed container and store in a cool, dry, and well-ventilated area.

Incompatibilities: Strong oxidizing agents, acid chlorides, acid anhydrides

Recommended Storage Temperature: 2-8°C

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

OSHA's Permissible Exposure Limits (PELs): None

Threshold Limit Values (TLVs): None

Engineering Controls: Handle in accordance to general industrial hygiene and safety practice.

Personal Protective Equipment (PPE):

Eye/Face Protection: Chemical safety glasses or goggles. Have eye-washing facilities readily available where eye contact can occur.

Skin Protection: Protective gloves

Body Protection: Lab coat

Respiratory Protection: Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: White to off-white powder

pH: No data available

Solubility: Soluble in DMSO

Melting Range: 83 - 86 °C (181 - 187 °F) - lit.

Vapor Density: No data available

Vapor Pressure: No data available

Specific Gravity: No data available

Odor: No data available

Odor Threshold: No data available

Viscosity: No data available

Relative Density: No data available

Evaporation Rate: No data available

Initial Boiling Point and Boiling Range: No data available

Flammability (solid, gas): No data available

Partition coefficient: No data available  
n-octanol/water):

Auto-ignition Temperature: No data available

Decomposition Temperature: No data available

Flash Point (Closed Cup): No data available

Flammable Limits: Upper (%) – No data available Lower (%) – No data available

## 10. STABILITY AND REACTIVITY

Reactivity: No data available

Chemical Stability: Stable under normal conditions of use

Possibility of Hazard Reactions: No data available

Conditions to Avoid: No data available

Incompatibles Materials: Carbon dioxide, carbon monoxide

Hazardous Decomposition Products: Carbon monoxide, carbon dioxide

### 11. TOXICOLOGICAL INFORMATION

Toxicity: LD<sub>50</sub> (Oral-Rat)(mg/Kg) No data available  
LD<sub>50</sub> (IP-Mouse)(mg/Kg) No data available  
LD<sub>50</sub> (Oral-Mouse)(mg/Kg) No data available

Carcinogenicity: NTP: No  
IARC: No  
OSHA Reg: No

Reproductive Toxicity: No data available

Specific Target Organ Toxicity: Single Exposure: No data available  
Repeated Exposure: No data available

Target Organs: Kidneys, heart

Routes of Entry: Ingestion, inhalation, skin and eye contact

NIOSH/RTECS NO: VS2900000

***The toxicological properties of this product have not been thoroughly investigated***

### 12. ECOLOGICAL INFORMATION

Ecotoxicity: No data available  
Persistence and Degradability: No data available  
Bioaccumulative Potential: No data available  
Mobility in Soil: No data available  
Other Adverse Effects: No data available

### 13. DISPOSAL CONSIDERATION

Disposal Procedure: Dispose in accordance with all applicable federal, state, and local environmental regulations.

### 14. TRANSPORT INFORMATION

Domestic (D.O.T.): Proper Shipping Name: Toxic solids, organic, n.o.s. (Vitamin D3)

Hazard Class: 6.1 Packing group: II  
Reportable Quantity: N/A  
UN/NA: 2811  
Labels: N/A

International:

IMDG: Proper Shipping Name: Toxic solids, organic, n.o.s. (Vitamin D3)  
Hazard Class: 6.1 Packing group: II EMS-No.: F-A, S-A  
UN/NA: 2811  
Labels: N/A

IATA: Proper Shipping Name: Toxic solids, organic, n.o.s. (Vitamin D3)  
 Hazard Class: 6.1 Packing group: II  
 UN/NA: 2811  
 Labels: N/A

**15. REGULATORY INFORMATION**

**TSCA:** Yes

**SARA TITLE III:**

Section 302 (EHS) Ingredients: No

Section 313 Ingredients: No

Section 304 (EHS/CERCLA) Ingredients: No

Section 311/312 Hazard: Acute Health Hazard, Chronic Health Hazard

**Massachusetts Right to Know Components:** This product is not on the Massachusetts Substance List (MSL).

**Pennsylvania Right to Know Components:** This product is not listed on the Pennsylvania Code’s Hazardous Substance List (Chapter 323).

**New Jersey Right to Know Components:** This product is not listed amongst the New Jersey Right to Know Hazardous Substance Fact Sheets

**California Prop. 65 Components:** This product is not known to the State of California to cause cancer or reproductive toxicity.

**16. OTHER INFORMATION**

<b>HMIS Rating:</b>	<b>Health Hazard</b>	<b>Flammability</b>	<b>Physical Hazard</b>	<b>Personal Protection</b>
	4	0	0	C
<b>NFPA Rating:</b>	<b>Health Hazard</b>	<b>Fire Hazard</b>	<b>Instability</b>	<b>Special Hazard</b>
	4	0	0	

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