

Material Safety Data Sheet

CRYSTALLINE D3

Section 1 - Product and Company Information

Product Name	CHOLECALCIFEROL, EP,BP,USP
Product Number	C40
Brand	Garden
Company	Garden Biochemical
Street Address	Huayuan Industrial Zone
City, State, Zip, Country	Dongyang, Zhejiang, 322121, China
Technical Phone:	+86 571 8657 1191
Emergency Phone:	+86 138 5812 8508
Fax:	+86 571 8657 1190

Section 2 - Composition/Information on Ingredient

Substance Name	CAS #	SARA 313
(+)-VITAMIN D/3, CRYSTALLINE, 99+%, USP	67-97-0	No

Formula	C27H44O
Synonyms	Arachitol, Calciol, Cholecalciferol, Cholecalciferol, D3, Colecalciferol, 7-Dehydrocholesterol, activated, Delsterol, Deparal, D3-Vigantol, Oleovitamin D3, Quintox, Ricketon, Rampage, Vigorsan, Trivitan, Vitamin D3, Vitinc dan-dee-3
RTECS Number:	VS2900000

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Highly Toxic (USA) Very Toxic (EU).
May impair fertility. Possible risk of harm to the unborn child.
Toxic if swallowed.
Target organ(s): Kidneys. Heart.

HMIS RATING

HEALTH: 3*
FLAMMABILITY: 0
REACTIVITY: 0

NFPA RATING

HEALTH: 3
FLAMMABILITY: 0
REACTIVITY: 0

*additional chronic hazards present.

For additional information on toxicity, please refer to Section 11.

Section 4 - First Aid Measures

ORAL EXPOSURE

If swallowed, wash out mouth with water provided person is

conscious. Call a physician immediately.

INHALATION EXPOSURE

If inhaled, remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen.

DERMAL EXPOSURE

In case of skin contact, flush with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes. Call a physician.

EYE EXPOSURE

In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

Section 5 - Fire Fighting Measures

FLASH POINT

N/A

AUTOIGNITION TEMP

N/A

FLAMMABILITY

N/A

EXTINGUISHING MEDIA

Suitable: Water spray. Carbon dioxide, dry chemical powder, or appropriate foam.

FIREFIGHTING

Protective Equipment: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes. Specific Hazard(s): Emits toxic fumes under fire conditions.

Section 6 - Accidental Release Measures

PROCEDURE TO BE FOLLOWED IN CASE OF LEAK OR SPILL

Evacuate area.

PROCEDURE(S) OF PERSONAL PRECAUTION(S)

Wear self-contained breathing apparatus, rubber boots, and heavy rubber gloves.

METHODS FOR CLEANING UP

Sweep up, place in a bag and hold for waste disposal. Avoid raising dust. Ventilate area and wash spill site after material pickup is complete.

Section 7 - Handling and Storage

HANDLING

User Exposure: Do not breathe dust. Do not get in eyes, on skin, on clothing. Avoid prolonged or repeated exposure.

STORAGE

Suitable: Keep tightly closed.
Store at 2-8°C

Section 8 - Exposure Controls / PPE

ENGINEERING CONTROLS

Safety shower and eye bath. Use only in a chemical fume hood.

PERSONAL PROTECTIVE EQUIPMENT

Respiratory: Government approved respirator.
 Hand: Compatible chemical-resistant gloves.
 Eye: Chemical safety goggles.

GENERAL HYGIENE MEASURES

Wash contaminated clothing before reuse. Wash thoroughly after handling.

Section 9 - Physical/Chemical Properties

Appearance	Color: White Form: Fine crystals	
Property	Value	At Temperature or Pressure
Molecular Weight	384.65 AMU	
pH	N/A	
BP/BP Range	N/A	
MP/MP Range	82-87 °C	
Freezing Point	N/A	
Vapor Pressure	N/A	
Vapor Density	N/A	
Saturated Vapor Conc.	N/A	
SG/Density	N/A	
Bulk Density	N/A	
Odor Threshold	N/A	
Volatile%	N/A	
VOC Content	N/A	
Water Content	N/A	
Solvent Content	N/A	
Evaporation Rate	N/A	
Viscosity	N/A	
Surface Tension	N/A	
Partition Coefficient	N/A	
Decomposition Temp.	N/A	
Flash Point	N/A	
Explosion Limits	N/A	
Flammability	N/A	
Autoignition Temp	N/A	
Refractive Index	N/A	
Optical Rotation	105-112	
Miscellaneous Data	N/A	
Solubility	N/A	

N/A = not available

Section 10 - Stability and Reactivity

STABILITY

Stable: Stable.
 Conditions to Avoid: Sensitive to air. Sensitive to light.
 Materials to Avoid: Strong oxidizing agents, Acid chlorides, Acid anhydrides.

HAZARDOUS DECOMPOSITION PRODUCTS

Hazardous Decomposition Products: Carbon monoxide, Carbon dioxide.

HAZARDOUS POLYMERIZATION

Hazardous Polymerization: Will not occur

Section 11 - Toxicological Information

ROUTE OF EXPOSURE

Skin Contact: May cause skin irritation.
Skin Absorption: May be harmful if absorbed through the skin.
Eye Contact: May cause eye irritation.
Inhalation: May be harmful if inhaled. Material may be irritating to mucous membranes and upper respiratory tract.
Ingestion: Toxic if swallowed.

TARGET ORGAN(S) OR SYSTEM(S)

Kidneys. Heart.

TOXICITY DATA

Oral
Rat
42 mg/kg
LD50

Oral
Mouse
42.5 mg/kg
LD50

Intraperitoneal
Mouse
136 MG/KG
LD50

Oral
Dog
80 mg/kg
LD50
Remarks: Behavioral:Somnolence (general depressed activity).
Behavioral:Change in motor activity (specific assay).
Gastrointestinal:Other changes.

CHRONIC EXPOSURE - TERATOGEN

Result: Possible risk of congenital malformation in the fetus.

Species: Rat
Dose: 90 MG/KG
Route of Application: Subcutaneous
Exposure Time: (12-20D PREG)
Result: Effects on Embryo or Fetus: Fetotoxicity (except death, e.g., stunted fetus).

CHRONIC EXPOSURE - REPRODUCTIVE HAZARD

Result: May cause reproductive disorders.

Section 12 - Ecological Information

No data available.

Section 13 - Disposal Considerations

APPROPRIATE METHOD OF DISPOSAL OF SUBSTANCE OR PREPARATION

Contact a licensed professional waste disposal service to dispose of this material. Observe all federal, state, and local environmental regulations.

Section 14 - Transport Information

DOT

Proper Shipping Name: Toxic solids, organic, n.o.s.
UN#: 2811
Class: 6.1
Packing Group: Packing Group II
Hazard Label: Toxic substances.
PIH: Not PIH

IATA

Proper Shipping Name: Toxic solid, organic, n.o.s.
IATA UN Number: 2811
Hazard Class: 6.1
Packing Group: II

Section 15 - Regulatory Information

EU ADDITIONAL CLASSIFICATION

T+ - Very Toxic.
R24/25 - Toxic in contact with skin or if swallowed.
R26 - Very Toxic by inhalation.
R48/25 - Toxic: danger of serious damage to health by prolonged if swallowed.
S36/37 - Wear suitable protective clothing and gloves.
S45 - In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

US CLASSIFICATION AND LABEL TEXT

Indication of Danger: Highly Toxic (USA) Toxic (EU).
Risk Statements: May impair fertility. Possible risk of harm to the unborn child. Toxic if swallowed.
Safety Statements: In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
Wear suitable protective clothing, gloves, and eye/face protection.
US Statements: Target organ(s): Kidneys. Heart.

UNITED STATES REGULATORY INFORMATION

SARA LISTED: No
TSCA INVENTORY ITEM: Yes Yes

CANADA REGULATORY INFORMATION

WHMIS Classification: This product has been classified in accordance with the hazard criteria of the CPR, and the MSDS contains all the information required by the CPR.
DSL: Yes
NDSL: No

Section 16 - Other Information

DISCLAIMER

For R&D or manufacturing use. Not for household use.

WARRANTY

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. Garden Biochemical, shall not be held liable for any damage resulting from handling or from contact with the above product.