

Brand name GARDEN	Material Safety Data Sheet Vitamin D ₃ Oil	Date 05/31/2005 Page 1 of 3
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1. Product identification and classification

Name: Vitamin D₃ Oil

Company: Zhejiang Garden Biochemical High-tech Stock Co., Ltd.

Address: Huayuan Industrial Zone, Dongyang 322121, Zhejiang Province, China

Telephone : +86-571-86571191/2/3

Telefax : +86-571-86571190

2. Composition and ingredient

Mixture

Vitamin D3 in vegetable oil.

Hazardous components: Cholecalciferol, CAS NO. 67-97-0, EINECS NO. 200-673-2.

Molecular formula: C₂₇H₄₄O

Molecular mass: 384.65g/mol

Hazard symbol: T+ very toxic

Risk phrases: R26, R24/25, R48/25.

3. Hazards

May cause birth defects based on animal data.

Acute Effects: Material has not been tested as a whole, so information described below is based on one or more of its ingredients. May cause skin reaction such as cracks in lips and around mouth, dry skin, skin peeling, itching and redness of the skin. May cause gastrointestinal effects such as nausea, vomiting, diarrhea, constipation, cramps, and loss of appetite. May cause renal system effects such as urine retention, increase or decrease in urine production, painful urination, and presence of blood in urine.

4. First-aid measures

Inhalation: Remove the casualty to fresh air and get medical attention immediately.

Skin contact: Wash affected skin with water and soap.

Eye contact: Wash the eye instantly with the clean water for at least 15min. If still feel smartly, ask the oculist for help.

5. Fire-fighting measures

Extinguishing media: Water spray jet, dry powder, foam, carbon dioxide, and sand.

Protective equipment: Wear self-contained breathing apparatus.

Further information: Hot container should be cooled down slowly with water. Don't allow to drain the extinguish water into rivers unless be processed. Toxic emission may be given off in a fire. See decomposition products.

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6. Accidental release measures
 Individual precaution: Wear protective equipments.
 Environmental protection: The redundant can be recycled and not be wasted.
 Cleaning up program: Using inactivity sorbent by put the goods to the obturator according to the management rule.

7. Packing and storage
 Technology measure: Place in the obturation system, charge in inactivity gas (Nitrogen)
 Material: Stainless steel, aluminium, porcelain enamel, glass
 Storage: Airproofed, stored in inactivity gas and cool place, avoid ray
 Packing group: III

8. Leak controls/ Personnel protection
 Defend requirement: Air ventilation.
 Respiratory protection: Use fine dust mask.
 Eye protection: Tight sealed safety glasses.
 Body protection: exposure suit
 The occupational sanitation habit: Don't eat, drink, smoke or deep breathing when working; the polluted suit should be put off immediately and sent to disposal when off duty, clean the face and hands.

9. Physical and chemical properties

Appearance and Odor:	Liquid, clear yellow, slight odor
Shelf life:	6 months/24months
Sensitivity	To heat, light, air
Viscosity	High
H ₂ O solubility	Insoluble
Solubility – other	Miscible with edible oils and fats, soluble in ether, hydrocarbons and chlorinated hydrocarbons, soluble in alcohol
Specific gravity:	0.950

10. Stability
 The avoided condition: light, heat
 Substance to avoid: Strong reducing and oxidizing agents, acids and alkalis.
 Dangerous reactions: In case of fire or when heated to decomposition material.

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11. Toxicological information

LD₅₀ oral (rat): 42mg/kg

Vitamin D₃ is a biological active substance.

For the people who touch this product often, it may cause calcification or hypercalcaemia.

12. Ecological information

The waste product can't be discarded directly unless processed by the biology wastewater process technique.

13. Disposal considerations

The castoff should be deposited or set on fire according to the State Standard.

14. Transport information

UN-No.: None subject to transport regulations.

IMDG class:

IMO: Packaging group:

IATA: Packaging group:

Correct technical name: NOT RESTRICTED

ADR/RID:

15. Regulatory Information

Hazardous Components: Vitamin D₃ (Cholecalciferol)

Labelling according to EC directives

Symbol(s): T⁺: Very Toxic

R-phrase(s): R26: Very toxic by inhalation.

R24/25: Toxic in contact with skin and if swallowed.

R48/25: Toxic, danger of serious damage to health by prolonged exposure if swallowed

S-phrase(s): 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).

16. Other information

Annotate: The above-mentioned data information corresponds to our present knowledge and experience of our country. For the necessary security measure information we provide as the product introduction, we can't insure it is absolutely safe because of the uncertainty of the chemicals.

It is the obligation to the purchaser to obey Regulations and give the information to the qualified occupational person.