

Safety data sheet

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BASF Safety data sheet according to 91/155/EEC

Date / Revised: 12.07.2004

Product: **Dry Vitamin D3 100**

Version: 1.0

(30067769/SDS_GEN_EU/EN)

Date of print 28.04.2005

1. Substance/preparation and company identification

Dry Vitamin D3 100

Use: Vitamin

Company:

BASF Aktiengesellschaft

Fine Chemicals Division

67056 Ludwigshafen, Germany

E-mail address: basis-msds-label.me-qr@basf-ag.de

Emergency information:

Fire brigade BASF Ludwigshafen

Telephone: +49-621-60-43333

Telefax number: +49-621-60-92664

2. Composition/information on ingredients

Chemical nature

Preparation based on: cholecalciferol

CAS: 67-97-0; EG: 200-673-2

in a matrix of: carbohydrates, Gelatins

Hazardous ingredients

cholecalciferol

Content (W/W): $\geq 0.1\%$ - $< 1\%$

CAS Number: 67-97-0

EC-Number: 200-673-2

Hazard symbol(s): T+

R-phrase(s): 24/25, 26, 48/25

The wording of the hazard symbols and R-phrases is specified in chapter 16 if dangerous ingredients are mentioned.

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3. Hazard identification

Harmful by inhalation.

4. First-aid measures

General advice:
Remove contaminated clothing.

If inhaled:
Keep patient calm, remove to fresh air, seek medical attention.

On skin contact:
Wash thoroughly with soap and water.

On contact with eyes:
Wash affected eyes for at least 15 minutes under running water with eyelids held open.

On ingestion:
Rinse mouth immediately and then drink plenty of water, seek medical attention.

5. Fire-fighting measures

Suitable extinguishing media:
water spray, carbon dioxide, foam, dry extinguishing media

Special protective equipment:
Wear a self-contained breathing apparatus.

Further information:
Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

6. Accidental release measures

Personal precautions:
Avoid dust formation.

Methods for cleaning up or taking up:
For large amounts: Sweep/shovel up.
Avoid raising dust.

7. Handling and storage

Handling

Avoid dust formation. Ensure thorough ventilation of stores and work areas.

Protection against fire and explosion:

Take precautionary measures against static discharges. Keep away from sources of ignition - No smoking.

Storage

Further information on storage conditions: Keep container tightly closed and dry; store in a cool place. Protect from the effects of light.

8. Exposure controls and personal protection

Personal protective equipment

Respiratory protection:

Breathing protection if breathable aerosols/dust are formed. Particle filter EN 143 Type P2, medium efficiency, (solid and liquid particles of harmful substances).

Hand protection:

Suitable chemical resistant safety gloves (EN 374) also with prolonged, direct contact (Recommended: Protective index 6, corresponding > 480 minutes of permeation time according to EN 374): E.g. nitrile rubber (0.4 mm), chloroprene rubber (0.5 mm), polyvinylchloride (0.7 mm) and other

Supplementary note: The specifications are based on own tests, literature data and information of glove manufacturers or are derived from similar substances by analogy. Due to many conditions (e.g. temperature) it must be considered, that the practical usage of a chemical-protective glove in practice may be much shorter than the permeation time determined in accordance with EN 374.

Eye protection:

Safety glasses with side-shields (frame goggles) (EN 166)

General safety and hygiene measures:

Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

Form: powder
Colour: white
Odour: odourless

Bulk density: approx. 0.6 g/cm³

Solubility in water: emulsifiable
(35 - 40 °C)

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10. Stability and reactivity

Substances to avoid:

No substances known that should be avoided.

Corrosion to metals: No corrosive effect on metal.

Hazardous reactions:

Dust explosion hazard.

No hazardous decomposition products known.

11. Toxicological information

Information on: cholecalciferol

LD50/oral/rat: 35 - 47 mg/kg

Literature data.

Information on: cholecalciferol

LC50/by inhalation/rat: approx. 0.13 - 0.38 mg/l / 4 h

Literature data.

Information on: cholecalciferol

LD50/dermal/rat: 61 - 185 mg/kg

Literature data.

Information on: cholecalciferol

Toxic in contact with skin and if swallowed.

Very toxic by inhalation.

Further information:

Information on: cholecalciferol

No mutagenic effect was found in various tests with bacteria, microorganisms and mammalian cell culture.

Literature data.

Information on: cholecalciferol

In high doses an the potential to impair fertility cannot be fully excluded.

After the uptake of low doses an impairment of fertility will not be expected in humans.

Information on: cholecalciferol

The potential to cause toxicity to development cannot be excluded when given in high doses.

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After the uptake of small doses toxicity to development will not be expected in humans.

12. Ecological information

Ecotoxicity

Information on: cholecalciferol

Toxicity to fish:

DIN 38412 Part 15 static

Leuciscus idus/LC50 (96 h): > 10,000 mg/l

The product has low solubility in the test medium. An aqueous dispersion has been tested. Tested above maximum solubility. The details of the toxic effect relate to the nominal concentration.

Information on: cholecalciferol

Aquatic invertebrates:

OECD Guideline 202, part 1 static

Daphnia magna/EC50 (48 h): > 100 mg/l

The product has low solubility in the test medium. An eluate has been tested. The details of the toxic effect relate to the nominal concentration. No toxic effects occur within the range of solubility.

Information on: cholecalciferol

Aquatic plants:

OECD Guideline 201 static

Selenastrum capricornutum/EC50 (96 h): > 100 mg/l

The product has low solubility in the test medium. An eluate has been tested. The details of the toxic effect relate to the nominal concentration. No toxic effects occur within the range of solubility.

Information on: cholecalciferol

Microorganisms/Effect on activated sludge:

OECD Guideline 209 aerobic

activated sludge, domestic/EC20 (0.5 h): > 1,000 mg/l

Information on: cholecalciferol

Assessment of aquatic toxicity:

There is a high probability that the product is not acutely harmful to aquatic organisms.

No toxic effects occur within the range of solubility.

The inhibition of the degradation activity of activated sludge is not anticipated when introduced to biological treatment plants in appropriate low concentrations.

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Persistence and degradability

Elimination information

Information on: cholecalciferol

Test method: OECD Guideline 301 F (aerobic), activated sludge, domestic

Method of analysis: BOD of the ThOD

Degree of elimination: < 10 % (28 d)

Evaluation: Not easily biodegradable (by OECD criteria).

Information on: cholecalciferol

Assessment: Poorly biodegradable.

Bioaccumulation potential

Information on: cholecalciferol

Accumulation in organisms is expected.

13. Disposal considerations

Observe national and local legal requirements.

14. Transport information

Not classified as hazardous under transport regulations (ADR RID ADNR IMDG/GGVSee ICAO/IATA)

15. Regulatory information

Regulations of the European union (Labelling) / National legislation/Regulations

Self classification:

Hazard symbol(s)

Xn Harmful.

R-phrase(s)

R20 Harmful by inhalation.

S-phrase(s)

S22 Do not breathe dust.

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Hazard determinant component(s) for labelling: COLECALCIFEROL

Other regulations

16. Other information

Full text of hazard symbols and R-phrases if mentioned as hazardous components in chapter 2:

T+	Very toxic.
24/25	Toxic in contact with skin and if swallowed.
26	Very toxic by inhalation.
48/25	Toxic: danger of serious damage to health by prolonged exposure if swallowed.

Vertical lines in the left hand margin indicate an amendment from the previous version.

The information contained herein is based on the present state of our knowledge and does not therefore guarantee certain properties. Recipients of our product must take responsibility for observing existing laws and regulations.