

# Safety data sheet

Page: 1/8

---

BASF Safety data sheet according to 91/155/EEC

Date / Revised: 19.09.2005

Version: 1.0

Product: **Dry Vitamin D3 100 GFP**

(30053529/SDS\_GEN\_GB/EN)

Date of print 20.09.2005

---

## 1. Substance/preparation and company identification

### Dry Vitamin D3 100 GFP

Use: Vitamin

Company:BASF Aktiengesellschaft - D-67056 Ludwigshafen  
GermanyContact address:

BASF PLC

PO Box 4, Earl Road,  
Cheadle Hulme, Cheshire,  
SK8 6QG

Telephone: 0161 485 6222

E-mail address: productsafety@nordic.basf.org

Emergency information:

Falck Euro Service

Tel: 0045 79 42 43 33

---

## 2. Composition/information on ingredients

Chemical nature

Preparation based on: cholecalciferol

in a matrix of: carbohydrates, starch, gum arabic

stabilized with: DL-Alpha-Tocopherol

---

BASF Safety data sheet according to 91/155/EEC

Date / Revised: 19.09.2005

Product: **Dry Vitamin D3 100 GFP**

Version: 1.0

(30053529/SDS\_GEN\_GB/EN)

Date of print 20.09.2005

---

#### Hazardous ingredients

cholecalciferol

Content (W/W): 0.25 %

CAS Number: 67-97-0

EC-Number: 200-673-2

INDEX-Number: 603-180-00-4

Hazard symbol(s): T+

R-phrases: 24/25, 26, 48/25

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

---

### **3. Hazard identification**

Harmful by inhalation.

---

### **4. First-aid measures**

General advice:

Remove contaminated clothing.

If inhaled:

Keep patient calm, remove to fresh air.

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 and then drink plenty of water.

Note to physician:

Treatment: Symptomatic treatment (decontamination, vital functions).

---

### **5. Fire-fighting measures**

Suitable extinguishing media:

water spray, foam, carbon dioxide, 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.

---

BASF Safety data sheet according to 91/155/EEC  
Date / Revised: 19.09.2005  
Product: **Dry Vitamin D3 100 GFP**

Version: 1.0

(30053529/SDS\_GEN\_GB/EN)

Date of print 20.09.2005

---

## 6. Accidental release measures

Personal precautions:

Use breathing apparatus if exposed to vapours/dust/aerosol.

Environmental precautions:

Do not discharge into drains/surface waters/groundwater.

Methods for cleaning up or taking up:

For large amounts: Sweep/shovel up.

For residues: Sweep/shovel up.

Dispose of absorbed material in accordance with regulations.

---

## 7. Handling and storage

### Handling

Handle in accordance with good industrial hygiene and safety practice. Avoid the formation and deposition of dust.

Protection against fire and explosion:

Fine dust of the product is capable of dust explosion. Prevent electrostatic charge - sources of ignition should be kept well clear - fire extinguishers should be kept handy.

### 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

### Components with workplace control parameters

none

### Personal protective equipment

Respiratory protection:

Breathing protection if breathable aerosols/dust are formed. Particle filter Type P2 or FFP2, (medium efficiency for solid and liquid particles e.g. EN143,149)

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

---

BASF Safety data sheet according to 91/155/EEC

Date / Revised: 19.09.2005

Version: 1.0

Product: **Dry Vitamin D3 100 GFP**

(30053529/SDS\_GEN\_GB/EN)

Date of print 20.09.2005

---

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)

Body protection:

Body protection must be chosen based on level of activity and exposure.

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. 600 kg/m<sup>3</sup>

Solubility in water: dispersible

*Information on: cholecalciferol*

*Partitioning coefficient n-octanol/water (log Pow): > 6.2 (OECD Guideline 117)*

-----

---

## 10. Stability and reactivity

Hazardous reactions:

Dust explosion hazard.

Hazardous decomposition products:

No hazardous decomposition products if stored and handled as prescribed/indicated.

---

## 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.*

-----

---

BASF Safety data sheet according to 91/155/EEC

Date / Revised: 19.09.2005

Product: **Dry Vitamin D3 100 GFP**

Version: 1.0

(30053529/SDS\_GEN\_GB/EN)

Date of print 20.09.2005

---

*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*  
*The potential to impair fertility cannot be excluded when given at maternally toxic doses.*  
*Literature data.*

-----

*Information on: cholecalciferol*  
*The potential to cause toxicity to development cannot be excluded at maternally toxic doses.*  
*Literature data.*

-----

---

## 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*

---

BASF Safety data sheet according to 91/155/EEC

Date / Revised: 19.09.2005

Product: **Dry Vitamin D3 100 GFP**

Version: 1.0

(30053529/SDS\_GEN\_GB/EN)

Date of print 20.09.2005

---

*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.*

-----

### **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 readily 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.

The UK Environmental Protection (Duty of Care) Regulations (EP) and amendments should be noted (United Kingdom).

This product and any uncleaned containers must be disposed of as hazardous waste in accordance with the 2005 Hazardous Waste Regulations and amendments (GB)

---

BASF Safety data sheet according to 91/155/EEC  
 Date / Revised: 19.09.2005  
 Product: **Dry Vitamin D3 100 GFP**

Version: 1.0

(30053529/SDS\_GEN\_GB/EN)

Date of print 20.09.2005

## 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

Directive 1999/45/EC ('Preparation Directive'):

Hazard symbol(s)	
Xn	Harmful.
R-phrase(s)	
R20	Harmful by inhalation.
S-phrase(s)	
S22	Do not breathe dust.
S53	Avoid exposure - obtain special instructions before use.

Hazard determinant component(s) for labelling: COLECALCIFEROL/VITAMIN D3

### Other regulations

The data should be considered when making any assessment under the Control of Substances Hazardous to Health Regulations (COSHH), and related guidance, for example, 'COSHH Essentials' (United Kingdom).

This product is classified under the Chemicals (Hazard Information and Packaging) Regulations, (CHIP) (United Kingdom).

## 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.

If you have any queries relating to this MSDS, its contents or any other product safety related questions, please write to the following e-mail address: [productsafety@nordic.basf.org](mailto:productsafety@nordic.basf.org)

---

BASF Safety data sheet according to 91/155/EEC

Date / Revised: 19.09.2005

Product: **Dry Vitamin D3 100 GFP**

Version: 1.0

(30053529/SDS\_GEN\_GB/EN)

Date of print 20.09.2005

---

The data contained in this safety data sheet are based on our current knowledge and experience and describe the product only with regard to safety requirements. The data do not describe the product's properties (product specification). Neither should any agreed property nor the suitability of the product for any specific purpose be deduced from the data contained in the safety data sheet. It is the responsibility of the recipient of the product to ensure any proprietary rights and existing laws and legislation are observed.