



Spreading Sunshine Globally

ABOUT FERMENTA BIOTECH LIMITED:

Founded in 1951, Fermenta possesses a growing portfolio of nutrition including Customized Premixes, Fortified Rice Kernel (FRK) and other nutritional ingredients. Apart from its nutrition portfolio, Fermenta is one of the world's leading manufacturers of Vitamin D3. It caters to over 400 customers across 60 countries with a worldwide distribution network for a variety of applications such as pharmaceuticals, dietary and nutritional supplements, food, animal nutrition and rodenticides. Fermenta's manufacturing facilities in Kullu, Dahej and Tirupati are certified by global accreditations, and its world class R&D centre is located at Thane. Fermenta also possesses expertise in green chemistry such as enzymes for antibiotic synthesis, other niche APIs and environmental solutions.

R&D Lab, Thane



Dahej Facility



Kullu Facility



**Head Office,
Thane**





Pharmaceuticals



**Dietary &
Nutritional
Supplements**



Animal Nutrition



Food



Veterinary



Rodenticides

**Wide
Spectrum of
Applications**

PRODUCT INFORMATION

CHOLECALCIFEROL

(Crystalline Vitamin D3)

Synonyms: Activated 7-Dehydrocholesterol

Concentration: 40,000,000 IU/g

Product Identification:

Chemical Name:

(3 β ,5Z,7E)-9,10-secocholesta-5,7,10(19)-trien-3-ol

Mol Formula: C₂₇H₄₄O

Mol Weight: 384.64 g/mol

CAS No.: [67-97-0]

Description: White or almost white crystals.

Solubility: Practically insoluble in water, freely soluble in ethanol (96%), soluble in trimethylpentane and in fatty oils.

Specifications: USP, FCC, Ph. Eur. and IP

Assay: 97 - 103 % as per USP/IP/FCC
97 - 102 % as per Ph. Eur.

Certifications: Certificate of Suitability by EDQM, Kosher, Halal, HACCP, ISO 9001 : 2015, ISO 14001 : 2015, ISO 45001 : 2018, WHO-GMP, EU-GMP, Vegetarian Certificate, BRC, FSSC22000, FSMA, USFDA, FAMI-QS

Regulatory Submissions: CEP, Health Canada DMF.

Packaging:

Aluminium Bottle: Under inert gas in 100g, 250g and 1Kg

LDPE Bags: Under vacuum in 10g, 100g, 250g, 1Kg, 4Kg and 5Kg

Shelf Life: 36 months in Aluminium bottle and in LDPE bag.

Storage: Store in an air tight container, under inert gas, protected from light, at a temperature of 5° ± 3°C . The contents of an opened container are to be used immediately.

Applications: Pharmaceutical, food, veterinary & feed industries.

Disclaimer: The aforementioned information is based on our current knowledge and experience. Although we are satisfied that it meets our specifications, we request users to use their discretion and carry out any necessary tests/precautions prior to usage of the product in any formulation.

Fermenta does not carry any liability in the final usage of the product and maintains that users should observe compliance with all applicable laws and regulations while using the product.



**CERTIFICATE OF SUITABILITY BY
EDQM & EIR FROM USFDA**

***Note:** Please refer to the Material Safety Data Sheet before handling the product.



Fermenta Biotech Limited

A - 1501, Thane One, 'DIL' Complex, Ghodbunder Road, Majiwade, Thane (West) - 400610, Maharashtra, India. Tel: +91 22 6798 0800 / 888

PRODUCT INFORMATION

CHOLECALCIFEROL SOLUTION

Cholecalciferol Concentrate (Oily Form)

Concentration: 1 MIU/g, 2 MIU/g & 4 MIU/g

Product Identification:

Chemical Name:

(3 β ,5Z,7E)-9,10-secocholesta-5,7,10(19)-trien-3-ol

Mol Formula: C₂₇H₄₄O

Mol Weight: 384.64 g/mol

CAS No.: [67-97-0]

Description: Clear Colourless to yellow coloured oily liquid.

Specification: USP and Ph. Eur.

Assay: 90 – 110 % of the labelled contents

Certifications: Kosher, Halal, HACCP, ISO 9001:2015, ISO 14001:2015, ISO 45001:2018, WHO-GMP, Vegetarian Certificate, BRC, FSSC 22000, FSMA, RSPO**

Packing: Packed under inert gas in 1Kg, 5Kg, 10Kg and 25Kg Aluminium bottles

Shelf Life: Retest period of 24/36 months* from the date of manufacture.

Storage: Store in tight, well fitted container, protected from light. The contents of an open container are to be used as soon as possible; any unused part is to be protected by an atmosphere of inert gas. Heat the content at 40° C in hot water bath for 60 minutes in case of partial solidification occurs. Shake well before use.

*Variant specific

**For MCT Oil

Applications: Pharmaceutical, food, dietary & nutraceutical supplement industry.

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PRODUCT INFORMATION

VITADEE™ 100 CWD / 500 CWD

Cholecalciferol Concentrate (Powder Form)
DS (Dispersible Solution) / S (Soluble)

Concentration: 100,000 IU/g, 500,000 IU/g

Product Identification:

Chemical Name:

(3 β ,5Z,7E)-9,10-secocholesta-5,7,10(19)-trien-3-ol

Mol Formula: C₂₇H₄₄O

Mol Weight: 384.64 g/mol

CAS No.: [67-97-0]

Description: White or yellowish white, small particles

Specification: In-House

Assay: NLT 100.0%

Certifications: WHO-GMP, Kosher, Halal, Vegetarian
Certificate, NSF - FSMA & cGMP, ISO 9001:2015, ISO 14001:2015

Packaging: Packed under inert gas in 1Kg & 5Kg Aluminium Bags

Shelf Life: Proposed retest period of 30 months from the date of manufacture.

Storage: VITADEE™ CWD is sensitive to air, light and humidity. The product may be stored for 30 months from the date of manufacture in the unopened original container and at a temperature below 15°C. For optimum stability, storage at 5° ± 3°C is recommended. Keep container tightly closed. Once opened, use contents quickly.

DS: Tableting application in pharmaceuticals, multi-vitamin premixes for food and nutraceutical industry

S: For fortifying liquid preparations (in beverage industry)

Applications: For fortifying powder and liquid products such as baby food, milk powders, multi-vitamin premixes and tableting application. Catering to the needs of food, dietary & nutraceutical supplements.

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GMP Registered
Dietary Ingredients

FBLVD3/PSI/08/26/02

PRODUCT INFORMATION

VITAMIN D3 500 FEED GRADE POWDER

Concentration: 500,000 IU/g

Product Identification:

Chemical Name:

(3 β ,5Z,7E)-9,10-secocholesta-5,7,10(19)-trien-3-ol

Mol Formula: C₂₇H₄₄O

Mol Weight: 384.64 g/mol

CAS No.: [67-97-0]

Description: Off - white to light yellow free flowing powder

Assay: Minimum 0.5 MIU/g of Cholecalciferol

Certifications: FAMI QS, Kosher, HACCP, ISO 9001:2015, ISO 14001:2015, ISO 45001:2018, Feed GMP

Packaging: Packed in 1 Kg, 5Kg and 20 Kg in double LDPE bags followed by Tri laminate Aluminium Bags (under Vacuum) and then in corrugated box

Shelf Life: Retest period of 24 months from the date of manufacture.

Storage: Store in cool and dry place below 25°C. Protect from light. Use immediately after opening.

Application: Animal feed supplement.

Stability: Stability of the product is assured when in its original unopened packaging and stored at room temperature. The stability of Vitamin D3 in a premix may vary depending upon the composition of the feed and the

prevailing operating conditions at the time of mixture and usage. Suitability of the product to be ascertained prior to commercial usage. Feeds that contain Vitamin D3 are advised to be consumed soon after mixing to ensure maximum supplementation value of the feed.

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PRODUCT INFORMATION

VITAMIN D3 RESIN IN OIL

Concentration: 1 MIU/g, 2 MIU/g, 4 MIU/g, 5 MIU/g, 10 MIU/g & 15 MIU/g

Product Identification:

Chemical Name:

(3 β ,5Z,7E)-9,10-secocholesta-5,7,10(19)-trien-3-ol

Mol Formula: C₂₇H₄₄O

Mol Weight: 384.64 g/mol

CAS No.: [67-97-0]

Description: Clear to almost clear, pale brown to brown viscous solution

Assay: 100-110% of the labelled contents

Certifications: FAMI QS, Kosher, Halal, HACCP, ISO 9001:2015, ISO 14001:2015, ISO 45001:2018

Packing: 1Kg, 5Kg and 10Kg Aluminium bottles packed under inert gas

Shelf Life: Retest period of 24 months from the date of manufacture.

Storage: Sealed / packed under Nitrogen, Protect from light and store below 25°C. Use immediately after opening or container must be closed after flushing with Nitrogen.

Application: Feed Additive

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*Variant specific

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PRODUCT INFORMATION

VITADEE™ 100 SD POWDER

Cholecalciferol Concentrate (Powder Form)

Concentration: 100,000 IU/g

Product Identification:

Chemical Name:

(3 β ,5Z,7E)-9,10-secocholesta-5,7,10(19)-trien-3-ol

Mol Formula: C₂₇H₄₄O

Mol Weight: 384.64 g/mol

CAS No.: [67-97-0]

Description: White or yellowish-white, small particles

Specification: Ph. Eur.

Assay: 90.0 - 110.0%

Certification: Certificate of Suitability by EDQM, Halal, WHO-GMP, ISO 9001:2015, ISO 14001:2015, ISO 45001:2018, FSSC 22000, FSMA, BRC

Packaging: Packed in 1 Kg, 5 Kg and 20 Kg in double LDPE bags followed by Tri laminate Aluminium Bags (under vacuum) and then incorrugated box

Shelf Life: Retest period: 30 months

Storage: VITADEE™ 100 SD Powder is sensitive to air, light and humidity. The product may be stored in an unopened original container and at a temperature below 25°C. Keep container tightly closed. The contents of an opened container are to be used immediately; any unused part is to be protected by an atmosphere of nitrogen

Applications: Pharmaceuticals, Food, Dietary & Nutritional Supplements

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PRODUCT INFORMATION

VITADEE™ 100 SD NU POWDER

Cholecalciferol Concentrate (Powder Form)

Concentration: 1g contains 100,000 I.U. of Vitamin D3.

Product Identification:

Chemical Name:

(3 β ,5Z,7E)-9,10-secocholesta-5,7,10(19)-trien-3-ol

Mol Formula: C₂₇H₄₄O

Mol Weight: 384.64 g/mol

CAS No.: [67-97-0]

Description: Off-White to yellowish, free flowing particles.

Specification: Ph.Eur./In-House

Assay: Minimum 100,000 IU/g (on IU basis)
Minimum 100.0% (on percentage basis)

Certification: WHO-GMP, Written Confirmation, BRC, FSSC 22000, FSMA, ISO 9001:2015, ISO 14001:2015, ISO 45001:2018, Halal.

Packing: Packed in 1Kg, 5Kg & 20Kg in double LDPE bags followed by Trilaminate Aluminium Bags (under vacuum) and then in corrugated box.

Shelf Life: Retest period of 30 Months* from the date of manufacture.

Storage: VITADEE™ 100 SD NU Powder is sensitive to air, light and humidity. The product may be stored in an unopened original container and at a temperature below 25°C. Keep container tightly closed. The contents of an opened container are to be used immediately; any unused part is to be protected by an atmosphere of nitrogen.

Applications: Food, Dietary & Nutritional Supplements.

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*stability study of the product is ongoing and may increase based upon the available stability data

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CERTIFICATIONS & ACCREDITATIONS*

CEP-EDQM

WHO-GMP

EU-GMP

US FDA



GMP Registered
Dietary Ingredients



ISO
14001:2015

ISO
9001:2015

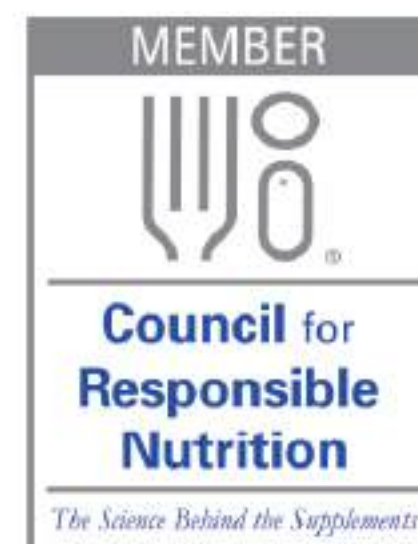
ISO
45001:2018

*Product/Site Specific

Our Associations:



National Association for the Blind (NAB)



A Public Awareness Initiative:



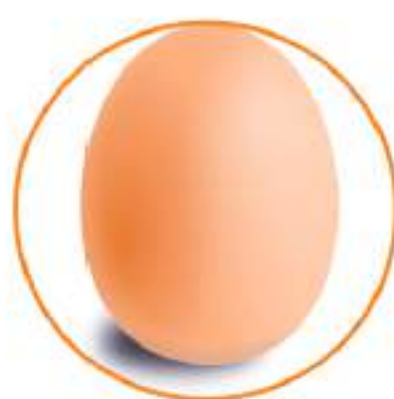
Sources of **VITAMIN D**



SUNLIGHT



FORTIFIED MILK



EGGS



MUSHROOMS



SALMON &
MACKEREL



FORTIFIED
BEVERAGES

Factors affecting **VITAMIN D** absorption



AGE



REGION



SEASON



CLOUD
COVER



TIME
OF DAY



SKIN
PIGMENTATION

Health Benefits of **VITAMIN D**



Immunity



General
Wellbeing



Bone & Joint
Health



Heart Health



Mental Health

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