Spreading sunshine globally







ABOUT FERMENTA BIOTECH LIMITED (FBL):

FBL is one of the leading manufacturers of Vitamin D3 globally, headquartered in Thane, India. With over five decades of experience, its presence spans across 50 countries with a worldwide distribution network for a variety of applications such as pharmaceuticals, dietary and nutritional supplements, food, animal nutrition, veterinary, and rodenticides.

FBL's manufacturing facilities in Kullu and Dahej are certificated by global accreditations and its world class R&D center is located at Thane. Apart from Vitamin D3, FBL also possesses expertise in integrated biotechnology solutions such as enzymes for antibiotic synthesis and other niche APIs.

For more information about the company and its businesses, please visit our website www.fermentabiotech.com

R&D Lab, Thane



Dahej Facility



Kullu Facility



Head Office, Thane





CERTIFICATIONS & ACCREDITATIONS*

CEP-EDQM

WHO-GMP

US FDA





















ISO 14001:2015 ISO 9001:2015

OHSAS 18001:2007

*Product-specific and Site-specific



Our Associations:





National Association for the Blind (NAB)

A Public Awareness Initiative:





Pharmaceuticals



Dietary & Nutritional Supplements



Animal Nutrition

Wide Spectrum of Applications



Food



Veterinary



Rodenticides

Sources of VITAMIN D













SUNLIGHT

FORTIFIED MILK

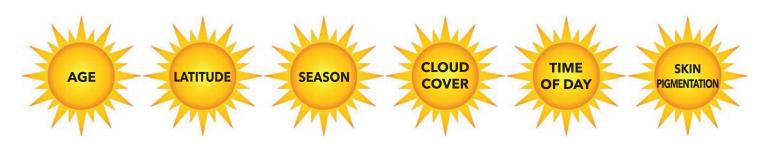
EGGS

MUSHROOMS

SALMON & MACKEREL

FORTIFIED BEVERAGES

Factors affecting VITAMIN D absorption



Health Benefits of VITAMIN D







General Wellbeing



Bone & Joint Health



Heart Health



Mental Health

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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:

(3β,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, HACCP, Vegetarian

Certificate.

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

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

Storage: VITADEETM 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 $5^{\circ} \pm 3^{\circ}$ 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.

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.



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



Manufactured by:

Fermenta Biotech Limited





Synonyms: Activated 7-Dehydrocholesterol.

Concentration: 40,000,000 IU/g

Product Identification:

Chemical Name:

(3β,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. Freely soluble

in Ethanol (96%).

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, OHSAS 18001:2007, WHO-GMP, Vegetarian Certificate, BRC,FSSC 22000,FSMA.

Regulatory Submissions: CEP, US DMF, Health Canada DMF, EFSA Dossier.

Packaging:

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

LDPE Bags: Under vacuum in 10g, 100g, 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 $5^{\circ} \pm 3^{\circ}\text{C}$. The contents of an opened container are to be used immediately.

Applications: Pharmaceutical, food, veterinary & feed industries.

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CERTIFICATE OF SUITABILITY BY EDQM & EIR FROM USFDA

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



Manufactured by:

Fermenta Biotech Limited



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

Product Identification:

Chemical Name:

(3β,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: 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, OHSAS 18001:2007, WHO-GMP, Vegetarian Certificate, BRC, FSSC 22000, FSMA.

Packing: Packed under inert gas in 1Kg and 10Kg Aluminium bottles.

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

Storage: Store in air 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.

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

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*Variant specific

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



Manufactured by:

Fermenta Biotech Limited



Concentration: 500,000 IU/g

Product Identification:

Chemical Name:

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

Mol Formula: $C_{27}H_{44}O$

Mol Weight: 384.64 g/mol

CAS No.: 67-97-0

Description: White to off - white free flowing powder.

Assay: Minimum 0.5 MIU/g of Cholecalciferol.

Certifications: FAMI QS, Kosher, HACCP, ISO 9001:2015,

ISO 14001:2015, OHSAS 18001:2007.

Packing: Packed in 25 Kg double LDPE bags placed in a

Carton 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.

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



Manufactured by:

Fermenta Biotech Limited



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

Product Identification:

Chemical Name:

(3β,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: 90 – 110% of the labelled contents.

Certifications: FAMI QS, Kosher, Halal, HACCP, ISO 9001:2015, ISO 14001:2015, OHSAS 18001:2007.

Packing: 1Kg and 10Kg Aluminium bottles. Packed under inert gas.

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

Storage: Store in cool, air 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.

Application: Animal feed supplement.

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



Manufactured by:

Fermenta Biotech Limited

PRODUCT INFORMATION



Concentration: 100,000 IU/g

Product Identification:

Chemical Name:

 $(3\beta,5Z,7E,22E)-9,10$ -secoergosta-5,7,10(19),22-tetraen-3-ol

Mol Formula: $C_{28}H_{44}O$

Mol Weight: 396.65 g/mol

CAS No.: 50-14-6

Description: White or yellowish white, small particles.

Specification: In-House

Assay: NLT 100.0%

Certifications: WHO-GMP, HACCP, NSF, Vegan.

Packaging: Packed under inert gas in 1kg and 5kg Aluminium Bags.

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

manufacture.

Storage: VITADEETM CWD is sensitive to air, light and humidity. The product may be stored for 24 months from the date of manufacture in the unopened original container and at a temperature below 15°C. For optimum stability, storage at $5^{\circ} \pm 3$ °C is recommended. Keep container tightly closed. Once opened, use contents quickly.

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 and pharmaceutical industry.

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.

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



Manufactured by:









Concentration: 1 MIU/g & 2 MIU/g

Product Identification:

Chemical Name:

(3β,5Z,7E,22E)-9,10-secoergosta-5,7,10(19),22-tetraen-3-ol

Mol Formula: C₂₈H₄₄O

Mol Weight: 396.65 g/mol

CAS No.: 50-14-6

Description: Clear, yellow coloured oily liquid.

Assay: 100.0 – 120.0 % of the labelled contents.

Certifications: Vegan Registration, WHO-GMP, BRC,

FSSC 22000, FSMA.

Packing: 1Kg and 10Kg Aluminium bottles.

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

Storage: Protect from light and store below 25°C.

Applications: Pharmaceutical & food industry and dietary & nutraceutical supplements.

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.

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



Manufactured by:





PRODUCT SPECIFICATIONS:

VITAMIN A PALMITATE	
Concentration (Vitamin A)	NLT 60,000 IU/ml
Chemical Name	all-trans-3,7-dimethyl-9-(2,6,6-trimethyl-1-cyclohexene-1-yl)-2,4,6,8-nonatetraene-1-yl palmitate
Mol. Formula	C ₃₆ H ₆₀ O ₂
Mol. Weight	524.87 g/mol
CAS No.	79-81-2
EINECS No.	201-228-5

VITAMIN D2	
Concentration	NLT 12,500 IU/ml
Chemical Name	9,10-secoergosta 5,7,10(19), 22-tetraen-3-ol, (3β,5Z,7E,22E)-
Mol.Formula	C ₂₈ H ₄₄ O
Mol. Weight	396.65 g/mol
CAS No.	50-14-6
EINECS No.	200-014-9

Description: Pale yellow, slightly viscous liquid

Antioxidant: Butylated Hydroxy Toluene (BHT)

Assay: Vitamin A Palmitate – NLT 60,000 IU/ml

Vitamin D2 - NLT 12,500 IU/ml

Packing: Packed under inert gas in 250g, 1 kg and 10 kg Aluminium or HDPE bottles

Shelf life: Retest period of 12 months from the date of manufacture.

Storage: Store in air 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.

Applications : Food and Beverage fortification, Milk fortification, Dietary & Nutraceutical Supplement Industry.

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.

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



Manufactured by:



VITAMIN A PALMITATE	
Concentration	1.01 – 1.11 MIU/g
Chemical Name	all-trans-3,7-dimethyl-9-(2,6,6 trimethyl-1-cyclohexene-1-yl) 2,4,6,8-nonatetraene-1-yl palmitate
Mol. Formula	C ₃₆ H ₆₀ O ₂
Mol. Weight	524.87 g/mol
CAS No.	79-81-2

VITAMIN D3	
Concentration	80,640 - 88,700 IU/g
Chemical Name	(3β, 5Z, 7E)-9, 10-secocholesta- 5, 7, 10 (19)-trien-3-ol
Mol.Formula	C ₂₇ H ₄₄ O
Mol. Weight	384.64 g/mol
CAS No.	67-97-0

Antioxidant: DL-α-tocopherol

Assay: Vitamin A Palmitate: 1.01 - 1.11 MIU/g

Vitamin D3:80,640-88,700 IU/g

Packing: Packed under inert gas in 250g, 1 kg and 10 kg Aluminium or HDPE bottles.

Shelf life: Retest period of 12 months from the date of manufacture.

Storage: Store in airtight, 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.

Applications: Food & oil fortification.

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



Manufactured by:



VITAMIN A PALMITATE	
Concentration	NLT 60,000 IU/ml
Chemical Name	all-trans-3,7-dimethyl-9-(2,6,6-trimethyl-1-cyclohexene-1-yl) 2,4,6,8-nonatetraene-1-yl palmitate
Mol.Formula	C ₃₆ H ₆₀ O ₂
Mol. Weight	524.87 g/mol
CAS No.	79-81-2

VITAMIN D3	
Concentration	NLT 12,500 IU/ml
Chemical Name	(3β, 5Z, 7E)-9, 10-secocholesta- 5, 7, 10(19)-trien-3-ol
Mol. Formula	C ₂₇ H ₄₄ O
Mol. Weight	384.64 g/mol
CAS No.	67-97-0

Antioxidant: Butylated Hydroxy Toluene (BHT)

Assay: Vitamin A Palmitate: NLT 60,000 IU/ml

Vitamin D3: NLT 12,500 IU/ml

Packing: Packed under inert gas in 250g, 1 kg and 10 kg Aluminium or HDPE bottles.

Shelf life: Retest period of 12 months from the date of manufacture.

Storage: Store in air 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.

Applications: Vitamin AD3 emulsion in edible oil for food and beverage fortification, milk fortification, dietary & nutraceutical supplement industry.

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Manufactured by:



VITAMIN A PALMITATE	
Concentration	1.01 – 1.11 MIU/g
Chemical Name	all-trans-3,7-dimethyl-9-(2,6,6 trimethyl-1-cyclohexene-1-yl) 2,4,6,8-nonatetraene-1-yl palmitate
Mol. Formula	C ₃₆ H ₆₀ O ₂
Mol. Weight	524.87 g/mol
CAS No.	79-81-2

VITAMIN D3	
Concentration	80,640 - 88,700 IU/g
Chemical Name	(3β, 5Z, 7E)-9, 10-secocholesta- 5, 7, 10 (19)-trien-3-ol
Mol.Formula	C ₂₇ H ₄₄ O
Mol. Weight	384.64 g/mol
CAS No.	67-97-0

Antioxidant: DL-α-tocopherol

Assay: Vitamin A Palmitate: 1.01 - 1.11 MIU/g

Vitamin D3:80,640-88,700 IU/g

Packing: Packed under inert gas in 250g, 1 kg and 10 kg Aluminium or HDPE bottles.

Shelf life: Retest period of 12 months from the date of manufacture.

Storage: Store in airtight, 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.

Applications: Food & oil fortification.

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



Manufactured by:



VITAMIN A PALMITATE	
Concentration	NLT 60,000 IU/ml
Chemical Name	all-trans-3,7-dimethyl-9-(2,6,6- trimethyl-1-cyclohexene-1-yl) 2,4,6,8-nonatetraene-1-yl palmitate
Mol.Formula	C ₃₆ H ₆₀ O ₂
Mol. Weight	524.87 g/mol
CAS No.	79-81-2

VITAMIN D3	
Concentration	NLT 12,500 IU/ml
Chemical Name	(3β, 5Z, 7E)-9, 10-secocholesta- 5, 7, 10(19)-trien-3-ol
Mol. Formula	C ₂₇ H ₄₄ O
Mol. Weight	384.64 g/mol
CAS No.	67-97-0

Antioxidant: Butylated Hydroxy Toluene (BHT)

Assay: Vitamin A Palmitate: NLT 60,000 IU/ml

Vitamin D3: NLT 12,500 IU/ml

Packing: Packed under inert gas in 250g, 1 kg and 10 kg Aluminium or HDPE bottles.

Shelf life: Retest period of 12 months from the date of manufacture.

Storage: Store in air 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.

Applications: Vitamin AD3 emulsion in edible oil for food and beverage fortification, milk fortification, dietary & nutraceutical supplement industry.

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