

Vitamin D3V

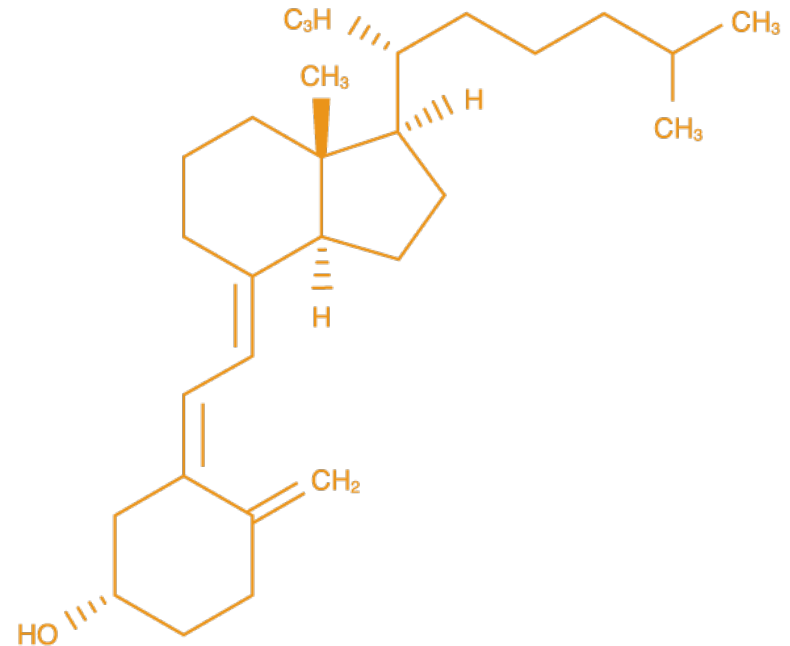
Ingredients To Supplement Success

What is Vitamin D3V?

- **Vitamin D3V** is Cholecalciferol of 100% plant origin, produced from Algae.

Vitamin D3V is available in a selection of formats and strengths, perfect for use across a wide range of applications including Foods, Nutraceuticals, and Animal Nutrition.

- Conventional Vitamin D3 is obtained from animal-origins. Vitamin D3V is 100% plant-source yet chemically-identical. It is of the highest quality and purity.



Vitamin D3V versus Vitamin D2

- Traditionally, the sole reason Vitamin D2 is used in the marketplace has been to provide a vegetarian-suitable alternative to Vitamin D3.
- **Vitamin D3V** takes away the requirement for the brands to use D2, which has inferior stability and efficacy.

“Vitamin D2 should no longer be regarded as a nutrient appropriate for supplementation or fortification of foods”

- American Journal of Clinical Nutrition

“Vitamin D3 is approximately 87% more potent than Vitamin D2”

- Clinical Journal of Endocrinology

Vitamin D3V formats

Product	Product ID	Packaging
Vitamin D3V 1miu/g Oil	D3V01	1kg Aluminium Canisters
Vitamin D3V 100,000iu/g	D3V02	1kg & 5kg Aluminium pouches

Vitamin D3V 1miu/g Oil

Product Description

Vitamin D3V 1miu/g Oil is a plant-source Vitamin D3 (Cholecalciferol) presented in medium chain triglycerides (fractionated coconut oil). Natural D-alpha tocopherol of sunflower oil origin is present at 0.2% as an antioxidant.

Stability & Storage

Vitamin D3V 1miu/g Oil is sensitive to air, heat and light. The product may be stored for 24 months from the date of manufacture in the unopened original container (which has been sealed under Nitrogen) and at a temperature below 4°C.

Specifications

Appearance: Clear, colourless to slightly yellowish oily liquid

Acid Value: max. 1.0 mg KOH/g

Peroxide Value: NMT 10 Meq/Kg

Vitamin D3 Activity: 900,000-1,100,000iu/g

Uses:

For food, Nutraceutical and Animal Nutrition preparations as a vegan-suitable source of Vitamin D3.

Vitamin D3V 100,000iu/g Powder



Product Description

Vitamin D3V 100,000iu/g Powder is a plant-source Vitamin D3 (Cholecalciferol) presented within a microencapsulated powder matrix.

Stability & Storage

Vitamin D3V 100,000iu/g Powder is sensitive to air, heat and light. The product may be stored for 24 months from the date of manufacture in the unopened original container and at a temperature below 25°C.

Specifications

Appearance: Creamy white to pale yellow powder

Bulk density: 0.4-0.7g/ml

Loss on drying: Not more than 4%

Vitamin D3 Activity: 90,000 – 110,000iu/g

Particle Size: NLT 95% through 40#

Uses:

For food, Nutraceutical and Animal Nutrition preparations as a vegan-suitable source of Vitamin D3.

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D3V cost-in-use

- **Vitamin D3V** is more expensive than animal – derived Vitamin D3 (Cholecalciferol), however due to the microgram dosage, the actual cost-in-use impact is miniscule. Illustrations:

Desired Vitamin D3 Dose	Cost in use per dose	Cost per monthly pack (30 doses)
200iu	Less than £0.001	Less than £0.03
400iu	Less than £0.002	Less than £0.06
1000iu	Less than £0.005	Less than £0.15

Vitamin D3V Applications

- Tablets and capsules.
- Liquid supplements including sprays and droppers.
- Infant formulas.
- Children's fortified confectionary.
- Pet foods.
- Bakery & Cereal.
- Sports Nutrition.
- Vitamin Pre-mixes.

Summary



- 100% plant-source Vitamin D3.
- Vegan Society registered.
- European Compliant.
- Non-GMO.
- Kosher & Halal Certified
- Patent-pending technology.
- Responsibly sourced with a fully sustainable supply chain.

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How do you know Vitamin D3V is directly equivalent to Lanolin-origin D3?

We have conducted various tests, including NMR, to demonstrate the chemical equivalence. The dossier we have compiled is sufficient to satisfy regulators in Europe, USA and Australia. We have also conducted extensive stability testing.

Is the purity of Vitamin D3V as good as Lanolin D3?

The minimum is that it is 'as good'. The reality is it is much purer. We do not have pesticides such as 'sheep dip' or other residual solvent issues associated with Lanolin. The purity of our starting materials are monitored closely, which is not necessarily the case with Lanolin or other animal compounds.

What stability data do you have on Vitamin D3V?

We have conducted extensive stability testing, including elevated temperature testing, in order to justify a minimum 24 month shelf life. We have a full stability package that we are able to share.

What can I claim about Vitamin D3V?

Vitamin D3V is Cholecalciferol (Vitamin D3) that is universally acceptable, including Vegans and Vegetarians. This is the key selling point: it is Vitamin D in the efficacious form, but from 100% plant source/origin.

What is the labelling stance?

As **Vitamin D3V** is produced as neat Cholecalciferol (Vitamin D3), it is labelled that way accordingly, and is therefore treated in exactly the same way labelling and regulatory-wise as conventional, animal-origin Vitamin D3. *I.e. it is Cholecalciferol, not a plant extract rich in Cholecalciferol, in the same way conventional D3 is Cholecalciferol, not lanolin extract (or similar) rich in Cholecalciferol.*

What is the regulatory status?

We have demonstrated complete equivalence to D3 from animal (Lanolin) origin, and confirmed compliance in Europe, USA and Australia. The dossier compiled by Intertek on our behalf satisfies regulatory requirement in many Asian and other markets for immediate marketing. Once we know a customer or distributor's exact regulatory needs, we can support and work with the necessary authorities.

Does Vitamin D3V behave differently to Lanolin D3 in formulations?

No, it is completely identical and can be used as a direct replacement. It will not behave any differently. The oil, powder and crystal (neat) formats equally use the standard strengths found with Lanolin D3 to assist in reformulating.

What certification do you have?

Vitamin D3V is registered with the Vegan Society, the globally recognised voice of all things Veganism. This only followed rigorous review of our full scientific disclosures. Vitamin D3V is certified Kosher, Halal, and satisfies Indian Green Dot product requirements.

Are customised grades available?

We will consider offering customised grades, depending on the volumes associated with any such enquiry, and the related minimum order quantities (e.g. a particular spray-drying technology may have a specific associated MOQ).

Can we use the Vitamin D3V brand name as part of our marketing?

The answer is yes. Vitamin D3V is a registered trademark in multiple markets. We can discuss your specific regional requirements and support with marketing options accordingly.