

Dry Vitamin D₃ 100

Human Nutrition

BASF

The Chemical Company

Chemical name

Cholecalciferol

CAS No.

67-97-0

EINECS No.

200-673-2

Product number

10233620

Description

Free-flowing, off-white powder, consisting of fine spherical particles.

Composition

The powder particles contain vitamin D₃ in medium chain triglycerides in droplets of 1-2 µm embedded in a matrix of gelatin and sucrose, coated with modified starch. The product contains t-butylhydroxytoluene (BHT, E 321) as antioxidant and sodium aluminium silicate (E 554) as an anti-caking agent.

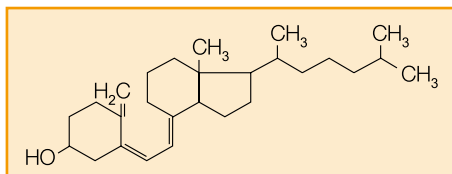
Solubility

The product can be dispersed in warm water (35-40°C), to form a milky emulsion. Virtually no vitamin D can be extracted from the powder with ether.

Specifications

Assay: min. 100,000 IU vitamin D₃/g (= 2,500 µg cholecalciferol/g)

Loss on drying: ≤ 5% (4 hours at 105°C)



C₂₇H₄₄O

Molar mass 384.7 g/mol

Monographs

The product complies with the current “Cholecalciferol concentrate (powder form)” Ph.Eur. monograph. The included active ingredient vitamin D₃ complies with the current “Cholecalciferol” Ph.Eur. and “Cholecalciferol” USP monographs.

Particle-size distribution

100% smaller than 600 µm (30 mesh USP)
min. 90% smaller than 300 µm (50 mesh USP)
max. 25% smaller than 125 µm (120 mesh USP)

Bulk density

Approx. 0.6 g/ml

Stabilization/Stability

The product is stabilized with BHT (E 321). The stability of vitamin D₃ in the dry powder is excellent even in the presence of minerals. Stored in the original packaging at room temperature (max. 25°C), the product is stable for at least 36 months.

Standard packaging

5 and 25 kg.
Please see appendix I for further information.

Storage

The product should be stored in the original packaging at room temperature (max. 25°C).

Applications***Dietary supplements:***

The product is particularly suitable for use in multivitamin/mineral tablets and hard shell capsules. The small particle size and relatively low vitamin D₃ content of the dry powder provide homogenous distribution even in product formulations with a low active content. Dry vitamin D₃ is also very suitable for the direct compression of vitamin D tablets with a high active content.

Note

Dry Vitamin D₃ 100 must be handled in accordance with the Safety Data Sheet.

The data contained in this publication are based on our current knowledge and experience. In view of the many factors that may affect processing and application of our product, these data do not relieve processors from carrying out their own investigations and tests; neither do these data imply any guarantee of certain properties, nor the suitability of the product for a specific purpose. Any descriptions, drawings, photographs, data, proportions, weights etc. given herein may change without prior information and do not constitute the agreed contractual quality of the product. It is the responsibility of the recipient of our products to ensure that any proprietary rights and existing laws and legislation are observed.

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