

Dry Vitamin A Palmitate 500

Human Nutrition


The Chemical Company

Chemical names

Retinyl palmitate, all-trans retinol palmitic acid ester

CAS No.	79-81-2
EINECS No.	201-228-5

Product number
10303069

Description

Free-flowing, light yellow powder, consisting of spherical particles.

Composition

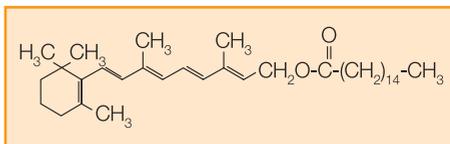
The powder particles contain vitamin A palmitate in droplets of 1-2 μm embedded in a matrix of gelatin and sucrose, coated with modified starch. The product contains t-butylhydroxytoluene (BHT, E 321) as antioxidant and sodium aluminium silicate (E 554) as an anti-caking agent.

Solubility

Dispersible in warm water (35-40°C), to form a milky emulsion.

Specifications

Appearance:	conforms
Assay:	min. 500,000 IU vitamin A (= 150,000 RE) per gram
Loss on drying:	max. 5% (4 hours at 105°C)



$\text{C}_{36}\text{H}_{60}\text{O}_2$

Molar mass 524.9 g/mol

Monographs

The product complies with the current "Vitamin A concentrate (powder form), synthetic" Ph.Eur. and "Vitamin A" USP monographs.

Particle-size distribution

100% smaller than 850 μm (20 mesh USP)
min. 95% smaller than 425 μm (40 mesh USP)
max. 12% 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 the vitamin A in the dry powder is excellent even in the presence of minerals. The product is resistant to pressure and very little vitamin A is expressed during tableting, thus resulting in good stability of the tablets.

Stored in the original packaging in a cool (8-15°C), dry place, the product is stable for at least 24 months.

Standard packaging

5 and 25 kg.

Please see appendix I for further information.

Storage

As vitamin A is sensitive to atmospheric oxygen, light, moisture and heat, the product should be stored in the original packaging at 8-15°C in a dark, dry place.

Applications

Dietary supplements:

If the product may be subject to severe strain during processing or storage, it is recommended to use the palmitate version of the vitamin.

Since the palmitate contained in vitamin A is the ester with the best resistance to hydrolysis, vitamin A palmitate is recommended particularly for preparations with a high moisture content as well as preparations, which will be stored in environments with a high relative humidity. It is equally suitable for use in multivitamin/mineral tablets and hard gelatin capsules.

Note

Dry Vitamin A Palmitate 500 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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