

Vitamin A propionate 2.5 mio. I.U./g

Chemical name

Retinyl propionate, all-trans retinol propionic acid ester

CAS No. 7069-42-3

EINECS No. 230-363-2

Product number

10080269

Description

Viscous yellow oil at room temperature, with a mild odour. The assay is adjusted by adding pharmaceutical-grade sunflower oil.

Solubility

Soluble in hydrocarbons, chlorinated hydrocarbons, ethers, fats and oils. The solvent should contain no peroxides. Insoluble in water.

Specification

Assay: min. 2.5 mio. I.U. vitamin A (= 750,000 RE) per gram

Identification: Yields a blue colour with anti-mony trichloride in chloroform (Carr-Price test). Thin layer chromatography test (Ph.Eur.)

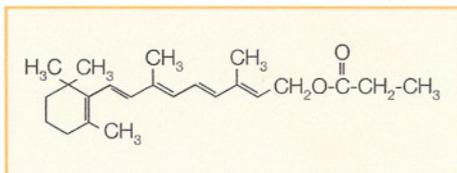
Absorbance ratios: Comply with Ph.Eur., USP and FCC

Acid value: ≤ 2.0 (Ph.Eur.)

Peroxides: max. 10 meq/kg (Ph.Eur.)

Monographs

The product complies with the current USP and Ph.Eur. monographs.



$C_{23}H_{34}O_2$

Molar mass 342.5 g/mol

Stabilization/Stability

The product is stabilized with about 10 mg of t-butylhydroxytoluene (BHT, E 321) per 1.0 mio. I.U.

When it is stored in the unopened original containers at room temperature (max. 25°C), the product is stable for up to 6 months. At 5°C, it is stable for up to 24 months.

Standard packaging

5, 25, and 50 kg.

For further information please see appendix I.

Storage

As vitamin A is sensitive to atmospheric oxygen, light, moisture and heat, it should be stored in a cool dark place in the unopened original containers. It is recommended to flush containers with an inert gas once they have been opened, and to use up the remaining contents as quickly as possible.

Applications

Pharmaceutical preparations:

For liquid preparations (syrups, oily solutions, drops, emulsions), particularly for highly concentrated aqueous solutions made with the aid of a solubilizer such as Cremophor EL or Cremophor RH 40 or Solutol HS 15, e.g. veterinary injection solutions. The chart below shows the quantity of Solutol HS 15 required for the solubilisation of proportional quantities of vitamin A esters.

The propionic acid ester is particularly recommended where the tendency of vitamin A acetate and palmitate to crystallize causes problems in processing.

For parenteral use sterilisation of the final product is required. Further information can be found in the book "Functions and Applications of BASF Pharmaceutical Excipients".

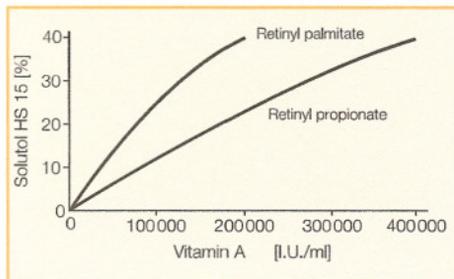
Food products:

For fortifying oils and fats (margarine, spreads). Quantities of 3–9 mg (10,000 – 30,000 I.U.) of vitamin A, calculated as retinol, are usually added per kg of margarine.

The regulations governing the use of BHT must be observed.

Cosmetics:

For cosmetic oils and emulsions (creams, lotions, body milk, gels etc.) and other preparations, e.g. lipstick, masks. The maximum quantities permitted by law in cosmetics must be observed.



Note

Vitamin A propionate must be handled in accordance with the Safety Data Sheet.