

SPECIFICATION DL-Alpha-Tocopherol 96 % (E307) (for food use)

Description

| | |
|--------------|---|
| Synonym | DL-alpha-Tocopherol, Tocopherol, Alpha-Tocopherol |
| Formula | $C_{29}H_{50}O_2$ |
| Product code | YYES04 |
| CAS No | 10191-41-0 |
| EC No | 233-466-0 |

Properties

| | |
|--------------------------------|---|
| Shelf life | 24 months after production date, in unopened original packaging |
| Aspect | Clear, colourless or yellowish-brown, viscous, oily liquid |
| Assay | ≤ 96 % to ≥ 102 % (JECFA) |
| Solubility | Practically insoluble in water, freely soluble in acetone, in anhydrous ethanol |
| Specific absorption in ethanol | $E^{1\%}_{1cm}$ (292 nm): 71,0 - 76,0 (JECFA) |
| Optical rotation (20 °C) | $0 \pm 0.05^\circ$ (10 % solution in chloroform) |
| Refractive index (20 °C) | $[n]_D^{20}$ 1,503 – 1,507 (JECFA) |
| Acid value | Max. 1,0 ml of 0,10 N sodium hydroxide |
| Sulphated ash | Max. 0,1 % (JECFA) |
| Heavy metals | Max. 10 mg/kg |
| Arsenic (As) | Max. 1 mg/kg |
| Lead (Pb) | Max. 2 mg/kg |

Handling

Stability DL-alpha-Tocopherol oxidizes and darkens in air and on exposure to light

Storage

Protect with a blanket of an inert gas
If the container is opened and not used immediately, it is recommended to flush the containers with an inert gas and to use up their contents as quickly as possible

Classified as **hazardous** as per EU regulation!

The product meets the latest editions of JECFA and EU Regulation No. 231/2012 of 9. March 2012.

NHU EUROPE GmbH

SPECIFICATION DL-Alpha-Tocopherol 96 % (for cosmetic use)

Ingredients

| | |
|--------------|---|
| Synonym | DL-alpha-Tocopherol, Tocopherol, Alpha-Tocopherol |
| Formula | $C_{29}H_{50}O_2$ |
| Product code | YYES04 |
| CAS No | 10191-41-0 |
| EC No | 233-466-0 |

Properties

| | |
|--------------------------------|---|
| Shelf life | 24 months after production date, in unopened original packaging |
| Aspect | clear, colourless or yellowish-brown, viscous, oily liquid (EP) |
| Assay | 96 % - 102 % (EP/USP) |
| Solubility | practically insoluble in water, freely soluble in acetone, in anhydrous ethanol |
| Specific absorption in ethanol | $E_{1\%}^{1\text{cm}}$ (292 nm): 71,0 - 76,0 (EP/ USP) |
| Identification A, B, C | A: Optical rotation: -0.01° to $+0.01^\circ$ B: Infrared absorption spectrophotometry: Both spectra in the product and the Reference Spectrum exhibit similar intensities of absorption at the same wave numbers. (EP) C: Chromatography: The retention time of the major peak for alpha-tocopherol of the Sample solution corresponds to that of the standard solution, as obtained in the assay. (USP) TLC: The principal spot in the chromatogram obtained with the test solution is similar in position and size to the principal spot in the chromatogram obtained with the reference solution. (EP) |
| Acid value | Max. 1,0 ml of 0,10 N sodium hydroxide (USP) |
| Related substances (EP) | |
| Impurity A | Max 0,5 % |
| Impurity B | Max 1,5 % |
| Sum of impurity C + D | Max 1,0 % |
| Any other impurities | Max 0,25 % |
| Total impurities | Max 2,5 % |



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**Handling
Stability**

DL-alpha-Tocopherol becomes darker in colour as soon as it is exposed to air and light

Storage

Protect with a blanket of an inert gas.
If the container is opened and not used immediately, it is recommended to flush the containers with an inert gas and to use up their contents as quickly as possible

Classified as **hazardous** as per EU regulation!

The product meets the latest editions of USP and EP.

NHU EUROPE GmbH

SPECIFICATION DL-Alpha-Tocopherol 96 % (E307) (for feed use)

Description

| | |
|--------------|---|
| Synonym | DL-alpha-Tocopherol, Tocopherol, Alpha-Tocopherol |
| Formula | $C_{29}H_{50}O_2$ |
| Product code | YYES04 |
| CAS No | 10191-41-0 |
| EC No | 233-466-0 |

Properties

| | |
|------------|--|
| Aspect | Clear, colourless or yellowish-brown, viscous, oily liquid |
| Shelf life | 24 months after production date, in unopened original packaging |
| Stability | DL-alpha-Tocopherol oxidizes and darkens in air and on exposure to light |

| | |
|------------|---|
| Assay | not less than 96 % and not more than 102 % |
| Solubility | Practically insoluble in water, freely soluble in acetone, in anhydrous ethanol |

| | |
|--------------------------------|--|
| Specific absorption in ethanol | $E^{1\%}_{1cm}$ (292 nm): 71,0 - 76,0 (JECFA) |
| Optical rotation (20 °C) | $0 \pm 0.05^\circ$ (10 % solution in chloroform) |
| Refractive index (20 °C) | $[n]_D^{20}$ 1,503 – 1,507 |
| Acid value | Max. 1,0 ml of 0,10 N sodium hydroxide |
| Sulphated ash | Max. 0,1 % |

| | |
|--------------|---------------|
| Heavy metals | Max. 10 mg/kg |
| Arsenic (As) | Max. 1 mg/kg |
| Lead (Pb) | Max. 2 mg/kg |

Handling

Usage Product can be used as feed additive, which consists of alpha-tocopherol (E307)

Storage Protect with a blanket of an inert gas
If the container is opened and not used immediately, it is recommended to flush the containers with an inert gas and to use up their contents as quickly as possible

Classified as **hazardous** as per EU regulation!

The product meets the latest editions of JECFA and EU Regulation No. 231/2012 of 9. March 2012.

NHU EUROPE GmbH

DL-Alpha-Tocopherol/YYES04/üa und fgg: 190520/av