

Vitapherole® T-90 Non GMO
 (Mixed tocopherols concentrate)

Names:

Chemical name: mixed tocopherols
 Antioxidant: E-306
 INCI name: tocopherol

Identification:

<u>Name</u>	<u>Empirical formula</u>	<u>Molecular weight</u>	<u>CAS</u>
d-alpha tocopherol	C ₂₉ H ₅₀ O ₂	430.69	59-02-9
d-beta tocopherol	C ₂₈ H ₄₈ O ₂	416.66	16698-35-4
d-gamma tocopherol	C ₂₈ H ₄₈ O ₂	416.66	54-28-4
d-delta tocopherol	C ₂₇ H ₄₆ O ₂	402.64	119-13-1

Standards:

Current EP and USP. Kosher certified, Halal certified. Produced under ISO 9001 standard. IP Certified. Non GMO.

Appearance: Clear, brownish red viscous oil

Taste: Mild, characteristic

Odour: Typical vegetable oil

Viscosity (60°C): 140 – 190 cP

Specific gravity 25°C: 0.92 – 0.96 g/cm³

Tocopherols content: 900 mg/g as mixed tocopherols (minimum) – 100 mg/g (max) sunflower dilution oil.

(GC analysis

Vitae method ITO – 02 – L) 720 mg/g non alpha-tocopherols (minimum)

Typical composition (%):

Total tocopherols:	90 min
Vegetable oil:	10 max
Alpha tocopherol:	0 - 18
Beta-Gamma tocopherol:	45-63
Delta tocopherol:	9-27

Acidity: Passes USP and EP tests

Irradiation: This product has not been irradiated

Specific rotation: (α)_D²⁵. Min. +20° (for 100% concentration)

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Heavy metals (total):	Passes USP	
Microbiological tests (cfu/g): (EP, RD 3177/83)	<i>E. Coli:</i>	None/g
	<i>Salmonella:</i>	None/10 g
	<i>Lysteria Monocytogenes:</i>	None/10 g
	<i>Shigella:</i>	None/10 g
	<i>Clostridium Perfringens:</i>	None/g
	<i>Staphylococcus Aureus:</i>	None/g
	<i>Enterobacteriaceae:</i>	max. 100/g
	<i>Total Aerobic Count:</i>	max. 1000/g
	<i>Yeast & Moulds:</i>	max 100/g
Residual solvents:	Passes USP	
Colour (Gardner units):	Max. 14	
Benzo (a) pyrene:	< 2 ppb	(as per EC regulation 208/2005 published on February 4, 2005.)
Sulphated ashes:	< 0.1 %	(as Directive 2008/84/EC of 27 August 2008)

Solubility:

Insoluble in water. Soluble in ethanol, animal fats and vegetable oils, essential and mineral oils, miscible with organic solvents.

Stability:

Unstable to light, heat, alkali and oxidizing conditions.

Storage:

“Vitapherole® T-90 Non GMO” may oxidize upon exposure to air and light, resulting in gradual darkening. Nitrogen blanketing and protection from light, heat and an alkaline environment are recommended. Store tightly closed.

Shelf life:

36 months from packaging date (unopened).

Packaging:

20 and 190 kg containers are supplied for this product.

Vitapherole® T-90 Non GMO
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All products produced using “Vitapherole® T-90 Non GMO” may be labelled as “natural source Vitamin E”.

Uses:

Due to its antioxidant power and low volatility, “Vitapherole® T-90 Non GMO” is a natural antioxidant widely used in nutrition and cosmetic industries to avoid the negative effects of oxidation.

Dosage information:

We recommend testing with several different amounts of “Vitapherole® T-90 Non GMO” between 200 and 450 ppm, which is equivalent to 0.02 to 0.04% based on the fat content.

Other information:

All orders and samples requested will be sent together with an Analysis Certificate. The Material Safety Data Sheet is available upon request.

Contact us through our Fax: +34 925 851021; Tel: +34 925 851013; e-mail: quality@vitaenaturals.com or through our web-site at: www.vitaenaturals.com and your request will be attended to by our local representative.

All information contained here is intended to be accurate. Anyway, this document is provided for your guidance only. We recommend testing the product for your particular purpose, prior to be used in the industrial process.