

Vitapherole® M-80 Non GMO
(High d – alpha mixed tocopherols concentrate)

Names:

Chemical name: mixed tocopherols
 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 standards. IP Certified. Non GMO.

Appearance: Clear, brownish red viscous oil

Taste: Mild, characteristic

Odour: Typical vegetable oil

Viscosity (60°C): 90 - 110 cP

Specific gravity 25°C: 0.93 – 0.96 g/cm³

Tocopherols content: 671 mg/g as mixed tocopherols (minimum) – 329 mg/g (max) sunflower dilution oil.

(GC analysis

Vitae Method ITO – 02 – L)

537 mg/g alpha-tocopherol (minimum)

Typical composition (%):

Total tocopherols:	67.1 min.
Sunflower oil:	32.9 max
Alpha tocopherols:	53.7 min (800 I.U. min)
Non alpha tocopherols:	13.4 min

Acidity: Passes USP and EP tests

Specific rotation: (α)_D²⁵. Min. +24° (for 100% concentration)

Heavy metals (total): Passes USP

Irradiation: This product has not been irradiated

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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.)

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® M-80 Non GMO” may oxidize upon exposure to air and light, resulting in gradual darkening. Nitrogen blanketing and protection from light, heat and 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.

Labelling:

All products produced using “Vitapherole® M-80 Non GMO” may be labelled as “natural source Vitamin E”

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Uses:

“Vitapherole® M-80 Non GMO” widely used in nutrition for food fortification. It is also used in soft gelatine capsules.

Other information:

All orders and samples requested will be sent together with an Analysis Certificate. 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 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.