

**Vitapherole® E-1000 Sunflower-OC**  
**Suitable for Organic Cosmetic**  
*(High content in RRR-alpha tocopherol)***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 <sub>29</sub> H <sub>50</sub> O <sub>2</sub>	430.69	59-02-9
d-beta tocopherol	C <sub>28</sub> H <sub>48</sub> O <sub>2</sub>	416.66	16698-35-4
d-gamma tocopherol	C <sub>28</sub> H <sub>48</sub> O <sub>2</sub>	416.66	54-28-4
d-delta tocopherol	C <sub>27</sub> H <sub>46</sub> O <sub>2</sub>	402.64	119-13-1

**Standards**

This product complies with current EP and USP-NF standards, FCC, JECFA and Regulation (EC) N° 852/2004.

Kosher (“Circle U”) and Halal certified. Produced under UNE EN ISO 9001: 2008 standard.

Non GMO (IP). It is not subjected to be labelled under Regulations (EU) 1829/2003 and 1830/2003.

This product does not contain allergens according to Regulation (EU) N°1169/2011 so; it is not required labelling declaration as being potential allergen.

Mixed tocopherols are generally recognized as safe (GRAS) by FDA (21 CFR Part 182, Sec.182.8890 and 182.3890).

Suitable for organic cosmetic. This product can be used in the formulation of cosmetics certified according to the natural and organic ECOCERT and COSMOS standards.

**Ingredients/Composition**

*GC method according to IT-02-L*

- Natural Mixed Tocopherols: 671 mg/g min. (67.1 %) min.
  - Alpha tocopherol: 671 mg/g min. (67.1 %) min.
  - Beta-Gamma tocopherol: 0 – 100 mg/g (0 – 10 %)
  - Delta tocopherol: 0 – 50 mg/g (0 – 5 %)
  
- Organic vegetable oil (sunflower): 329 mg/g max. (32.9 %) max.

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**Quality Control Assay***(Parameters analyzed per batch)*

<b>Appearance:</b>	Clear, from amber to reddish viscous oil
<b>Taste:</b>	Mild, characteristic
<b>Odour:</b>	Typical vegetable oil
<b>Colour:</b>	Max. 14 Gardner Units
<b>Viscosity (60°C):</b>	90 – 180 cP
<b>Specific gravity/Density (25°C):</b>	0.93 – 0.95 g/cm <sup>3</sup>
<b>Potency:</b>	1000 IU/g (min)
<b>Acidity:</b>	<1 ml KOH 0.1N /g (According to USP and ISO 660:2009)
<b>Benzo (a) pyrene:</b>	< 2 ppb (As per EC Regulation (EU) 835/2011)
<b>Sum of Benzo(a)pyrene, Benzo(a)anthracene, Benzo(b)fluoranthene and Chrysene:</b>	< 10 ppb (As per EC Regulation (EU) 835/2011)

*(Parameters analyzed periodically based on statistical data)*

<b>Irradiation:</b>	This product has not been irradiated at any point during the manufacturing process.
<b>Specific rotation:</b>	( $\alpha$ ) <sub>D</sub> <sup>25</sup> . Min. + 20° (for 100% concentration) (As per Commission Directive 2008/84/EC and Commission Regulation (EU) N° 231/2012)
<b>Heavy metals:</b>	Pb: <0.1ppm Hg:<0.1ppm Cd: <1ppm As: <1ppm (As per Commission Regulation (EC) N° 629/2008, amending Regulation (EC) N° 1881/2006). Complies also with Commission Regulation (EU) N° 231/2012)

<b>Microbiological tests:</b>	<i>E. Coli:</i>	None cfu/g
(In compliance with EP and RD 3177/83)	<i>Salmonella:</i>	None cfu/25g
	<i>Listeria Monocytogenes:</i>	None cfu/10 g
	<i>Shigella:</i>	None cfu/10 g
	<i>Clostridium Perfringens:</i>	None cfu/g
	<i>Staphylococcus Aureus:</i>	None cfu/g
	<i>Enterobacteriaceae:</i>	max 100 cfu/g
	<i>Total Aerobic Count:</i>	max 1000 cfu/g
	<i>Yeast &amp; Moulds:</i>	max 100 cfu/g

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**Sulphated ashes:** < 0.1%  
(In compliance with Directive 2008/84/EC and Commission Regulation (EU) N° 231/2012)

**Residual solvents:** In compliance with limits established in EP and USP for Class I solvents.

**Dioxins:**

- <b>Sum of dioxins</b> (WHO-PCDD/F-TEQ)	0,75 pg/g fat
- <b>Sum of dioxins and dioxin-like PCBS</b> (WHO-PCDD/F-PCB-TEQ)	1, 25 pg/g fat
- <b>Sum of PCB28, PCB52, PCB101, PCB138, PCB153 and PCB180</b> (ICES – 6)	40 ng/g fat

(In compliance with Commission Regulation (EU) N° 1259/2011)

**Pesticides:** In compliance with Regulation (EC) N° 396/2005, amending Council Directive 91/414/EEC and according to current European Pharmacopoeia (EP).

**Properties and Conditions**

**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:** Ambient temperature. Nitrogen blanketing and protection from light, moisture and air. Store in tightly closed containers.

**Shelf life:** 36 months from packaging date (unopened).

**Packaging:** 20 and 190 kg containers are supplied for this product.  
(In compliance with Commission Regulation (EU) N° 10/2011 and FDA 21 CFR)

**Labelling:** All products produced using “Vitapherole® E-1000 sunflower-OC” may be labelled as “natural source Vitamin E”.

The product is in compliance with Regulation (EC) N° 1223/2009 on cosmetic products (Art.19 Labelling).

**Uses:** “Vitapherole® E-1000 sunflower-OC” is a natural antioxidant widely used in cosmetic industries to avoid the negative effects of oxidation.

This product may be used in the manufacturing of *cosmetics* as per Regulation (EC) N° 1223/2009.

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**Other information**

All orders and samples requested will be sent together with an Analysis Certificate and Material Safety Data Sheet. Contact us through our fax: +34 925 851021; tel: +34 925 851013; e-mail: [quality@vitaenaturals.com](mailto:quality@vitaenaturals.com) or through our web-site at: [www.vitaenaturals.com](http://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.***