

**DESCRIPTION**

Tocobiol® SF c is a natural antioxidant made from the distillation of a single raw ingredient, whole Non-GMO sunflower oil. It naturally contains mixed tocopherols, plant sterols and squalene, which provide its unique antioxidant and dispersibility properties.

INCI name (UE): Tocopherol (mixed  $\alpha$ ,  $\beta$ ,  $\gamma$ ,  $\delta$ ), Beta-Sitosterol, Squalene.

CAS number: 59-02-9 / 16698-35-4 / 54-28-4 / 119-13-1 / 83-46-5 / 111-02-4.

EINECS number: 200-412-2 / 240-747-1 / 200-201-5 / 204-299-0 / 201-480-6 / 203-826-1.

**ACTIVE INGREDIENTS**

TOCOBIOL® SF

Mixed Tocopherols ..... 18-20 %  
Sterols..... Max 10 %  
Squalene ..... Max 5 %

**TYPICAL ISOMERS**

Isomer distribution in the total content of tocopherols:

$\alpha$  - tocopherol ..... Min 65 %  
 $\beta$  +  $\gamma$  - tocopherol ..... Min 7 %  
 $\delta$  - tocopherol ..... Min 9 %

**APPLICATIONS**

Natural antioxidant especially designed for cosmetic products: skin care, facial masks, sun care, hair care, anti-aging, lip balms and lipsticks, face and body oils, soap bars, etc.

**DOSAGE**

The usage rate is based on the application and can vary from 0.05 to 1 % (500 to 10000 ppm) of the total formula. Typical usage rate is 0.1% to 0.3 % (1000 to 3000 ppm) of the total formula.

**TECHNICAL CHARACTERISTICS**

Appearance: Oily liquid. Color yellowish amber to dark amber. Characteristic odor. It is possible the presence of cereous components in microcrystalline form.

Solubility: Insoluble in water. Soluble in fats and oils at the recommended dosages.

Lead (Pb)  $\leq$  3 ppm  
Arsenic (As)  $\leq$  2 ppm  
Cadmium (Cd)  $\leq$  1 ppm  
Mercury (Hg)  $\leq$  0.1 ppm

Pesticides: According to current legislation.  
Density: 0.95 – 1.00 g/cm<sup>3</sup> at 25°C

The product could crystallize at room temperature. It could be necessary a warming and homogenization before use. (Around 60°C during 5 minutes)

Due to the natural origin of the product, and depending on the batch and the harvest campaign, changes in color and odor may be observed.

Vegetarian and Vegan suitable.  
Gluten and BSE-TSE free.  
Non-irradiated.  
No presence of nanomaterials.  
Not tested on animals.

**MICROBIOLOGICAL SPECIFICATION**

Total plate count  $\leq$  1000 cfu/g  
Yeast and molds  $\leq$  25 cfu/g  
E. coli: Absent / 25g  
Salmonella Absent / 25g

**CERTIFICATES**

NON-GMO IP Certificate  
KOSHER Certificate  
HALAL Certificate  
COSMOS – ECOCERT Certificate  
Produced under ISO 9001  
Detailed data upon request



COSMOS  
APPROVED

**ALLERGENS**

INGREDIENT	Presence: YES/NO
Amyl cinnamal	NO
Amylcinnamyl alcohol	NO
Benzyl alcohol	NO
Benzyl salicylate	NO
Cinnamyl alcohol	NO
Cinnamal	NO
Citral	NO
Coumarin	NO
Eugenol	NO
Geraniol	NO
Hydroxycitronellal	NO
Hydroxymethylpentyl- cyclohexenecarboxaldehyde	NO
Isoeugenol	NO
Anisyl alcohol	NO
Benzyl benzoate	NO
Benzyl cinnamate	NO
Citronellol	NO
Farnesol	NO
Hexyl cinnamaldehyde	NO
Lilial	NO
d-Limonene	NO
Linalool	NO
Methyl heptine carbonate	NO
3-Methyl-4-(2,6,6-trimethyl-2-cyclohexen-1- yl)-3-buten-2-one	NO
Oak moss	NO
Tree moss	NO

Note: The 26 fragrance substances were introduced into annex III of the Cosmetics Directive by the 7th amendment (2003/15/EC) on the basis of the SCCNFP draft opinion (SCCNFP/0017/98) published on 30 September 1999

**PACKAGING**

1, 2.5, 5 and 10 Kg white polyethylene (HDPE) jerrycans.  
190 Kg drums.

**STORAGE**

We recommend storing the product in its tightly closed original containers under room temperature conditions, away from oxygen, heat and light.  
Once open, use immediately.

Best Before: 2 years under the above mentioned storage conditions.

**REGULATIONS**

The product is conform to the Regulation (EC) 1881/2006 setting maximum levels for certain contaminants in foodstuffs, and its last amendments.

Identity Preserved Traceability used to ensure that the products are derived from non-GMO soya or sunflower and ascorbyl palmitate from non-GMO origin. Is accordance with the requirements CE 1829/2003 and CE 1830/2003.

Tocopherols are Generally Recognized as Safe (GRAS), according to CFR Title 21 section 182.3890 of the FDA GRAS Substances Database (SCOGS).

Packaging complies with the Regulations (EU) 10/2011 and 1935/2004, including latest amendments.

**ORIGIN**

The product is manufactured by BTSa, BIOTECNOLOGÍAS APLICADAS, S.L. in Spain, at our facilities located in Parque Científico-Tecnológico Campus U.A.H. C/ Arroba n. 4 28805 Alcalá de Henares (Madrid).

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