

Usnea Lichen CO₂-to extract, water dispersible

4 % Usnic Acids, Type no. 101.003



Raw material: *Usnea barbata* - Lichen, dried

Production: By supercritical fluid extraction with natural carbon dioxide, no solvent residues, no inorganic salts and no heavy metals [1]. The usnea lichen CO₂-extract is cleaned up in a second step to practically pure usnic acid, which is formulated with sunflower oil (organic) and emulsifiers to a standardized and water dispersible product.

Description: Contains in formulation CO₂-extracted natural usnic acid from usnea barbata. Yellow-light green liquid at room temperature, water dispersible. The colour can change from light-green to yellow during storage because of decomposition of chlorophyll traces. This colour change has no effect on the quality and efficiency of the product.

D/E - ratio: 3,0 - 4,0 kg raw material yield 1 kg product.

Declaration: INCI-Name (CTFA): Helianthus Annuus Seed Oil, CAS-No. 8001-21-6, EINECS-No. 232-273-9 and Polyglyceryl-6 Caprylate, CAS-No. 51033-35-3 and Polyglyceryl-3 Palmitate, CAS-No. 51330-20-2 and Usnea Barbata (Lichen) Extract, CAS-No. 84696-53-7, EINECS-No. 283-658-3

Halal - Status: Certified by Halal Certification Services (HCS)
The certification is marked with the Halal Logo on the product.

Kosher - Status: Certified by London Beth Din Kashrut Division (KLBD). The certification is marked with the Kosher logo on the product.

Transport: No dangerous good in the sense of the transport regulations.

Ingredients: Antimicrobial usnic acids 3,8 - 4,2 % analysed with usnic acid as standard, sunflower oil (organic) and a mixture of emulsifiers. Emulsifiers are based on renewable resources, completely biodegradable, non-toxic and PEG-free.

Application: Multifunctional cosmetic ingredient with deodorising properties and supporting microbial stability [2]. A challenge testing has proved the efficacy against various germs. Dosage: 0,2 - 0,8 % in the end product, dispersible in the water phase of cosmetic formulas, recommended also in combination with preservatives; protective effect against UVB-mediated inflammatory skin conditions by PGE₂ inhibition [3].

Naturalness: The product contains only usnea lichen CO₂ extract, sunflower oil (organic) and apart from a mixture of emulsifiers no other additives and no technical adjuncts. The product is conform to the BDIH guidelines of controlled natural cosmetics.

Stability: Unopened container under cool and dry storage conditions and exclusion of light at least 2 years.

References: [1] Manninen P., Häivälä E., Sarimo S., Kallio H. : Z. Lebens Unters Forsch A (1997) 204: 202-205

[2] Weckesser S., Engel K., Simon-Haarhaus B., Wittmer A., Pelz K., Schempp C.M.: Phytomedicine,14 (2007) 508-516

[3] Engel K.,Schmidt U., Reuter J., Weckesser S., Simon-Haarhaus B.,Schempp C.M. : Journal of Photochemistry and Photobiology (2007)

Disclaimer: These data are given for customer's information only to the best of our knowledge but under exemption of liability especially regarding infringement of or prejudice to third party rights through the use of this product. This information is not a substitute for prior tests demonstrating the suitability of the product for the intended use. Users are responsible for ensuring the compliance with the applicable legislation. The concentrated FLAVEX extracts are raw materials for product formulation. Hence they are not intended for direct consumption in food and for undiluted topical application in cosmetics, perfumery and aromatherapy. Keep away from children.



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CO₂ EXTRACTION