


General Specification

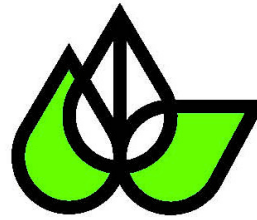
Clove Bud CO₂-se extract (organic)

DE-ÖKO-013, Type No. 035.004

Raw material:	<i>Syzygium aromaticum</i> - Flower Buds, dried, from organic farming	
Production:	By supercritical fluid extraction with natural carbon dioxide, no solvent residues, no inorganic salts, no heavy metals, no reproducible microorganisms [1].	
D/E - ratio:	5,0 - 6,3 kg clove buds to 1 kg product.	
Organoleptic description:	Yellow, clear liquid with aromatic clove flavour.	
Composition:	100 % Clove Bud CO ₂ -se extract (organic)	
Ingredients:	80 - 95 % essential oil with 45 - 75 % eugenol, 10 - 20 % caryophyllene, 5 - 25 % eugenyl acetate.	
Limited substances (food):	According to Annex II Reg. (EC) No. 1334/2008 (flavour regulation): methyl eugenol, estragole (for values in the extract, see certificate of analysis)	
Limited substances (cosmetic):	According to Annex III Reg. (EC) No. 1223/2009 (cosmetic regulation): methyl eugenol (for value in the extract, see certificate of analysis)	
Declaration:	<p>In food: flavouring preparation or spice extract or clove bud extract</p> <p>In food supplements: clove bud extract</p> <p>In cosmetics: INCI-Name: Eugenia Caryophyllus Flower Extract, CAS.-No. 84961-50-2, EINECS-No. 284-638-7</p>	
Application:	<p>Traditional use: Due to its antibacterial effect, the essential oil of clove is used in traditional herbal medicines against inflammations of the mouth and throat mucosa, as well as for local pain relief in toothache. Cloves are also said to have a positive influence on the healing of stomach ulcers [2,3].</p> <p>In food: Cloves are traditionally used as spice mixtures for gingerbread or in curry mixtures. In addition, many herbal and bitter liqueurs contain cloves [4]. The extract is therefore suitable for flavouring in the food and beverage industry.</p>	



931687-DE-3102

Hochdruckextraktion mit CO₂

since 1986

FLAVEX®
Naturextrakte**In food supplements:**

Eugenol contained in clove extract has antioxidant and anti-inflammatory properties and is effective against oxidative stress [5]. Thus the extract in dietary supplements can bring physiological benefits and positively influence the quality of life.

In cosmetics:

The extract can be used as a fragrance in perfume and soaps. Its antibacterial effect makes it suitable for use in mouthwash or toothpaste [4,6].

Handling:

The concentrated FLAVEX extracts are the basic ingredients for the product formulation. They are therefore not intended for direct consumption in food, nor for direct application to the skin in cosmetics, perfumery and aromatherapy. Keep away from children!

Stability:

Unopened containers at least 5 years under exclusion of light and following conditions:
Store in a cool, dry place!

Transport:

No dangerous good in the sense of the transport regulations.

REACH - Status:

This product is currently not subject to registration.

Certification:

- ORGANIC certified by QC&I (Quality, Certification and Inspection)
- HALAL certified by HCS (Halal Certification Services)
- KOSHER certified by KLBD (Beth Din Kashrut Division)

Conformity:

The product complies with the requirements of Regulation (EC) No. 1334/2008 on flavourings and with the requirements of Regulation (EC) No.1223/2009 on cosmetic products in the currently valid version. Possible traces of prohibited substances are unintentional and result from impurities as they may occur in plants and their processing and are technically unavoidable in good manufacturing practice. However, the presence is in compliance with Art. 3 Regulation (EC) No. 1223/2009.

Literature:

- [1] P. Manninen, E. Häivälä, S. Sarimo, H. Kallio, Distribution of microbes in supercritical CO₂ extraction of sea buckthorn (Hippophae rhamnoides) oils, Zeitschrift für Lebensmitteluntersuchung und -Forschung / Springer-Verlag (1997) 204: 202-205
- [2] F.C. Czygan, D. Frohne, Chr. Hölzel, A. Nagell, P. Pachaöy, H.J. Pfänder, M. Wichtl, g. Willhuhn, W. Buff, Teedrogen und Phytopharmaka, 3. Auflage., Stuttgart: Wissenschaftliche Verlagsgesellschaft GmbH 1997
- [3] Committee on Herbal Medicinal Products (HMPC), European Medicines Agency (EMA), Assessment report on Syzygium aromaticum (L.) Merrill et L.M. Perry, flos and Syzygium aromaticum (L.) Merrill et L.M. Perry, floris aetheroleum, (2011) EMA/HMPC/534946/2010
- [4] Wolfgang Blascheck u.a. (Hrsg.), HagerROM 2017, Hagers Enzyklopädie der Arzneistoffe und Drogen, Stuttgart: Wissenschaftliche Verlagsgesellschaft Stuttgart, 2017
- [5] J. N. Barboza et al., An Overview on the Anti-inflammatory Potential and Antioxidant Profile of Eugenol, Oxidative Medicine and Cellular Longevity, Volume 2018, Article ID 3957262
- [6] Dipl.-Ing. agr. Renate Merz, Kräuter und Gewürze in der Kosmetik- Duftende Wirkung mit Tradition, Z Arznei-Gewürzpfla, 18(2): 87-89, Agrimedia GmbH & Co. KG, 2013

Disclaimer:

This specification has been prepared to the best of our knowledge for customer information, but under exemption of liability, particularly regarding infringement of or prejudice to third party rights by the use of the product. Statements on application summarise literature evidence and have informative character. Statements have not been evaluated by competent authorities and do not refer to finished products. The marketer of a finished product containing a FLAVEX extract as an ingredient is responsible for ensuring that the product claims are lawful and that the applicable laws and regulations of the country in which the product is sold are complied with. This document provides an overview of the product, further product-relevant documents (e.g. IFRA list, allergen list) are available on request.

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