


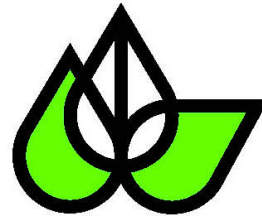


## General Specification

### Rosemary CO<sub>2</sub>-se extract

### Cineol Type, Type No. 027.005

<b>Raw material:</b>	<i>Salvia rosmarinus</i> - Leaves, dried		 
<b>Production:</b>	By supercritical fluid extraction with natural carbon dioxide, no solvent residues, no inorganic salts, no heavy metals, no reproducible microorganisms [1].		
<b>D/E - ratio:</b>	33 - 50 kg rosemary leaves to 1 kg product.		
<b>Organoleptic description:</b>	Clear yellow to light brown oil with eucalyptus like, woody - balsamic smell.		
<b>Composition:</b>	100 % Rosemary CO <sub>2</sub> -se extract, Cineol type		
<b>Ingredients:</b>	At least 38 % 1.8 cineol, 8 - 15 % alpha-pinene, 5 - 15 % camphor, 3 - 10 % beta caryophyllene, 2 - 4 % limonene, p-cymene, borneol, bornylacetate, verbenone and other CO <sub>2</sub> -soluble ingredients.		
<b>Limited substances (food):</b>	According to Annex II Reg. (EC) No. 1334/2008 (flavour regulation): methyl eugenol (for value in the extract, see IFRA list)		
<b>Limited substances (cosmetic):</b>	According to Annex III Reg. (EC) No. 1223/2009 (cosmetic regulation): methyl eugenol (for value in the extract, see IFRA list)		
<b>Declaration:</b>	<p>In food: flavouring preparation or herb extract or rosemary extract</p> <p>In food supplements: rosemary extract</p> <p>In cosmetics: INCI-Name: Rosmarinus Officinalis Leaf Extract, CAS-Nr. 84604-14-8, EINECS-Nr. 283-291-9</p>		
<b>Application:</b>	<p>Traditional use: The essential oil of rosemary is used internally as a traditional herbal medicine for the treatment of dyspepsia and spasmodic gastrointestinal disorders. Externally, the extract is used to treat mild muscle and joint pain and mild circulatory disorders [2]. In folk medicine, rosemary is used for general digestive problems, headaches and migraines [3].</p> <p>In food: Due to its flavour, essential rosemary oil can be used as a herb extract in many foods.</p> <p>In food supplements: Rosemary essential oil is also suitable in diluted form for use in food supplements.</p>		



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**In cosmetics:**

The essential oil of rosemary, especially its main components 1,8-cineol, camphor, alpha-pinene, verbenone and beta-caryophyllene have antimicrobial properties against oral pathogens responsible for the development of caries [4]. Therefore, the use of rosemary extract in oral care products such as toothpaste or mouthwashes is conceivable. Moreover, the extract has a characteristic spicy aroma and is suitable as a fragrance in various cosmetic products and perfumes.

**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:**

UN 1169 EXTRACTS, AROMATIC, LIQUID; 3, III

**REACH - Status:**

This product is currently not subject to registration.

**Certification:**

- 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.

**Literature:**

[1] P. Manninen, E. Häivälä, S. Sarimo, H. Kallio, Distribution of microbes in supercritical CO<sub>2</sub> extraction of sea buckthorn (*Hippophae rhamnoides*) oils, Zeitschrift für Lebensmitteluntersuchung und -Forschung / Springer-Verlag (1997) 204: 202-205

[2] Committee on Herbal Medicinal Products (HMPC), European Medicines Agency (EMA), Community herbal monograph on *Rosmarinus officinalis* L., aetheroleum, EMA/HMPC/235453/2009

[3] Wolfgang Blascheck u.a. (Hrsg.), HagerROM 2017, Hagers Enzyklopädie der Arzneistoffe und Drogen, Stuttgart: Wissenschaftliche Verlagsgesellschaft Stuttgart, 2017

[4] Bernardes WA; Lucarini R; Tozatti MG; Flauzino, LG; Souza, MG; Turatti, IC; Andrade e Silva, ML; Martins, CH; da Silva Filho, AA; Cunha, WR., Antibacterial activity of the essential oil from *Rosmarinus officinalis* and its major components against oral pathogens, Z. Naturforschung C, 65, 588-593, 2010

**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.