



## General Specification

### Sage Antioxidant extract 35

#### Type No. 063.015



<b>Raw material:</b>	<i>Salvia triloba</i> (syn. <i>fruticosa</i> ) - Leaves, dried
<b>Production:</b>	By supercritical fluid extraction with natural carbon dioxide with addition of a small amount of ethanol as entrainer, no inorganic salts, no heavy metals, no reproducible microorganisms [1]. The CO <sub>2</sub> -extract is standardised with pure sunflower oil (organic).
<b>D/E - ratio:</b>	10 - 15 kg sage leaves to 1 kg product.
<b>Organoleptic description:</b>	Dark brown and at room temperature soft to viscous product with characteristic smell and taste
<b>Composition:</b>	60 % Sage Antioxidant extract 40 % sunflower oil (organic)
<b>Ingredients:</b>	> 15 % Antioxidative reference compounds: Phenolic diterpenes carnosic acid and carnosol (calc. as carnosic acid) with > 11 % of carnosic acid; total volatile flavor compounds < 3 %, water < 2%, residual content of ethanol < 2 %.
<b>Limited substances (food):</b>	According to Annex II Reg. (EC) No. 1334/2008 (flavour regulation): thujone (alpha- and beta-) (for value in the extract, see certificate of analysis)
<b>Declaration:</b>	In food: flavouring preparation or spice extract or sage extract  In food supplements: flavouring preparation or spice extract or sage extract  In cosmetics: INCI-Name: Salvia Triloba Leaf Extract, CAS-No. 85085-68-3, EINECS-No. 285-391-8 and Helianthus Annuus Seed Oil, CAS-No. 8001-21-6, EINECS-No. 232-273-9
<b>Application:</b>	Traditional use: Due to the diterpenes carnosol and carnosic acid content, the extract has antioxidant and antimicrobial properties [2, 3].  In food: Sage extract has a characteristic flavour, which suits well to meat and poultry products. The use as spice extract in other foods is also possible.  In food supplements: It can also be used as a flavouring component in food supplements.

**In cosmetics:**

The antioxidant carnosic acid contained in the extract can reduce oxidative changes in skin surface lipids when applied to the skin. Therefore the product is suitable as an ingredient in cosmetic skin care products, especially in anti-aging products [2]. Its characteristic flavour profile also allows it to be used as a fragrance in perfumes and other cosmetic care products.

**Handling:**

Warm up and mix before use!

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:**

- 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] Simona Birtic, Pierre Dussort, François-Xavier Pierre, Antoine C. Bily, Marc Roller, Carnosic acid, Phytochemistry 115 (2015) 9–19

[3] Edwin N. Frankel, Shu-Wen Huang Robert Aeschbach and Elizabeth Prior, Antioxidant Activity of a Rosemary Extract and Its Constituents, Carnosic Acid, Carnosol, and Rosmarinic Acid, in Bulk Oil and Oil-in-Water Emulsion, J. Agric. Food Chem. 1996, 44, 131-135

**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.