

TECHNICAL DATA SHEET

Product Information

Product Name: Star anise food fragrance — water-dispersible, PN AF-ILVE1EML
Scientific name: *Illicium verum*
Parts utilized for extraction: Fruit (dried)
Appearance: Milky-white to pale-yellow oil-in-water emulsion
Aroma: Sweet, warm and intensely anisic, with a liquorice-like body
Solubility: Dispersible in water (oil-in-water emulsion); miscible with ethanol

Raw Material Specification

Analysis	Method	Result
Total ash for herb	Ph. Eur. (2.4.16)	<4%
Pesticides	GC/MS, LC-MS/MS	Complies with Ph. Eur. (2.8.13)
Aflatoxins (G1, G2, B1, B2)	AOAC 999.07	Complies with Ph. Eur. (2.8.18)
Ochratoxin A	AOAC 2004.10	Complies with Ph. Eur. (2.8.22)
Benzo(a)pyrene (PAH)	JOSS 2002 25, pp. 96-100	<10 ppb

Extract Specification

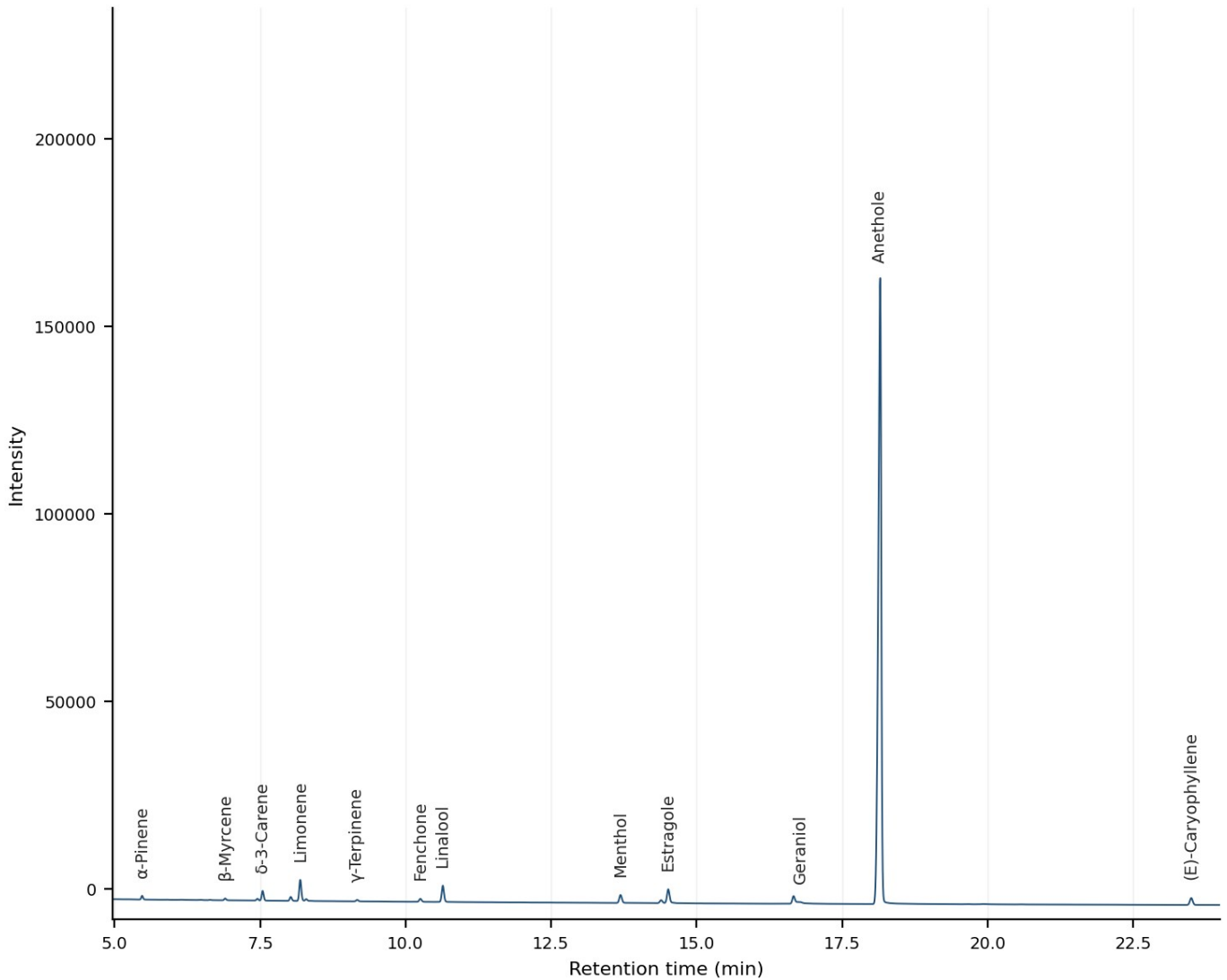
Analysis	Method	Specification	Result
Major components:			
Anethole	GC-FID, area normalisation (AF-LABGC003)	min. 80 %	87.83 %
Limonene		max. 5.0 %	2.15 %
Linalool		max. 3.0 %	1.81 %
Estragole		max. 6.0 %	1.76 %
(E)-Caryophyllene		max. 2.0 %	0.95 %
δ-3-Carene		max. 2.0 %	0.93 %
TOTAL		min. 90 %	95.43 %
Identified compounds (GC-FID area)	GC-FID, area normalisation (AF-LABGC003)	min. 95 %	98.82 %
Arsenic (As)	ICP-OES (In-house method)	N.D. (< 1 ppm)	N.D.
Cadmium (Cd)		N.D. (< 3 ppm)	N.D.
Lead (Pb)		N.D. (< 1 ppm)	N.D.
Mercury (Hg)		N.D. (< 0.1 ppm)	N.D.
Total aerobic microbial count (cfu/g)	ISO 4833-1	<10000	Complies
Yeast & mold (cfu/g)	ISO 21527-2	<100	Complies
<i>Escherichia coli</i>	ISO 16649-2	N.D. (in 1 g)	N.D.
<i>Salmonella</i>	ISO 6579	N.D. (in 25 g)	N.D.
<i>Pseudomonas aeruginosa</i>	ISO 13720	N.D. (in 1 g)	N.D.
<i>Staphylococcus aureus</i>	ISO 6888-1	N.D. (in 1 g)	N.D.

Batch Number:
20261015-ILVE1EML



Manufactured:
15.10.2026

Chromatogram



Additional Data

Storage conditions: Store refrigerated (2–8 °C); keep away from intense light and high heat. Shake well before use.

Carrier: Lecithin (E322(i)) and water. The star anise essential oil is emulsified in this lecithin / water base.

Packaging: 1–5 kg/bottle, 10–25–50 kg/drum.

Shelf life: 12 months (unopened, refrigerated)

Dosage and use: A water-dispersible form of star anise (*Illicium verum*) fragrance oil, emulsified in a lecithin / water base for direct incorporation into aqueous food and beverage systems without a pre-solubilization step — syrups, liqueur and spiced beverage bases, dairy drinks and confectionery fillings. Anethole is the dominant constituent and carries almost all of the odour, so very small additions are effective. Estragole is naturally present in star anise; formulators should observe the estragole limits applicable to their product category and market. Compositional figures in the Extract Specification and the chromatographic profile refer to the essential-oil fraction of the product, determined by GC-FID area normalisation; the carrier is stated separately above.

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Full chromatographic profile (GC-FID)

Name	CAS	RT (min)	Content (%)
α -Pinene	80-56-8	5.474	0.32
β -Myrcene	123-35-3	6.901	0.17
α -Phellandrene	99-83-2	7.455	0.16
δ-3-Carene	13466-78-9	7.545	0.93
p-Cymene	99-87-6	8.028	0.40
Limonene	138-86-3	8.191	2.15
1,8-Cineole	470-82-6	8.293	0.19
γ -Terpinene	99-85-4	9.169	0.16
Fenchone	1195-79-5	10.255	0.34
Linalool	78-70-6	10.640	1.81
Menthol	1490-04-6	13.693	0.98
α -Terpineol	98-55-5	14.390	0.37
Estragole	140-67-0	14.512	1.76
Geraniol	106-24-1	16.780	0.30
Anethole	104-46-1	18.152	87.83
(E)-Caryophyllene	13877-93-5	23.497	0.95