

TECHNICAL DATA SHEET

Product Information

Product Name: Star anise food fragrance oil, PN AF-ILVE1FRG
Scientific name: *Illicium verum*
Parts utilized for extraction: Fruit (dried)
Appearance: Clear, colourless to pale-yellow mobile liquid
Aroma: Sweet, warm and intensely anisic, with a liquorice-like body
Solubility: Insoluble in water; soluble in ethanol and fixed oils

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

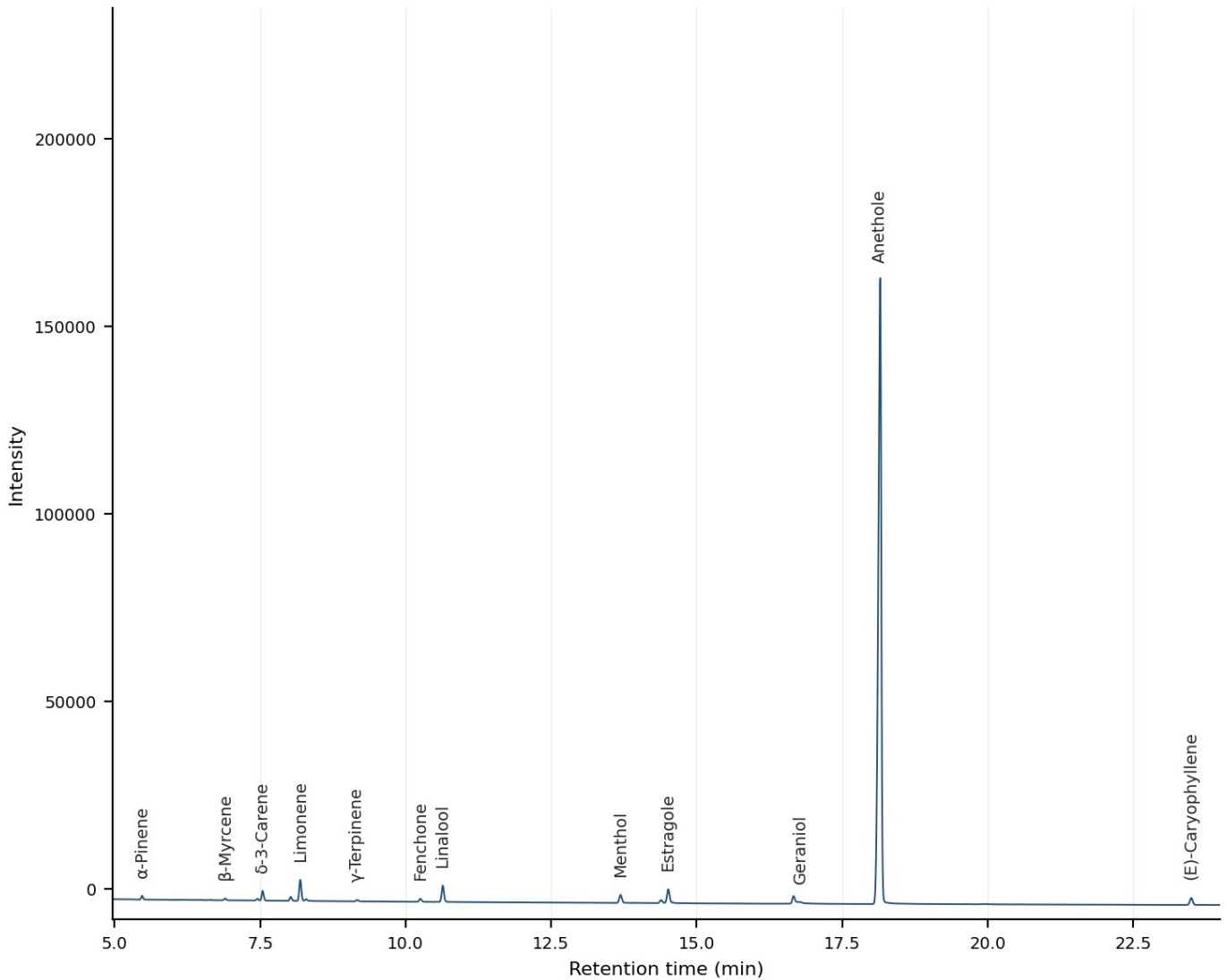
Analysis	Method	Specification	Result
Major components:			
Anethole	GC-FID, area normalisation (AF-LABGC003)	min. 80 %	87.83 %
Limonene		max. 5.0 %	2.15 %
Linalool		max. 3.0 %	1.81 %
Estragole		max. 6.0 %	1.76 %
(E)-Caryophyllene		max. 2.0 %	0.95 %
δ-3-Carene		max. 2.0 %	0.93 %
TOTAL		min. 90 %	95.43 %
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:
20260907-ILVE1FRG



Manufactured:
07.09.2026

Chromatogram



Additional Data

Storage conditions: Store in cool and dry place, keep away from intense light and high heat.

Carrier: Fractionated coconut oil (caprylic/capric triglyceride, MCT).

Packaging: 10 mL amber glass bottle with food-grade fine-mist spray head; also supplied by the kilogram (1-5 kg/bottle, 10-25-50 kg/drum).

Shelf life: 24 months

Dosage and use: Star anise fragrance oil is used in confectionery, baked goods, liqueurs and spiced beverage bases, and in savoury seasoning work where a warm anisic note is wanted. 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