

TECHNICAL DATA SHEET

Product Information

Product Name: Sweet orange food fragrance oil (cold-pressed), PN AF-CTSI1FRG
Scientific name: *Citrus sinensis*
Parts utilized for extraction: Fruit peel (fresh)
Appearance: Clear, colourless to pale-orange mobile liquid
Aroma: Fresh, sweet and juicy citrus, true to ripe orange peel
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)	<5%
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

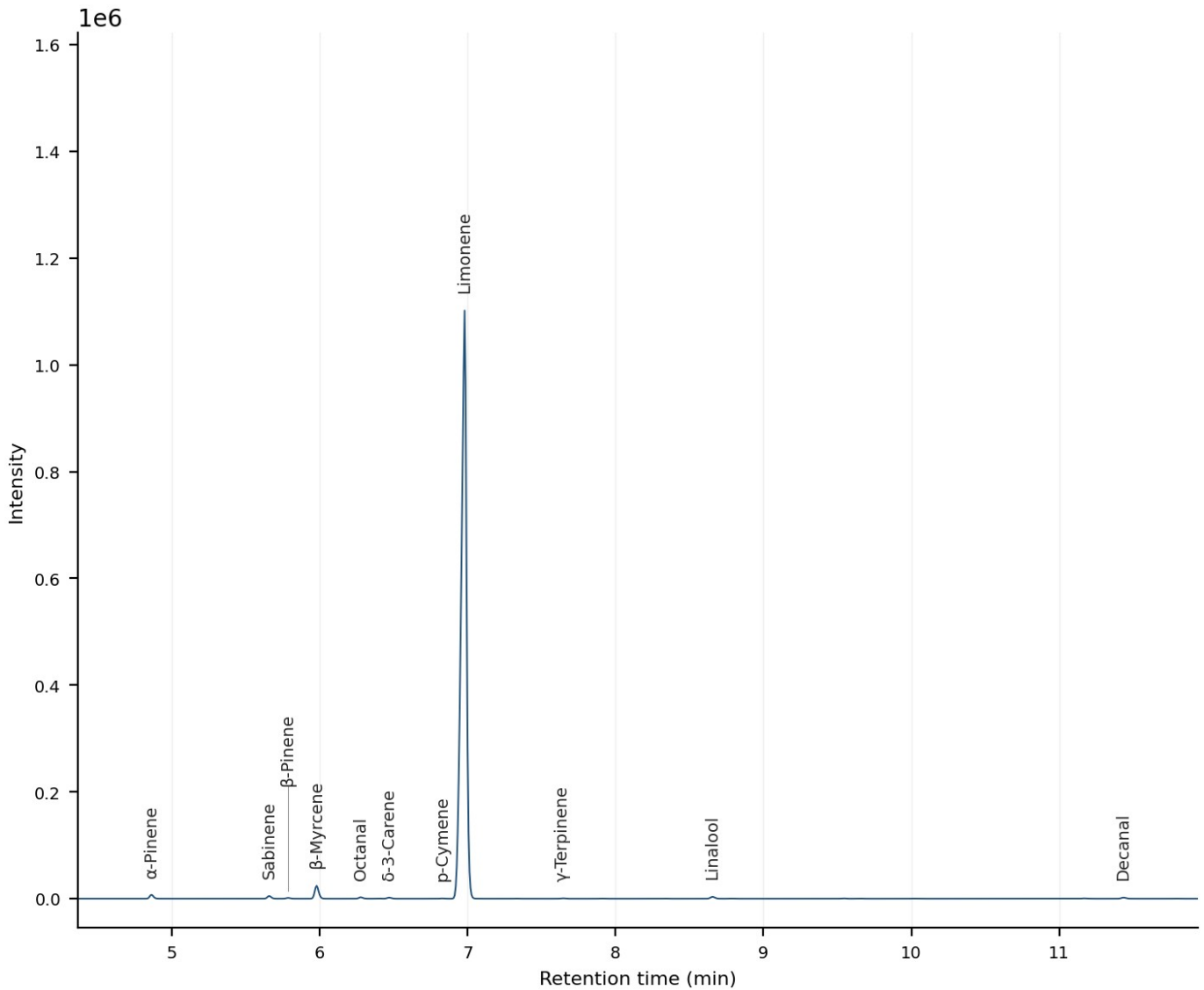
Analysis	Method	Specification	Result
Major components:			
Limonene	GC-FID, area normalisation (AF-LABGC003)	min. 90 %	96.43 %
β-Myrcene		min. 1.0 %	1.59 %
α-Pinene		max. 1.0 %	0.46 %
Sabinene		max. 1.0 %	0.33 %
Linalool		max. 1.0 %	0.27 %
TOTAL		min. 95 %	99.08 %
Identified compounds (GC-FID area)	GC-FID, area normalisation (AF-LABGC003)	min. 98 %	99.78 %
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-CTSI1FRG



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: Sweet orange is the most widely used citrus fragrance in food work — confectionery, bakery, dairy, soft drinks and syrups — and is equally at home in candles, soaps and cleaning fragrances. The profile is overwhelmingly d-limonene, which gives the immediate juicy lift but also makes the material prone to oxidation: keep containers closed, cold and full. As with all expressed citrus peel oils, observe the photosensitivity guidance applicable to leave-on skin products. 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	4.863	0.46
Sabinene	3387-41-5	5.659	0.33
β-Pinene	127-91-3	5.787	0.10
β-Myrcene	123-35-3	5.980	1.59
Octanal	124-13-0	6.277	0.18
δ-3-Carene	13466-78-9	6.469	0.15
p-Cymene	99-87-6	6.829	0.04
Limonene	138-86-3	6.980	96.43
γ-Terpinene	99-85-4	7.644	0.06
Linalool	78-70-6	8.656	0.27
Decanal	112-31-2	11.435	0.17