Batch Number:
20260907-CTAR1FRG

ALTRAFLORA
NATURAL EXTRACTS

Manufactured:
07.09.2026

TECHNICAL DATA SHEET

Product Information

Product Name: Bitter orange food fragrance oil (cold-pressed), PN AF-CTAR1FRG

Scientific name: *Citrus aurantium*

Parts utilized for extraction: Fruit peel (fresh)

Appearance: Clear, colourless to pale yellow-orange mobile liquid

Aroma: Fresh, dry citrus with a bitter-green edge

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:			
Limonene	GC-FID, area normalisation (AF-LABGC003)	min. 88 %	93.76 %
Linalool		max. 4.0 %	1.90 %
β-Myrcene		0.5 – 3.0 %	1.27 %
α-Pinene		0.5 – 3.0 %	1.25 %
Decanal		0.1 – 1.0 %	0.43 %
Octanal		0.1 – 1.0 %	0.38 %
Sabinene		max. 1.0 %	0.27 %
TOTAL		**min. 92 %**	**99.26 %**
Identified compounds (GC-FID area)	GC-FID, area normalisation (AF-LABGC003)	min. 98 %	99.87 %
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
Escherichia coli	ISO 16649-2	N.D. (in 1 g)	N.D.
Salmonella	ISO 6579	N.D. (in 25 g)	N.D.
Pseudomonas aeruginosa	ISO 13720	N.D. (in 1 g)	N.D.
Staphylococcus aureus	ISO 6888-1	N.D. (in 1 g)	N.D.

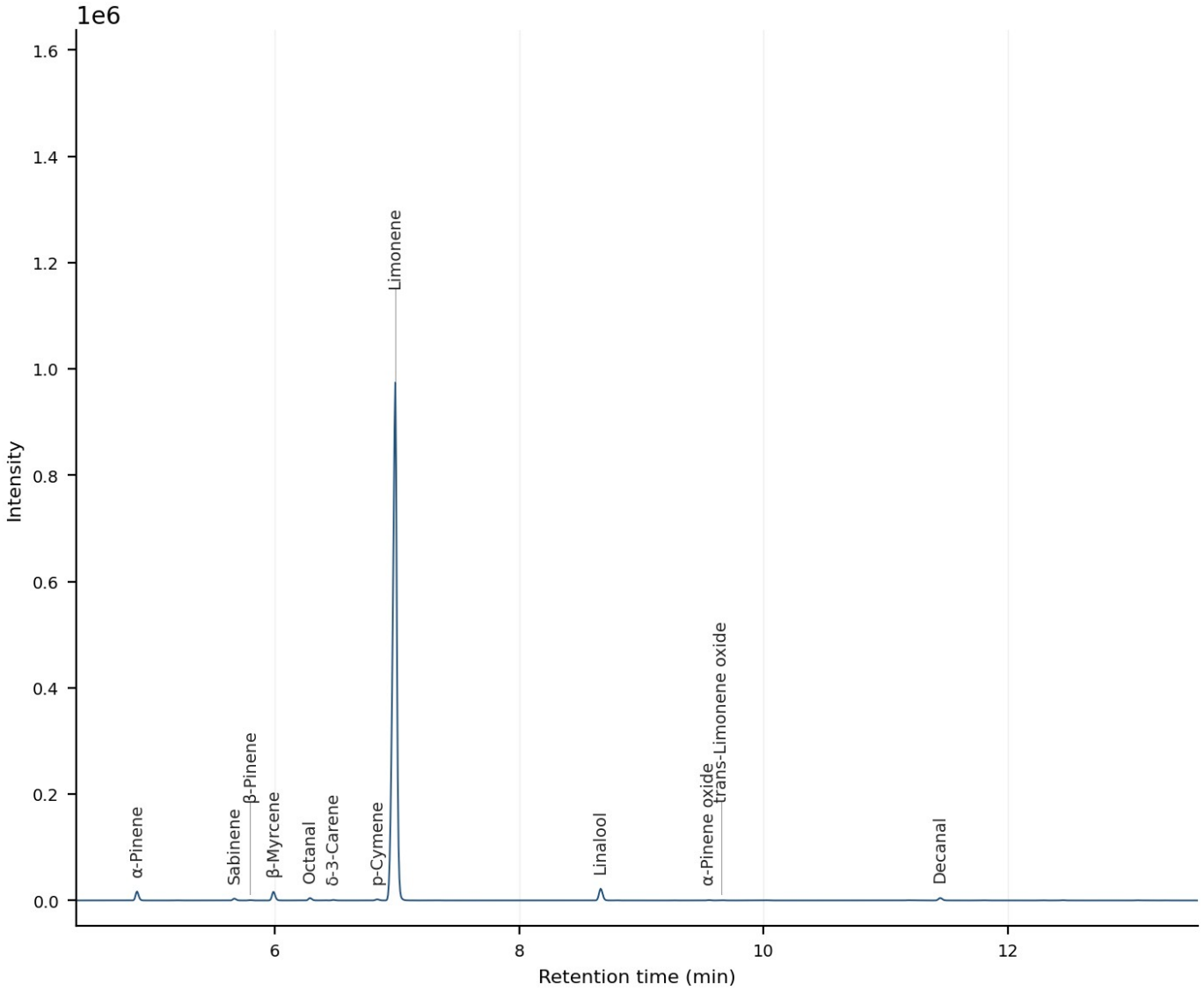
Zafer Mahallesi, 1033/2 Sokak, No: 16/A, Merkezefendi/DENİZLİ || www.altraflora.com

Batch Number:
20260907-CTAR1FRG

ALTRAFLORA
NATURAL EXTRACTS

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 g, 15 g and 30 g amber glass bottles with food-grade fine-mist spray head.

Shelf life: 24 months

Dosage and use: Bitter orange peel oil is drier and greener than sweet orange, with a bitter edge that suits marmalade, liqueur and bitters work, baked goods, and citrus-floral fragrance accords where sweet orange would read too candied. The oil is almost entirely limonene, with linalool giving the soft floral lift that distinguishes it. As with all expressed citrus peel oils, observe the photosensitivity guidance applicable to leave-on skin products, and store cold and full to limit oxidation. 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.

Zafer Mahallesi, 1033/2 Sokak, No: 16/A, Merkezefendi/DENİZLİ || www.altraflora.com

Batch Number:
20260907-CTAR1FRG

ALTRAFLORA
NATURAL EXTRACTS

Manufactured:
07.09.2026

Full chromatographic profile (GC-FID)

Name	CAS	RT (min)	Content (%)
α-Pinene	**80-56-8**	**4.872**	**1.25**
Sabinene	**3387-41-5**	**5.669**	**0.27**
β-Pinene	127-91-3	5.798	0.05
β-Myrcene	**123-35-3**	**5.990**	**1.27**
Octanal	**124-13-0**	**6.289**	**0.38**
δ-3-Carene	13466-78-9	6.480	0.09
p-Cymene	99-87-6	6.839	0.18
Limonene	**138-86-3**	**6.986**	**93.76**
Linalool	**78-70-6**	**8.668**	**1.90**
α-Pinene oxide	1686-14-2	9.554	0.07
trans-Limonene oxide	4959-35-7	9.658	0.07
α-Terpineol	98-55-5	11.181	0.05
Decanal	**112-31-2**	**11.447**	**0.43**
Carvone	99-49-0	12.447	0.05
Neral	106-26-3	13.052	0.05

Zafer Mahallesi, 1033/2 Sokak, No: 16/A, Merkezefendi/DENİZLİ || www.altraflora.com