Batch Number:
20260907-PNSL1EO

ALTRAFLORA
NATURAL EXTRACTS

Manufactured:
07.09.2026

TECHNICAL DATA SHEET

Product Information

Product Name: Yellow pine essential oil (origin: Turkey), PN AF-PNSL1EO

Scientific name: *Pinus sylvestris*

Parts utilized for extraction: Needles and wood

Appearance: Clear, colourless to pale-yellow mobile liquid

Aroma: Fresh, resinous and terpenic, characteristic of pine

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:			
α-Pinene	GC-FID, area normalisation (AF-LABGC003)	min. 80 %	87.70 %
β-Pinene		3.0 – 8.0 %	5.18 %
Limonene		1.0 – 4.0 %	1.65 %
Camphene		0.5 – 3.0 %	1.31 %
Longifolene		max. 2.0 %	0.62 %
β-Myrcene		max. 2.0 %	0.58 %
TOTAL		**min. 90 %**	**97.04 %**
Identified compounds (GC-FID area)	GC-FID, area normalisation (AF-LABGC003)	min. 95 %	98.65 %
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.

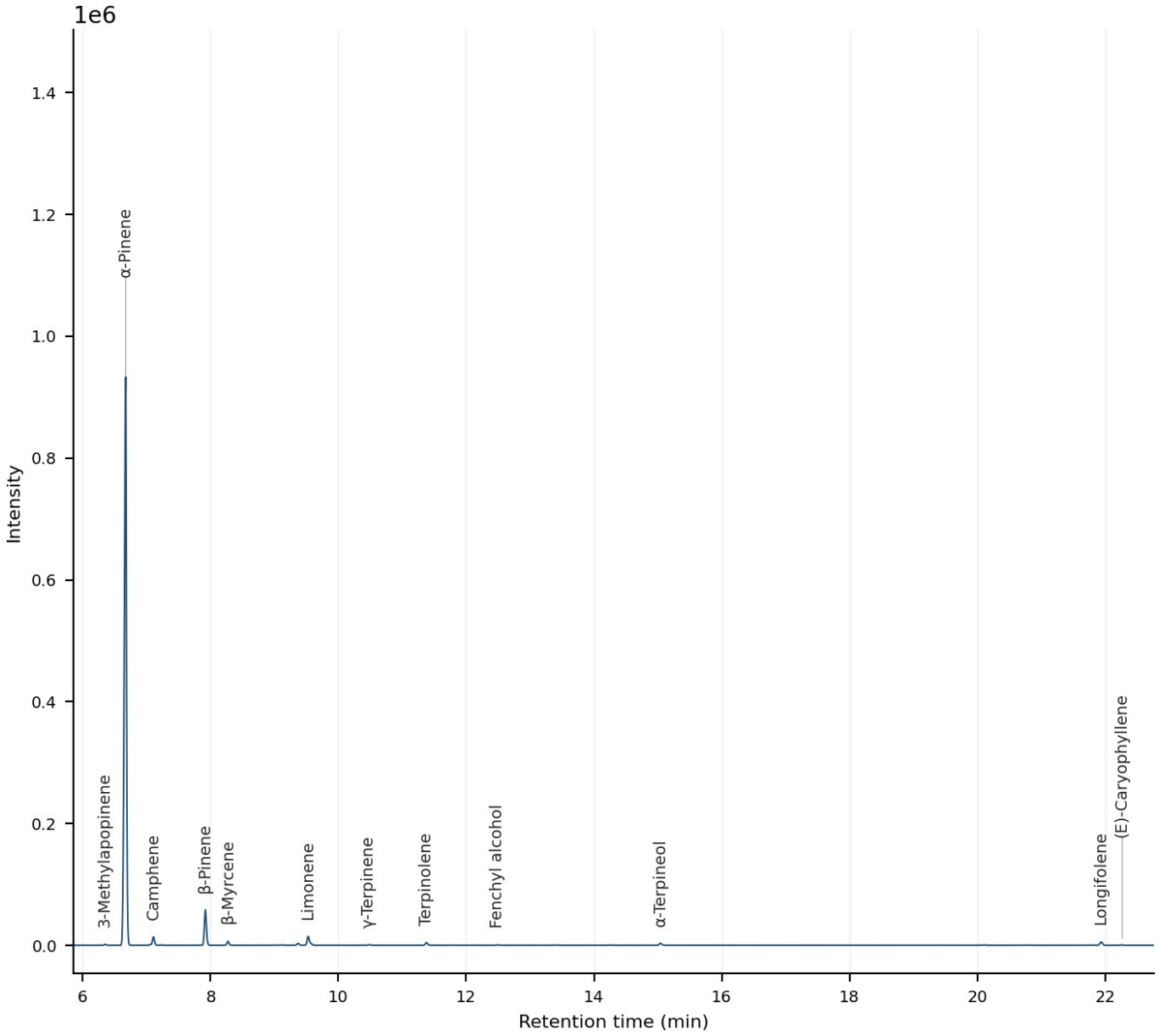
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Chromatogram



Additional Data

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

Carrier: None. This is a pure, undiluted distilled fraction.

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

Shelf life: 24 months

Dosage and use: Yellow pine oil is used in household and institutional cleaning fragrance, in pine-note soaps and disinfectant bases, in sauna and spa products, and as a terpene feedstock. This lot assays 87.70 % α-pinene, so the specification is issued at >80 %; it supersedes the earlier >60 % specification. Pinene-rich oils autoxidise on storage and it is the oxidation products, not α-pinene itself, that cause skin sensitisation: store cold, full, dark and under inert gas, and verify the peroxide value before use in any skin-contact product.

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Full chromatographic profile (GC-FID)

Name	CAS	RT (min)	Content (%)
3-Methylapopinene	4889-83-2	6.349	0.12
α-Pinene	**80-56-8**	**6.671**	**87.70**
Camphene	**79-92-5**	**7.107**	**1.31**
Thuja-2,4(10)-diene	36262-09-6	7.217	0.05
β-Pinene	**127-91-3**	**7.919**	**5.18**
β-Myrcene	**123-35-3**	**8.273**	**0.58**
α-Terpinene	99-86-5	9.133	0.05
p-Cymene	99-87-6	9.370	0.30
Limonene	**138-86-3**	**9.528**	**1.65**
γ-Terpinene	99-85-4	10.476	0.08
Terpinolene	586-62-9	11.379	0.43
Fenchyl alcohol	1632-73-1	12.487	0.06
cis-Sabinene hydrate	15537-55-0	14.259	0.04
α-Terpineol	98-55-5	15.041	0.35
Longicyclene	1137-12-8	20.101	0.06
Longifolene	**475-20-7**	**21.937**	**0.62**
(E)-Caryophyllene	13877-93-5	22.258	0.07

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