Batch Number:
20260301-PRNG1TSF

ALTRAFLORA
NATURAL EXTRACTS

Manufacturing Date:
01.03.2026

TECHNICAL DATA SHEET

Product Information

Product Name: Black pepper SFE extract (origin: Turkey), PN AF-PRNG1TSF

Scientific name: *Piper nigrum*

Parts utilized for extraction: Fruit (dry)

Appearance: Orange-yellow oleoresin

Aroma: Characteristic

Solubility: Immiscible with water, soluble in ethanol



Raw Material Specification

Analysis	Method	Result
Total ash for herb	Ph. Eur. (2.4.16)	<3%
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
Piperine	HPLC-DAD (in-house method)	>25 %	25.84 %
Major terpenoids:			
Caryophyllene <(E)->	GC-MS and GC-FID (in-house method)	>10%	11.08 %
3-Carene		>1%	2.32 %
Limonene		>1%	2.13 %
Loss on drying (%)	Ph. Eur. (2.8.17)	<5%	2.4%
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.
Pseudomonus aeruginosus	ISO 13720	N.D. (in 1 g)	N.D.
Staphylococcus aureus	ISO 6888-1	N.D. (in 1 g)	N.D.

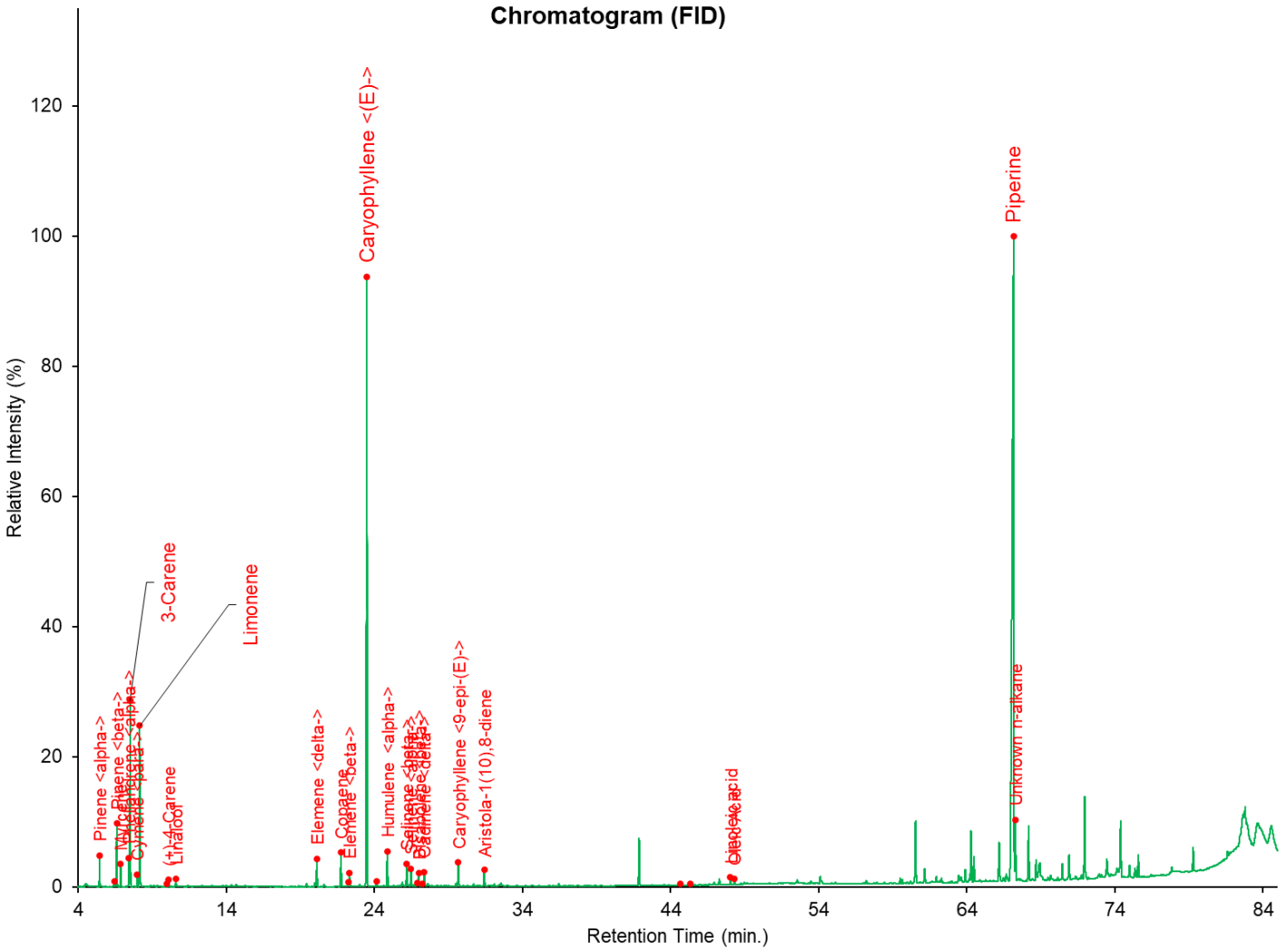
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Chromatogram(s)



Additional Data

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

Carrier: None. This is a pure oleoresin without solvent residues or adulterants.

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

Shelf life: 24 months

Dosage and use: The extract finds primary use in the food industry as a natural flavouring agent, offering consistent pungency and aroma for processed meats, sauces, snacks, and seasoning blends. Its standardized piperine content makes it valuable in nutraceutical formulations, where it serves as a bioavailability enhancer for nutrients like curcumin, CoQ10, and various vitamins. Supercritical extraction preserves the thermolabile aromatic profile that would be partially lost in steam distillation or degraded in solvent extraction.

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