

CERTIFICATE OF ANALYSIS (COA)

Product Name	BLACK PEPPER ESSENTIAL OIL
Botanical Name	Piper nigrum
Product Code	PEO1020
CAS #	8006-82-4 ; 84929-41-9
FEMA #	2845
EINECS #	284-524-7
INCI Name	Piper Nigrum (Black Pepper) Seed Oil

Batch #	10202306
Manufacturing Date	JUNE 2023
Best Before Date	MAY 2026

Part Used	Dried Peppercorn Fruit
Extraction Method	Steam Distilled Essential Oil
Quality	100% Pure and Natural
Note Classification	Middle to Top Note

<u>PROPERTIES</u>	<u>SPECIFICATIONS</u>	<u>RESULTS</u>
Appearance	Colorless to pale yellow green colored liquid	CONFORMS
Odour	Dry-woody, warm, spicy aroma with subtle floral and fruit notes, reminiscent of ground black pepper	CONFORMS
Refractive Index	1.455 - 1.495 @ 20°C	1.468
Specific Gravity (g/mL)	0.850 - 0.890 @ 20°C	0.876
Optical Rotation (°)	-20° to +4°	CONFORMS
Solubility	Soluble in alcohols and fixed oils; Insoluble in water	CONFORMS

Comments	Odour quality is excellent
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<u>MICROBIAL ANALYSIS</u>	<u>SPECIFICATIONS</u>	<u>STANDARDS</u>	<u>RESULTS</u>
Aerobic Mesophilic Bacterial Count	< 100 CFU/g	ISO 21149	CONFORMS
Yeast and Mould	< 10 CFU/g	ISO 16212	CONFORMS
Candida albicans	ABSENT / 1g	ISO 18416	CONFORMS
Escherichia coli	ABSENT / 1g	ISO 21150	CONFORMS
Pseudomonas aeruginosa	ABSENT / 1g	ISO 22717	CONFORMS
Staphylococcus aureus	ABSENT / 1g	ISO 22718	CONFORMS

<u>HEAVY METAL TESTS</u>	<u>SPECIFICATIONS</u>	<u>STANDARDS</u>	<u>RESULTS</u>
Lead: Pb (mg/kg or ppm)	< 10 ppm	na	CONFORMS
Arsenic: As (mg/kg or ppm)	< 2 ppm	na	CONFORMS
Mercury: Hg (mg/kg or ppm)	< 1 ppm	na	CONFORMS

STABILITY AND STORAGE:

Keep in tightly closed container in a cool and dry place, protected from sunlight. When stored for more than 36 months, quality should be checked before use.

As it is electronically generated document, hence no signature required.



CERTIFIED ORGANIC



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