

## CERTIFICATE OF ANALYSIS (COA)

<b>Product Name</b>	<b>CARDAMOM ESSENTIAL OIL</b>
<b>Botanical Name</b>	Elettaria cardamomum
<b>Product Code</b>	PEO1031
<b>CAS #</b>	8000-66-6 ; 85940-32-5
<b>FEMA #</b>	2241
<b>EINECS #</b>	288-922-1
<b>INCI Name</b>	Elettaria Cardamomum (Cardamom) Oil

<b>Batch #</b>	10312206
<b>Manufacturing Date</b>	JUNE 2022
<b>Best Before Date</b>	MAY 2025

<b>Part Used</b>	Fruit Seeds
<b>Extraction Method</b>	Steam Distilled Essential Oil
<b>Quality</b>	100% Pure and Natural
<b>Note Classification</b>	Middle Note

<u>PROPERTIES</u>	<u>SPECIFICATIONS</u>	<u>RESULTS</u>
<b>Appearance</b>	Colorless to pale greenish yellow colored liquid	CONFORMS
<b>Odour</b>	Spicy-sweet, fruity, warm, highly aromatic, slightly cineolic aroma	CONFORMS
<b>Refractive Index</b>	1.460 - 1.470 @ 20°C	1.465
<b>Specific Gravity (g/mL)</b>	0.915 - 0.940 @ 20°C	0.930
<b>Optical Rotation (°)</b>	+15° to +50°	CONFORMS
<b>Solubility</b>	Soluble in alcohols and fixed oils; Insoluble in water	CONFORMS

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

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



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