



## PRODUCT SPECIFICATION

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Product Name	Cardamom Essential Oil
Botanical Name	<i>Elettaria Cardamomum</i>
CAS #	8000-66-6 / 85940-32-5
EC #	288-922-1
EINECS #	---
INCI Name	Elettaria cardamomum seed oil
INCI Description	"Cardamom Oil". Elettaria Cardamomum Seed Oil is the volatile oil obtained from the dried ripe seeds of Elettaria cardamomum, Zingiberaceae. It contains Eucalyptol, sabinene, D-alpha-terpineol and its acetate, borneol, limonene, terpinene, L-4-terpinenol and its acetate and formate
Country of Origin	India
Packaging	As Per Customer Requirement

Part Used	Seeds
Extraction Method	Steam Distillation
Quality	100% Pure and Natural
Note Classification	Strong

Physical & Analytical Analysis	SPECIFICATIONS
Appearance	Pale Yellow
Odor	Sweet and spicy Odor
Refractive Index @ 20°C	1.465
Specific Gravity (g/mL) @ 20°C	0.938
Optical Rotation (°)	38.27°
Solubility	Insoluble in water, soluble in alcohol and oils

Ingredients	Strength (%)
1,8-cineole	26.5-44.6
Linalyl acetate	0.7-7.7
a-terpinyl acetate	29.2-39.7
Linalool	0.4-5.9
(P)-limonene	1.7-6.0

EU Allergens
Citral
Linalool
Geraniol
Limonene

Sabinene	2.5-3.8
a-terpineol	0.8-4.3
Terpinen-4-ol	0.9-3.2
b-myrcene	0.2-2.2
(E)-nerolidol	0.1-2.7
a-pinene	0.6-1.5
Geraniol	0.3-1.1

MICROBIAL ANALYSIS	SPECIFICATIONS	STANDARDS
Aerobic Mesophilic Bacterial Count	< 100 CFU	ISO 21149
Yeast and Mould	< 10 CFU	ISO 16212
Candida albicans	ABSENT	ISO 18416
Escherichia coli	ABSENT	ISO 21150
Pseudomonas aeruginosa	ABSENT	ISO 22717
Staphylococcus aureus	ABSENT	ISO 22718

HEAVY METAL TESTS	SPECIFICATIONS	STANDARDS
Lead: Pb (mg/kg or ppm)	< 10 ppm	In House
Arsenic: As (mg/kg or ppm)	< 2 ppm	In House
Mercury: Hg (mg/kg or ppm)	< 1 ppm	In House

Note: This Product Specification Sheet was prepared in accordance with the Quality parameters taken during product manufacturing/processing to maintain the quality of the product. This Specification Sheet shows the product characteristic feature of the actual product. However you can find the detailed examination report for the respective batches in their COA.