

CERTIFICATE OF ANALYSIS (COA)

Product Name	CALAMUS ESSENTIAL OIL	
Botanical Name	Acorus calamus	
CAS #	8015-79-0 ; 84775-39-3	
EINECS #	283-869-0	
INCI Name	Acorus Calamus Root Oil	

Part Used	Roots		
Extraction Method	Steam Distilled Essential Oil		
Quality	100% Pure and Natural		
Note Classification	Base Note		

PROPERTIES	<u>SPECIFICATIONS</u>	RESULTS
Appearance	Pale yellow to brown, slightly viscous liquid	CONFORMS
Odour	Warm, spicy, waxy aroma reminiscent of a sweet forest	CONFORMS
Refractive Index	1.525 - 1.580 @ 25°C	1.551
Specific Gravity (g/mL)	1.040 - 1.085 @ 25°C	0.049
Optical Rotation (°)	-0.5° to +0.5°	CONFORMS
Solubility	Soluble in alcohols and fixed oils; Insoluble in water	CONFORMS

MICROBIAL ANALYSIS	SPECIFICATIONS	STANDARDS	RESULTS
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

HEAVY METAL TESTS	SPECIFICATIONS	STANDARDS	RESULTS
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

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