

CERTIFICATE OF ANALYSIS (COA)

Product Name	CHRISTMAS ESSENTIAL OIL
Botanical Name	Abies fraseri + Abies peocera + Abies grandis
INCI Name	Abies Fraseri (Frasier Fir) Needle Oil and Abies Peocera (Noble Fir) Needle Oil and Abies grandis (Grand Fir) Needle Oil

Part Used	Needles and Twigs
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	Very fresh, sweet, woody-balsamic, evergreen/coniferous aroma	CONFORMS
Refractive Index	1.460 - 1.490 @ 20°C	1.475
Specific Gravity (g/mL)	0.850 - 0.900 @ 20°C	0.874
Optical Rotation (°)	-40° to -4°	CONFORMS
Solubility	Soluble in alcohols and fixed oils; Insoluble in water	CONFORMS

<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

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