

CERTIFICATE OF ANALYSIS (COA)

Product Name	ORANGE ESSENTIAL OIL, BITTER
Botanical Name	Citrus aurantium var. amara
CAS #	68916-04-1 ; 72968-50-4
EINECS #	277-143-2
INCI Name	Citrus aurantium amara (Bitter Orange) Peel Oil

Part Used	Peels
Extraction Method	Cold Pressed Essential Oil
Quality	100% Pure and Natural
Note Classification	Top Note

<u>PROPERTIES</u>	<u>SPECIFICATIONS</u>	<u>RESULT</u>
Appearance	Pale yellow to orange yellow colored liquid	CONFORMS
Odour	Distinctly fresh, citrus, dry-bitter aroma with sweet undertones	CONFORMS
Refractive Index	1.460 - 1.495 @ 20°C	1.473
Specific Gravity (g/mL)	0.840 - 0.860 @ 20°C	0.850
Optical Rotation (°)	+88° to +97°	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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