

CERTIFICATE OF ANALYSIS (COA)

Product Name	MANDARIN ESSENTIAL OIL
Botanical Name	Citrus reticulata
CAS #	8008-31-9 ; 84929-38-4
EINECS #	284-521-0
INCI Name	Citrus Reticulata (Mandarin) 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 reddish orange colored liquid	CONFORMS
Odour	Fresh, zesty, characteristic citrus-sweet aroma	CONFORMS
Refractive Index	1.450 to 1.490 nD	1.473
Specific Gravity (g/mL)	0.8100 to 0.8900 g/cm ³	0.851
Optical Rotation (°)	+35° to +75°	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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