

CERTIFICATE OF ANALYSIS (COA)

Product Name	LEMON SEED OIL
Botanical Name	Citrus limon
CAS #	-
EINECS #	-
INCI Name	Citrus Limon (Lemon) Seed Oil

Part Used	Seeds
Extraction Method	Cold Pressed
Quality	100% Pure and Natural

<u>PROPERTIES</u>	<u>SPECIFICATIONS</u>	<u>RESULTS</u>
Appearance	Pale yellow to golden colored liquid	CONFORMS
Odour	Characteristic mild aroma	CONFORMS
Refractive Index	1.460 - 1.480 @ 20°C	1.471
Specific Gravity (g/mL)	0.910 - 0.930 @ 20°C	0.921
Saponification Value (mgKOH/g)	190 - 200	194
Peroxide Value (meqO ₂ /kg)	Less than 5.0	CONFORMS
Iodine Value (g I ₂ /100g)	80 - 90	84
Acid Value (mgKOH/g)	Less than 1.0	CONFORMS
Solubility	Soluble in cosmetic esters and fixed oils; Insoluble in water	CONFORMS

FREE ACID COMPOSITION

FATTY ACID	C-CHAIN	SPECIFICATIONS (%)	RESULTS (%)
Palmitic Acid	C16:0	16.00 – 26.00	19.10
Stearic Acid	C18:0	2.00 – 5.00	2.50
Oleic Acid	C18:1 (n-9)	22.00 – 36.00	32.20
Linoleic Acid	C18:2 (n-6)	32.00 – 42.00	36.40
Alpha-Linolenic Acid	C18:3 (n-3)	3.00 – 10.00	9.10

MICROBIAL ANALYSIS	<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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