

CERTIFICATE OF ANALYSIS (COA)

Product Name	MANGO KERNEL OIL
Botanical Name	Mangifera indica
CAS #	90063-86-8
EINECS #	290-045-4
INCI Name	Mangifera Indica Seed Oil

Part Used	Seed Kernels
Extraction Method	Cold Pressed and Fractionated
Quality	100% Pure and Natural

<u>PROPERTIES</u>	<u>SPECIFICATIONS</u>	<u>RESULTS</u>
Appearance	Pale yellow to golden colored liquid	CONFORMS
Odour	Characteristic faint odour	CONFORMS
Refractive Index	1.440 - 1.495 @ 20°C	1.465
Specific Gravity (g/mL)	0.890 - 0.935 @ 20°C	0.917
Saponification Value (mgKOH/g)	170 - 200	188
Peroxide Value (meqO ₂ /kg)	Less than 4.0	CONFORMS
Iodine Value (g I ₂ /100g)	40 - 90	75
Free Fatty Acids (% oleic)	Less than 0.5	CONFORMS
Moisture (%)	Less than 0.1%	0.01
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	4.00 – 10.00	6.70
Stearic Acid	C18:0	4.00 – 14.00	7.10
Oleic Acid	C18:1 (n-9)	65.00 – 76.00	70.90
Linoleic Acid	C18:2 (n-6)	6.00 – 14.00	11.20
Arachidic Acid	C20:0	2.00 – 6.00	2.90

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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