

CERTIFICATE OF ANALYSIS (COA)

Product Name	MAHUA (MOWRAH) OIL
Botanical Name	Madhuca indica, Madhuca longifolia
CAS #	-
EINECS #	-
INCI Name	Madhuca Longifolia 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 yellow colored liquid	CONFORMS
Odour	Characteristic odour	CONFORMS
Refractive Index	1.458 - 1.462 @ 40°C	1.460
Specific Gravity (g/mL)	0.862 - 0.875 @ 30°C	0.869
Saponification Value (mgKOH/g)	187 - 196	192
Unsaponifiable Matter (%)	Maximum 2.00	CONFORMS
Peroxide Value (meqO ₂ /kg)	Less than 5.0	CONFORMS
Iodine Value (g I ₂ /100g)	58 - 70	75
Acid Value (mgKOH/g)	Less than 0.5	CONFORMS
Moisture (%)	Maximum 0.1	CONFORMS
Insoluble Impurities (%)	Maximum 0.1	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	20.00 – 25.00	22.80
Stearic Acid	C18:0	20.00 – 25.00	21.10
Oleic Acid	C18:1 (n-9)	35.00 – 48.00	40.60
Linoleic Acid	C18:2 (n-6)	10.00 – 16.00	14.70

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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