

CERTIFICATE OF ANALYSIS (COA)

Product Name	PAPAYA SEED OIL
Botanical Name	Carica papaya
CAS #	84012-30-6
EINECS #	281-675-0
INCI Name	Carica Papaya (Papaya) Seed Oil

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

<u>PROPERTIES</u>	<u>SPECIFICATIONS</u>	<u>RESULTS</u>
Appearance	Pale yellow to greenish golden colored liquid	CONFORMS
Odour	Characteristic mild odour	CONFORMS
Refractive Index	1.460 - 1.475 @ 20°C	1.465
Specific Gravity (g/mL)	0.910 - 0.940 @ 20°C	0.928
Saponification Value (mgKOH/g)	180 - 200	193
Peroxide Value (meqO ₂ /kg)	Less than 5.0	CONFORMS
Iodine Value (g I ₂ /100g)	75 - 90	CONFORMS
Acid Value (mgKOH/g)	Less than 0.8	0.2
Free Fatty Acids (% oleic)	Less than 0.4	0.1
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	14.00 – 16.00	14.50
Palmitoleic Acid	C16:1 (n-7)	Maximum 1.00	0.30
Stearic Acid	C18:0	2.00 – 5.00	2.30
Oleic Acid	C18:1 (n-9)	68.00 – 77.00	71.90
Linoleic Acid	C18:2 (n-6)	5.00 – 12.00	10.10
Alpha-Linolenic Acid	C18:3 (n-3)	Maximum 0.50	0.30

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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