

CERTIFICATE OF ANALYSIS (COA)

Product Name	PRICKLY PEAR SEED OIL
Botanical Name	Opuntia ficus-indica
CAS #	90082-21-6
EINECS #	290-109-1
INCI Name	Opuntia ficus indica (Prickly Pear) 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 greenish yellow colored liquid	CONFORMS
Odour	Characteristic nutty odour	CONFORMS
Refractive Index	1.460 - 1.480 @ 20°C	1.466
Specific Gravity (g/mL)	0.900 - 0.930 @ 25°C	0.914
Saponification Value (mgKOH/g)	165 - 200	188
Peroxide Value (meqO ₂ /kg)	Less than 8.0	CONFORMS
Free Fatty Acids (% oleic)	Less than 1.5	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	8.00 – 14.00	9.60
Stearic Acid	C18:0	2.00 – 6.00	3.50
Oleic Acid	C18:1 (n-9)	18.00 – 30.00	23.70
Linoleic Acid	C18:2 (n-6)	48.00 – 65.00	62.20
Alpha-Linolenic Acid	C18:3 (n-3)	Maximum 1.00	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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