

## **CERTIFICATE OF ANALYSIS (COA)**

Product Name	STRAWBERRY SEED OIL
Botanical Name	Fragaria ananassa
CAS #	-
EINECS #	-
INCI Name	Fragaria Ananassa (Strawberry) Seed Oil

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

<u>PROPERTIES</u>	<u>SPECIFICATIONS</u>	<u>RESULTS</u>
Appearance	Amber green to dark green colored liquid	CONFORMS
Odour	Characteristic mild fruity, strawberry-like odour	CONFORMS
Refractive Index	1.475 - 1.485 @ 20°C	1.479
Specific Gravity (g/mL)	0.910 - 0.930 @ 20°C	0.920
Saponification Value (mgKOH/g)	180 - 200	190
Unsaponifiable Matter (%)	Maximum 1.5	CONFORMS
Peroxide Value (meq O2/kg)	Less than 5.50	CONFORMS
Iodine Value (g I2/100g)	165 – 195	173
Acid Value (mgKOH/g)	Less than 2.0	CONFORMS
Free Fatty Acids (% oleic)	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	2.00 - 6.00	2.30
Palmitoleic Acid	C16:1 (n-7)	Maximum 0.50	0.10
Stearic Acid	C18:0	1.00 - 2.50	1.30
Oleic Acid	C18:1 (n-9)	8.00 – 16.00	13.10
Linoleic Acid	C18:2 (n-6)	44.00 – 55.00	50.90
Alpha-Linolenic Acid	C18:3 (n-3)	28.00 - 38.00	31.70



MICROBIAL ANALYSIS	SPECIFICATIONS	<u>STANDARDS</u>	RESULTS
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

HEAVY METAL TESTS	SPECIFICATIONS	<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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