

CERTIFICATE OF ANALYSIS (COA)

Product Name	TOMATO SEED OIL
Botanical Name	Solanum lycopersicum
CAS #	90131-63-8
EINECS #	290-375-9
INCI Name	Solanum Lycopersicum (Tomato) 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 reddish orange colored liquid	CONFORMS
Odour	Characteristic faint odour	CONFORMS
Refractive Index	1.460 - 1.480 @ 20°C	1.476
Specific Gravity (g/mL)	0.915 - 0.925 @ 20°C	0.928
Saponification Value (mgKOH/g)	186 - 198	193
Peroxide Value (meq O ₂ /kg)	Less than 3.0	CONFORMS
Iodine Value (g I ₂ /100g)	120 - 135	127
Free Fatty Acids (% oleic)	Less than 0.5	0.1
Acid Value (mgKOH/g)	Less than 1.0	0.2
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	10.00 - 16.00	11.40
Stearic Acid	C18:0	4.00 - 9.00	4.60
Oleic Acid	C18:1 (n-9)	18.00 - 25.00	23.50
Linoleic Acid	C18:2 (n-6)	50.00 - 60.00	57.40
Alpha-Linolenic Acid	C18:3 (n-3)	Maximum 3.0	2.20

<u>MICROBIAL ANALYSIS</u>	<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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