

CERTIFICATE OF ANALYSIS (COA)

Product Name	ONION OIL
Botanical Name	Allium cepa
CAS #	-
EINECS #	-
INCI Name	Allium Cepa 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 amber colored liquid	CONFORMS
Odour	Slightly pungent, characteristic onion aroma	CONFORMS
Refractive Index	1.455 - 1.480 @ 20°C	1.466
Specific Gravity (g/mL)	0.905 - 0.935 @ 20°C	0.923
Saponification Value (mgKOH/g)	180 - 200	191
Moisture and Insoluble Impurities (%)	Maximum 0.1	
Peroxide Value (meqO ₂ /kg)	Less than 5.0	CONFORMS
Iodine Value (g I ₂ /100g)	100 - 145	124
Acid Value (mgKOH/g)	Less than 1.0	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	5.00 – 14.00	7.10
Stearic Acid	C18:0	1.50 – 5.00	1.90
Oleic Acid	C18:1 (n-9)	24.00 – 36.00	31.80
Linoleic Acid	C18:2 (n-6)	46.00 – 62.00	55.90
Erucic Acid	C22:1 (n-9)	1.00 – 4.00	2.40

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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