

CERTIFICATE OF ANALYSIS (COA)

Product Name	COFFEE BEAN OIL
Botanical Name	Coffea arabica
CAS #	84650-00-0 ; 8001-67-0
EINECS #	283-481-1
INCI Name	Coffea Arabica (Coffee) Seed Oil

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

<u>PROPERTIES</u>	<u>SPECIFICATIONS</u>	<u>RESULT</u>
Appearance	Light brown colored viscous liquid	CONFORMS
Odour	Characteristic strong rich aroma of roasted coffee	CONFORMS
Refractive Index	1.450 - 1.490 @ 20°C	1.475
Specific Gravity (g/mL)	0.920 - 0.980 @ 20°C	0.939
Saponification Value (mgKOH/g)	180 - 230	214
Peroxide Value (meq O ₂ /kg)	Less than 10.0	CONFORMS
Iodine Value (g I ₂ /100g)	100-120	105
Acid Value (mgKOH/g)	Less than 5.0	CONFORMS
Solubility	Soluble in cosmetic esters and fixed oils; Insoluble in water	CONFORMS

FATTY ACID COMPOSITION:

<u>FATTY ACID</u>	<u>C-CHAIN</u>	<u>SPECIFICATIONS (%)</u>	<u>RESULTS</u>
Palmitic Acid	<u>C16:0</u>	<u>30.00 – 36.00</u>	<u>31.60</u>
Stearic Acid	<u>C18:0</u>	<u>7.50 – 9.50</u>	<u>7.90</u>
Oleic Acid	<u>C18:1 (n-9)</u>	<u>7.50 – 10.50</u>	<u>10.20</u>
Linoleic Acid	<u>C18:2 (n-6)</u>	<u>5.00 – 14.00</u>	<u>45.10</u>
Alpha-Linolenic Acid	<u>C18:3 (n-3)</u>	<u>Maximum 2.00</u>	<u>1.20</u>
Arachidic Acid	<u>C20:0</u>	<u>2.00 – 4.00</u>	<u>2.60</u>

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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