

CERTIFICATE OF ANALYSIS (COA)

Product Name	BLACK RASPBERRY SEED OIL
Botanical Name	Rubus occidentalis
CAS #	-
EINECS #	-
INCI Name	Rubus Occidentalis (Black Raspberry) Seed Oil

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

<u>PROPERTIES</u>	<u>SPECIFICATIONS</u>	<u>RESULT</u>
Appearance	Pale greenish golden to green colored liquid	CONFORMS
Odour	Characteristic slightly nutty, fruity odour	CONFORMS
Refractive Index	1.460 - 1.480 @ 20°C	1.471
Specific Gravity (g/mL)	0.900 - 0.930 @ 20°C	0.915
Saponification Value (mgKOH/g)	180 – 200	191
Peroxide Value (meq O <sub>2</sub> /kg)	Less than 15.0	CONFORMS
Iodine Value (g I <sub>2</sub> /100g)	160 - 190	175
Acid Value (mgKOH/g)	Less than 2.0	CONFORMS
Solubility	Soluble in cosmetic esters and fixed oils; Insoluble in water	CONFORMS

**FATTY ACID COMPOSITION:**

<b>FATTY ACID</b>	<b>C-CHAIN</b>	<b>SPECIFICATIONS (%)</b>	<b>RESULTS</b>
Palmitic Acid	C16:0	2.00 – 5.00	2.20
Oleic Acid	C18:1 (n-9)	6.00 – 18.00	13.50
Linoleic Acid	C18:2 (n-6)	48.00 – 58.00	53.30
Alpha-Linolenic Acid	C18:3 (n-3)	29.00 – 33.00	30.30

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

<b><u>HEAVY METAL TESTS</u></b>	<b><u>SPECIFICATIONS</u></b>	<b><u>STANDARDS</u></b>	<b><u>RESULTS</u></b>
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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