

CERTIFICATE OF ANALYSIS (COA)

Product Name	CHERRY KERNEL OIL
Botanical Name	Prunus avium
CAS #	8022-29-5 ; 85566-22-9
EINECS #	287-632-2
INCI Name	Prunus Avium (Cherry) Kernel Oil

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

<u>PROPERTIES</u>	<u>SPECIFICATIONS</u>	<u>RESULT</u>
Appearance	Pale yellow to golden yellow colored liquid	CONFORMS
Odour	Characteristic mild nutty odour	CONFORMS
Refractive Index	1.463 - 1.480 @ 20°C	1.470
Specific Gravity (g/mL)	0.910 - 0.925 @ 20°C	0.917
Saponification Value (mgKOH/g)	180 - 200	185
Peroxide Value (meq O ₂ /kg)	Less than 5.0	CONFORMS
Iodine Value (g I ₂ /100g)	120.-135	128
Free Fatty Acids (% oleic)	Less than 0.5	0.3
Acid Value (mgKOH/g)	Less than 1.0	0.6
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>5.50 – 10.00</u>	<u>7.40</u>
Stearic Acid	<u>C18:0</u>	<u>Maximum 4.0</u>	<u>2.00</u>
Oleic Acid	<u>C18:1 (n-9)</u>	<u>23.00 – 45.00</u>	<u>41.70</u>
Linoleic Acid	<u>C18:2 (n-6)</u>	<u>40.00 – 55.00</u>	<u>43.30</u>
Alpha-Linolenic Acid	<u>C18:3 (n-3)</u>	<u>3.00 – 13.00</u>	<u>4.00</u>
Arachidic Acid	<u>C20:0</u>	<u>Maximum 1.50</u>	<u>1.00</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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