

## **CERTIFICATE OF ANALYSIS (COA)**

Product Name	SAW PALMETTO OIL
Botanical Name	Serenoa repens
CAS #	90106-85-7 ; 84604-15-9
EINECS #	283-292-4
INCI Name	Serenoa Repens Fruit Oil

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

<u>PROPERTIES</u>	<u>SPECIFICATIONS</u>	<u>RESULTS</u>
Appearance	Greenish brown colored liquid	CONFORMS
Odour	Characteristic mild aroma	CONFORMS
Refractive Index	1.450 - 1.490 @ 20°C	1.476
Specific Gravity (g/mL)	0.890 - 0.940 @ 20°C	0.912
Solubility	Soluble in cosmetic esters and fixed oils; Insoluble in water	CONFORMS

## FREE ACID COMPOSITION

FATTY ACID	C-CHAIN	SPECIFICATIONS (%)	RESULTS (%)
Caprylic Acid	C8:0	1.00 – 3.00	2.10
Capric Acid	C10:0	1.00 – 3.00	1.90
Lauric Acid	C12:0	25.00 – 35.00	29.40
Myristic Acid	C14:0	8.00 – 15.00	11.00
Palmitic Acid	C16:0	16.00 – 22.00	19.20
Stearic Acid	C18:0	4.00 – 6.00	4.80
Oleic Acid	C18:1 (n-9)	26.00 – 34.00	31.60
Linoleic Acid	C18:2 (n-6)	35.00 – 54.00	43.70



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

HEAVY METAL TESTS	SPECIFICATIONS	STANDARDS	RESULTS
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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