

CERTIFICATE OF ANALYSIS

Product Name	act Name ROSELLE HIBISCUS SEED OIL	
Botanical Name	Hibiscus sabdariffa	
CAS#	84775-96-2	
EINECS #	283-920-7	
INCI Name	Hibiscus Sabdariffa (Hibiscus) Seed Oil	

Batch #	41002008
Manufacturing Date	AUGUST 2022
Best Before Date	FEB 2024

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

<u>PROPERTIES</u>	SPECIFICATIONS	<u>RESULTS</u>
Appearance	Pale yellow to golden colored liquid	CONFORMS
Odour	Nutty odour	CONFORMS
Refractive Index	1.460 - 1.480 @ 20°C	1.468
Specific Gravity (g/mL)	0.900 - 0.930 @ 20°C	0.919
Saponification Value (mgKOH/g)	188 - 200	190
Peroxide Value (meq O ₂ /kg)	Less than 10.0	CONFORMS
lodine Value (g l ₂ /100g)	100 - 140	118
Acid Value (mgKOH/g)	Less than 2.0	CONFORMS
Solubility	Soluble in cosmetic esters and fixed oils; Insoluble in water	CONFORMS

FATTY ACID COMPOSITION:

FATTY ACID	C-CHAIN	SPECIFICATIONS (%)	RESULTS (%)
Palmitic Acid	C16:0	16.00 – 22.00	20.10
Stearic Acid	C18:0	4.00 - 6.00	5.40
Oleic Acid	C18:1 (n-9)	26.00 – 34.00	28.40
Linoleic Acid	C18:2 (n-6)	35.00 – 54.00	41.20

MICROBIAL ANALYSIS	SPECIFICATIONS	<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

HEAVY METAL TESTS	SPECIFICATIONS	<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

STABILITY AND STORAGE:

Keep in tightly closed container in a cool and dry place, protected from sunlight. When stored for more than 18 months, quality should be checked before use.

As it is electronically generated document, hence no signature required.