

Certificate of Analysis

No. 002/COA-NSIO/V/202 5

Product name : Native Sacha Inchi Oil
Supplier : Quilla Herbal Indonesia
Species : Plukenetia volubilis L.
Production date : March 25, 2025
Expired date : March 25, 2027
Analysis Date : March 25, 2025

Parameters	Specifications	Result	Method
Physical Characteristics			
Appearance	Liquid	Complies	Organoleptic
Colour	Yellow	Complies	Organoleptic
Odour	Characteristic	Complies	Organoleptic
Relative Density	0.91-0.94 gr/cm ³	0.91 gr/cm ³	USP <841>
Acid Value	0.37-2.40 mg/g	0.38 ± 0.02 mg/g	USP <401>
Peroxide Value	1.50-19.10 m-eq/kg	11.01 m-eq/Kg	USP <401>
Iodine Value	183.69-195.05 g/100 g	179.32 g/100 g	USP <401>
Refractive Index	1.475-1.482	1.479	USP <831>
Chemical properties			
Vitamin A (Retinol)	Absent	123.42 mcg/100 g	USP <621>
Vitamin D3 (Cholecalciferol)	Absent	2811.03 mcg/100 g	USP <621>
Vitamin E (α-tocopherol)	Absent	145.06 mg/100 g	USP <621>
Magnesium (Mg)	Absent	0.48 mg/100 g	ICP-OES
Calcium (Ca)	Absent	3.36 mg/100 g	ICP-OES
Antioxidant Activity	Absent	8.859 ppm	Spectrophotometric
Fatty Acids			
Omega3 Fatty Acids	>42%	48.50%	NTP <151.400>
Omega6 Fatty Acids	>32%	34.80%	NTP <151.400>
Omega9 Fatty Acids	>8.5	7.70%	NTP <151.400>

Microbiology			
Total Plate Count	NMT 5000 cfu/g	<10 cfu/g	USP <231>
Yeast and Mold	NMT 100 cfu/g	<10 cfu/g	USP <231>
Total Heavy Metals			
Lead (Pb)	NMT 3 ppm	Complies	USP <231>
Arsenic (As)	NMT 1 ppm	Complies	USP <231>
Cadmium (Cd)	NMT 1 ppm	Complies	USP <231>
Mercury (Hg)	NMT 0.1 ppm	Complies	USP <231>

Approved By,
Head of Department Pharmaceutics
and Pharmaceutical Technology



(Prof. Dr. apt. Sriwidodo, M.Si.)

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Toxicity			
Acute Toxicity (LD50)	Absent	>10000 ppm	OECD

Jatinangor, 01 Agustus 2024
Head of Department Pharmaceutics
and Pharmaceutical Technology



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