

TECHNICAL DATA SHEET (TDS)
TAMANU OIL
(*Calophyllum Inophyllum* Seed Oil)

1. PRODUCT IDENTIFICATION & OVERVIEW

Product Name	Tamanu Oil (Virgin)
INCI Name	<i>Calophyllum Inophyllum</i> Seed Oil
CAS Number	241148-25-4
EINECS No.	607-323-1
Description	100% Pure and Natural fixed oil obtained by cold pressing of the dried kernels (nuts) of <i>Calophyllum inophyllum</i> L. (Clusiaceae). Unrefined, virgin grade.

2. TECHNICAL & SENSORY PROPERTIES

Appearance	Viscous liquid (may solidify at low temperature)
Colour	Dark green to greenish-brown
Odour	Characteristic, rich, earthy, nutty, woody-spicy
Relative Density (20°C)	0.910 – 0.929
Refractive Index (20°C)	1.470 – 1.487
Acid Value	≤ 40 mg KOH/g (crude); typically 15 – 62 mg KOH/g depending on grade
Saponification Value	190 – 210 mg KOH/g
Iodine Value	80 – 100 g I ₂ /100g
Peroxide Value	< 10 meq O ₂ /kg
Viscosity (25°C)	20 – 26 mPa·s
Solubility	Soluble in alcohol and oils; insoluble in water

Main Fatty Acid Composition	Oleic acid (35–48%), Linoleic acid (20–35%), Palmitic acid (9–16%), Stearic acid (10–18%)
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3. APPLICATIONS & USES

Cosmetics & Skincare	Widely used in facial serums, moisturisers, anti-ageing creams, and lip products for its skin-conditioning and regenerative properties . Traditionally recognised for promoting new tissue formation and supporting skin healing .
Hair Care	Incorporated into shampoos, conditioners, and scalp treatments as a conditioning agent .
Traditional & Therapeutic	Used in Polynesian traditional medicine for treating wounds, burns, skin rashes, and inflammatory skin conditions . Known for antimicrobial and bacteriostatic effects .
Makeup Products	Used in foundations, concealers, and BB/CC creams for its nourishing base and skin-enhancing properties .

4. STORAGE, PACKAGING & SAFETY

Storage Conditions	Store in sealed containers at ambient temperature (below 25°C), protected from light and away from oxidizing substances . Shake well before use .
Packaging	Sealed glass, aluminium, or HDPE containers.
Shelf Life	36 months when stored properly in unopened original containers .
Safety & Handling	Avoid contact with eyes. Perform a patch test before use. Not recommended for use during pregnancy . Keep away from ignition sources .
Safety Information	Generally considered safe and non-toxic for topical use; non-sensitizing and non-comedogenic . Persons with nut allergy should exercise caution .

Disclaimer: The information provided in this document is correct to the best of our knowledge, information, and belief at the date of its publication. It is provided as a general specification for quality control and handling purposes only.