

CERTIFICATE OF ANALYSIS

PRODUCT NAME: TAMANU SEED OIL, COLD PRESSED BATCHNUMBER: 4514907

PRODUCT INCI: CALOPHYLLUM INOPHYLLUM SEED OIL

PRODUCT CODE: OVTAMA

CAS NUMBER: 68956-68-3

EINECS NUMBER: 273-313-5

MANUFACTURING METHOD: SUNDRIED SEEDS & COLD PRESSED

BEST BEFORE END: AUGUST 2025

ANALYTICAL DETAILS	Range %	RESULTS
Appearance	OILY LIQUID IN ROOM TEMP / SOLID IN COLD TEMPS	-
Odour	NEUTRAL	-
COLOUR	DARK	-
SPECIFIC GRAVITY @ 20°C	GREENQrovA.980	0.921
Refractive Index @ 20°C (nr)	1.455 – 1.490	1.43
IODINE VALUE	79.0-98.0	85
PEROXIDE VALUE	<25.0	2.2
SAPONIFICATION	190 - 205	195
ACID VALUE	<80.0	49.1

FATTY ACID PROFILE		RANGE %	RESULTS
C-CHAIN	ACID NAME		
C16:0	Palmitic	< 16.0	13.2
C18:0	STEARIC	<18.0	16.1
C18:1	Oleic	22.0-48.0	41.1
C18:2	LINOLEIC	< 57.0	25



Allergen Declaration:

RODUCT NAME:	Tamanu Seed Oil, Cold Pressed			
INCI:	Calophyllum Imophyllum Seed			
	COSMETIC ALLERGENS			
The F	ollowing is from the 7th amendment of the cosmetic directive of the European Union Annex iii.			
nex Illa Reference:		CAS NUMBER:	TOTAL ALLERGEN INCLUSION (%):	
67	AMYL CINNAMAL	122-40-7	0.00	
68	BENZYL ALCOHOL	100-51-6	0.00	
69	CINNAMYL ALCOHOL	104-54-1	0.00	
70	CITRAL	5392-40-5	0.00	
71	EUGENOL	97-53-0	0.00	
72	HYDROXY-CITRONELLAL	107-75-5	0.00	
73	ISOEUGENOL	97-54-1	0.00	
74	AMYLCIN-NAMYL ALCOHOL	101-85-9	0.00	
75	BENZYL SALICYLATE	118-58-1	0.00	
76	CINNAMAL	104-55-2	0.00	
77	COUMARIN	91-64-5	0.00	
78	GERANIOL	106-24-1	0.00	
78	HYDROXY- METHYLPENTYLCYCLOHEXENECARBOXALDEHYDE	31906-04-4	0.00	
80	ANISE ALCOHOL	105-13-5	0.00	
81	BENZYL CINNAMATE	103-41-3	0.00	
82	FARNESOL	4602-84-0	0.00	
83	BUTYLPHENYL METHYLPROPIONAL	80-54-6	0.00	
84	LINALOOL	78-70-6	0.00	
85	BENZYL BENZOATE	120-51-4	0.00	
86	CITRONELLOL	106-22-9	0.00	
87	HEXYL CINNAM-ALDEHYDE	101-86-0	0.00	
88	LIMONENE	5989-27-5	0.00	
89	METHYL HEPTIN CARBONATE	111-12-6	0.00	
90	ALPHA-ISOMETHYL IONONE	127-51-5	0.00	
91	EVERNIA PRUNASTRI EXTRACT	90028-68-5	0.00	
92	EVERNIA FURFURACEA EXTRACT	90028-67-4	0.00	
fellowie is from the commission	FOOD ALLERGENS ion directive 2007/68/FC of 27th November 2007 amending Annex like to Directive 200/13/FC of the European Parlian	and the formation in the second state of the formation		
	оп инсличе 2007/00/сс 0/27лп новетиег 2007 ителинуувтех ти то опеслие 200723/сс 0/иле сигореан нитип			
ex Illa Reference: 1		PRESENT IN PRODUCT:	CONTAMINATION PRESENCE:	FACTORY PRESENCE:
-	CEREALS (CONTAINING GLUTEN)	NO	NO	YES
2	CRUSTACEANS	NO	NO	NO
3	EGGS	NO	NO	NO
4	FISH	NO	NO	NO
5	PEANUTS	NO	NO	YES
6	SOYA	NO	NO	YES
7	MILK	NO	NO	YES
8	NUTS	NO	NO	YES
9	CELERY & CELERIAC	NO	NO	NO
10	MUSTARD	NO	NO	YES
11	SESAME	NO	NO	YES
	SULPHUR DIOXIDE & SULPHITES	NO	NO	NO
12				
12 13 14	LUPIN MOLLUSC	NO	NO	NO



GMO Statement

PRODUCT NAME: Tamanu

MADAR Corporation Limited can confirm that the above listed product is GMO Free.

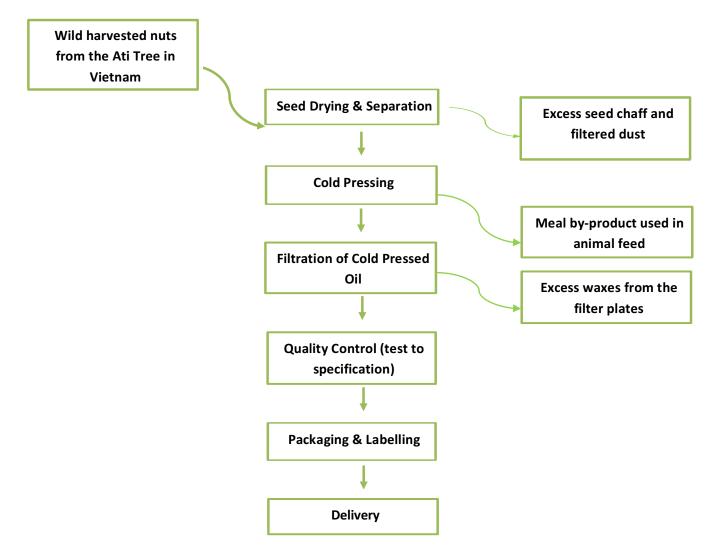
06/03/2019



Composition Statement & Manufacturing Flow Chart

Tamanu Seed Oil, Cold Pressed

INCI Name	% Inclusion	CAS Number
Calophyllum Inophyllum Seed	100%	68956-68-3 / 2411-48-25-4



The attached information is considered to be correct at the time the client received this information. Please be aware that detail can change and we encourage clients to update their records with MADAR regularly. The information is not and should not be considered a guarantee or warranty, or a part of our contractual or other legal obligations. The information is not to be disclosed to others, reproduced or transmitted in whole or in part without permission from MADAR.

BiOrigins, 19-20 Sandleheath Industrial Estate, Fordingbridge, Hampshire, SP6 1PA, UK

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Material Safety Data Sheet

EU Regulation: 1907/2006

SECTION 1: Identification	of the substar	nce/mixtu	ure and of the comp	oany/underta	king
1.1 Product Identification					
Product Name	Tamanu Seed Oil	, Cold Pres	SED		
Biological Definition	CALOPHYLLUM INC	PHYLLUM SE	ED IS A FIXED OIL OBTAINED FR	ROM THE TAMANU S	EED
INCI Name	CALOPHYLLUM INC	PHYLLUM SEE	ED		
Synonyms & Trade Names	TAMANU SEED OIL				
Internal Product Code	OVTAMA				
CAS-No	68956-68-3 / 2411-48-25-4	EC No.	733-313-5	EINECS No.	733-313-5
1.2 Details of the supplier of the safety data sheet					
Company Address	MADAR Corporation Limited 19-20 Sandleheath Industrial Estate, Fordingbridge, Hampshire, SP6 1PA				
Email	technical@madarco	orporation.co	o.uk		
1.3 Details of the supplier of the safety of	lata sheet				
Emergency Contacts	01425 655555 duri	ng office hou	rs		



SECTION 2: Hazards	Identification
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2.1		
Classification of the substance or mixture Classification (67/548/EEC)	This product is not dangerous according to REACH Regulation 1907/2006.	
Classification (EU1272/2008)	This product does not belong to any list of substances supposedly hazardous to human or animal health according to EU Regulation 1272/2008 & any further amendments, nor to those having recognized exposition limits. Care should be taken when handling hot oil as it may constitute a burn hazard. Spills can constitute a slippage hazard.	
2.2 Label Elements	Label in accordance with Regulation (EC) No 1272/2008.	
GHS Label	None.	
Signal Word	None.	
Contains	None.	
Hazards Statement	None.	
Signal Word	None.	
Precautionary Statements	None.	
Supplementary Precautionary Statements	None.	
Section 16 (Other Information): Risk & Safety phrases in full.		
2.3 Other Hazards		
Adverse physio-chemical properties	None.	
Adverse effects on human health	None.	
SECTION 3: Composition of Ingredients		
3.1 Substances	Not Applicable.	
3.2 Mixtures	Not Applicable.	



SECTION 4: First Aid Measures

4 .1	
Description of First Aid Measures	
General Information	Always remove contaminated clothing immediately.
Inhalation	Not expected for this particular product, however always best avoiding proactive inhalation.
Ingestion	No instruction as this is a non-toxic product.
Skin Contact	No instruction as this is a non-toxic product.
Eye Contact	Wash immediately & thoroughly with clean tap water.
4.2 Most important symptoms & effects (Acute & Delayed)	None.
4.3 Indication of any immediate medical attention or special treatment required	Not Applicable.

SECTION 5: Fire Fighting Measures

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5.1 Extinguishing material	Foam, Co2, Dry Chemical Powder.
5.2 Special hazards arising from the substance Or mixture	This product may only form ignitable mixtures or burn above the flash point. Dangerous combustion products include smoke & oxides of carbon.
5.3 Advice for fire-fighters	Standard. Wear self-contained breathing apparatus in confined spaces.

SECTION 6: Accidental Release Measures	
6.1 Personal precautions	None Required.
6.2 Environmental precautions	None Required.
6.3 Methods & material for containment and cleaning up	Spills can be absorbed by cloth or sawdust, washed away with water & cleaned with sodic products.
6.4 References to other sections	Refer & consider section 8. Refer & consider section 13.

SECTION 7: Handling & Storage

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	Handle in accordance with good hygiene and safety practice. Keep containers sealed when not in
7.1	use. Prevent spills & leaks to avoid slip hazard. Always wear personal protective clothing (refer to
Precautions for safe-handling	section 8). Do not eat, drink, sniff or smoke whilst handling this product. Provide suitable
	mechanical equipment for the safe handling of drums & heavy packages.



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7.2	Keep the product container tightly closed, in a dry, ventilated area (at temperatures <20°C). Keep	
Conditions for safe storage, including any	away from potential sources of ignition and protected from light. Maintain limited contact with	
incompatibilities	oxygen.	
7.3	No Data.	
Specific end use(s)		
SECTION 8: Exposure Controls &		
Personal Protection		
8.1		
Control Parameters	None.	
8.2		
Exposure Controls		
Eye Protection	Not required as a non-toxic product, however we still recommend taking precautions by wearing	
	protective eye-wear when handling the product.	
Hand Protection	None.	
Respiratory Equipment		
Hygiene Measures	None.	
Engineering Measures	None.	
Properties		
Physical & Chemical Properties		
Appearance	OILY LIQUID	
Colour	GREEN –DARK GREEN - DARK BLUE -BLACK	
Odour	Characteristic	
Relative Density	ΝΟ ΔΑΤΑ	
Flash Point (°C)		
Refractive Index	1.460 – 1.470	
Melting Point (°C)	NOT APPLICABLE	
Boiling Point (°C)	>100°C.	
Vapour Pressure		
Solubility in Water @ 20°C	INSOLUBLE.	
9.2	NO DATA.	
Other Information	NO DATA.	
SECTION 10: Stability & Reactivity		
10.1	Not Applicable.	
Reactivity		
10.2 Chamical stability	Stable under suggested storage conditions (<20°C).	
Chemical stability		
10.3 Possibility of hazardous reactions	No.	
10.4		
Conditions to avoid	Storage at high temperatures. Do not store above 20°C.	



10.5 Incompatible materials	Concentrated acids, alkalis & oxidising agents.	
10.6	This product does not decompose under normal conditions. Under fire conditions the product	
Hazardous decomposition products	will produce a mixture of irritating fumes & smoke.	

SECTION 11: Toxicological Information

11.1	
Toxicological effects	
Acute Toxicity	A non-toxic product. For pharmaceutical & cosmetic use only. This product does not carry a microbiological specification as it is sterilised in the refining process. It does not contain any impurities. This product is not included in the list of substances prohibited in cosmetic products or subject to restrictions. It does not contain colorants, preservatives or UV filters (Annex II – VI of EU regulation 1223/2009).
Skin irritation	Not Applicable.
Eye damage or irritation	Not Applicable.
Respiratory or skin sensitivity	Not Applicable.
Germ cell mutagenicity	Not Applicable.
Carcinogenicity	Not Applicable.
Reproductive toxicity	Not Applicable.
STOT – single exposure	Not Applicable.
STOT – repeated exposure	Not Applicable.
Aspiration hazard	Not Applicable.
Other information	Not Applicable.
SECTION 12: Ecological Information	
12.1 Toxicity	Low - None.
12.2 Persistence & degradability	>90% (OECD)
12.3 Bio- accumulative potential	None.
12.4 Mobility in soil	Low – None.
12.5 Results of PBT & VPVB assessment	Not Available.
12.6 Other adverse effects	None.
SECTION 13: Disposal Information	·

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13.1	
Waste treatment methods	Always recover spilled product. Discard waste material with authorized waste



management services. Act in accordance with local & national waste regulations.

SECTION 14: Transport Information

14.1	
Transport Information	
Warning icon	Road (ADR), Rail (RID), Sea (IMDG) and Air (ICAO), transport not restricted in
	drums or food tankers.
Shipping Name	Not Applicable.
UN Number (Road)	Not Applicable.
ADR Class	Not Applicable.
Hazard Number (ADR)	Not Applicable.
Hazchem Code	Not Applicable.
UN Number (Sea)	Not Applicable.
IMDG Class	Not Applicable.
IMDG Pack GR.	Not Applicable.
EMS	Not Applicable.
UN Number (Air)	Not Applicable.
Air Class	Not Applicable.
Air Pack GR.	Not Applicable.

SECTION 15: Regulatory Information 15.1 Product specific safety, health & environmental regulations & legislation Regulation (EC) No 1907/2006 of the European Parliament and of the council of $18^{\rm th}$ December 2006. Concerning the registration, evaluation, authorization & restriction of chemicals (REACH), establishing a European Chemicals Agency, EU Directives amending Directive 199/45/EC and repealing council regulation (EEC) No793/93 & commission regulation (EC) No1488/94 as well as council directive 76/769/EEC & commission directive 91/155/ECC, 93/67/ECC, 93/105/EEC & 2000/21/EC (including amendments). The Chemicals (Hazard Information & Packaging for Supply Regulations 2009 Statutory Instruments (S.I.2009 No 716). Classification & labelling of substances & preparations dangerous for supply. Approved Code of Practice Safety data sheets for substances & preparations. **Guidance Notes** Workplace exposure limits EH40. CHIP for everyone HSG 108. 15.2 Assessment has not been carried out as this is a non-hazardous material **Chemical Safety Assessment** according to article 31 of REACH 1907/2006.



SECTION 16: Other Information		
Allergens:	None.	
Training Instructions: Refer to possible hazard before use of this product.		
Abbreviations & Acronyms:		
MSDS	Material Safety Data Sheet.	
INCI	International Nomenclature of Cosmetic Ingredients.	
CAS	Chemical Abstract Service.	
IMDG	International Maritime code for Dangerous Goods.	
ADR	Accord European sur le transport des merchandises Dangereuses par Route (European Agreement concerning the international Carriage of Dangerous goods by Road).	
RID	International Carriage of Dangerous Goods by Rail.	
ICAO	International Civil Aviation Organization.	
ADN	International Carriage of Dangerous Goods by Inland Waterways.	
GHS	Globally Harmonized System of classification & labelling of chemicals.	
Trem Card	Transport Emergency Card.	
STOT	Specific Target Organ Toxicity.	

Documentation Revision	
Date	Change Description
10 th April 2018	Data Launch

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SPECIFICATION SHEET

PRODUCT NAME: TAMANU SEED OIL, COLD PRESSED

PRODUCT INCI: CALOPHYLLUM INOPHYLLUM SEED

PRODUCT CODE: OVTAMA

CAS NUMBER: 68956-68-3

EINECS NUMBER: 273-313-5

MANUFACTURING METHOD: SUNDRIED SEEDS & COLD PRESSED

DOCUMENTATION REVIEWED: AUGUST 2020

ANALYTICAL DETAILS	Range %
Appearance	OILY LIQUID IN ROOM TEMP / SOLID IN COLD TEMPS
Odour	Characteristic
COLOUR	GREEN – DARK GREEN - DARK BLUE - BLACK
Specific Gravity @ 20°C	0.905 – 0.940
Refractive Index @ 20°C (nr)	1.455 – 1.490
IODINE VALUE	79.0 – 98.0
Peroxide Value	<25.0
Saponification	190 - 205
Acid Value	<76.0

FATTY ACID PROFILE		Range %
C-CHAIN	ACID NAME	
C16:0	Palmitic	< 14.0
C18:0	Stearic	<14.0
C18:1	Oleic	22.0 - 45.0
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Vegetarian & Vegan Suitability Statement

PRODUCT NAME: Tamanu

MADAR Corporation Limited can confirm that the above listed product has not been tested in animals and does not contain dairy or any other animal product, by product or derivative and is therefore suitable for vegetarian and vegan use.

28/06/19