

# **CERTIFICATE OF ANALYSIS**

## PRODUCT NAME: MACADAMIA NUT OIL, REFINED

#### BATCH NUMBER: 4503401

PRODUCT INCI: MACADAMIA INTEGRIFOLIA OIL

### CAS NUMBER: 129811-19-4

EINECS NUMBER: N/A

#### MANUFACTURING METHOD: EXPELLER PRESSED & REFINED

#### BEST BEFORE DATE: APRIL 2025

ANALYTICAL DETAILS	RANGE %	RESULTS
Appearance	CLEAR - LIGHT YELLOW OILY LIQUID	-
COLOUR LOVIBOND (5 <sup>1</sup> /4" CELL)	<20Y, <2.0R	-
Odour	Odourless	-
SPECIFIC GRAVITY @ 20°C	0.910 – 0.930	0.915
REFRACTIVE INDEX @ 20°C	1.465 – 1.470	1.469
SAPONIFICATION VALUE	187 - 200	193.0
UNSAPONIFIABLE MATTER	<1.5	0.80
FREE FATTY ACID (% AS OLEIC)	<1.0	0.1
PEROXIDE VALUE	<10.0	0.4
IODINE VALUE	70 - 85	83.0

FATTY ACID Profile		RANGE %	RESULTS
C16:0	PALMITIC	6.0 - 12.0	10.08
C16:1	Palmitoleic	9.0 - 20.0	9.3
C18:0	STEARIC	2.0 - 8.0	2.9
C18:1	Oleic	50.0 - 67.0	66.7
C18:2	LINOLEIC	3.0 – 7.0	6.6
C18:3	LINOLENIC	< 3.0	0.2
C20:0	ARACHIDIC	< 5.0	1.0
C20:1	Eicosanoic	< 3.0	1.2
C22:0	BEHENIC	< 2.0	0.6
C24:0	LIGNOCERIC	<2.0	0.2



# **ALLERGEN STATEMENT**

PRODUCT NAME: MACADAMIA NUT OIL, REFINED

## **COSMETIC ALLERGENS**

Annex Illa Reference:		CAS NUMBER:	TOTAL ALLERGEN INCLUSION (%):
67	AMYL CINNAMAL	122-40-7	0.000
68	BENZYL ALCOHOL	100-51-6	0.000
69		104-54-1	0.000
70	CITRAL	5392-40-5	0.000
71	EUGENOL	97-53-0	0.000
72	HYDROXY-CITRONELLAL	107-75-5	0.000
73	ISO EUGENOL	97-54-1	0.000
74	AMYLCIN-NAMYL ALCOHOL	101-85-9	0.000
75	BENZYL SALICYLATE	118-58-1	0.000
76	CINNAMAL	104-55-2	0.000
77	COUMARIN	91-64-5	0.000
78	GERANIOL	106-24-1	0.000
79	HYDROXYISOHEXYL 3-CYCLOHEXENE CARBOXALDEHYDE	31906-04-4	0.000
80	ANISE ALCOHOL	105-13-5	0.000
81	BENZYL CINNAMATE	103-41-3	0.000
82	FARNESOL	4602-84-0	0.000
83	BUTYLPHENYL METHYLPROPIONAL	80-54-6	0.000
84	LINALOOL	78-70-6	0.000
85	BENZYL BENZOATE	120-51-4	0.000
86	CITRONELLOL	106-22-9	0.000
87	HEXYL CINNAM-ALDEHYDE	101-86-0	0.000
88	LIMONENE	5989-27-5	0.000
89	METHYL 2-OCTYNOATE	111-12-6	0.000
90	ALPHA-ISOMETHYL IONONE	127-51-5	0.000
91	EVERNIA PRUNASTRI EXTRACT	90028-68-5	0.000
92	EVERNIA FURFURACEA EXTRACT	90028-67-4	0.000



## **FOOD ALLERGENS**

Annex Illa		PRESENT IN	CONTAMINATION	FACTORY
Reference:		PRODUCT:	PRESENCE:	PRESENCE:
1	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	YES	NO	YES
9	CELERY & CELERIAC	NO	NO	YES
10	MUSTARD	NO	NO	YES
11	SESAME	NO	NO	YES
12	SULPHUR DIOXIDE & SULPHITES	NO	NO	NO
13	LUPIN	NO	NO	NO
14	MOLLUSC	NO	NO	NO

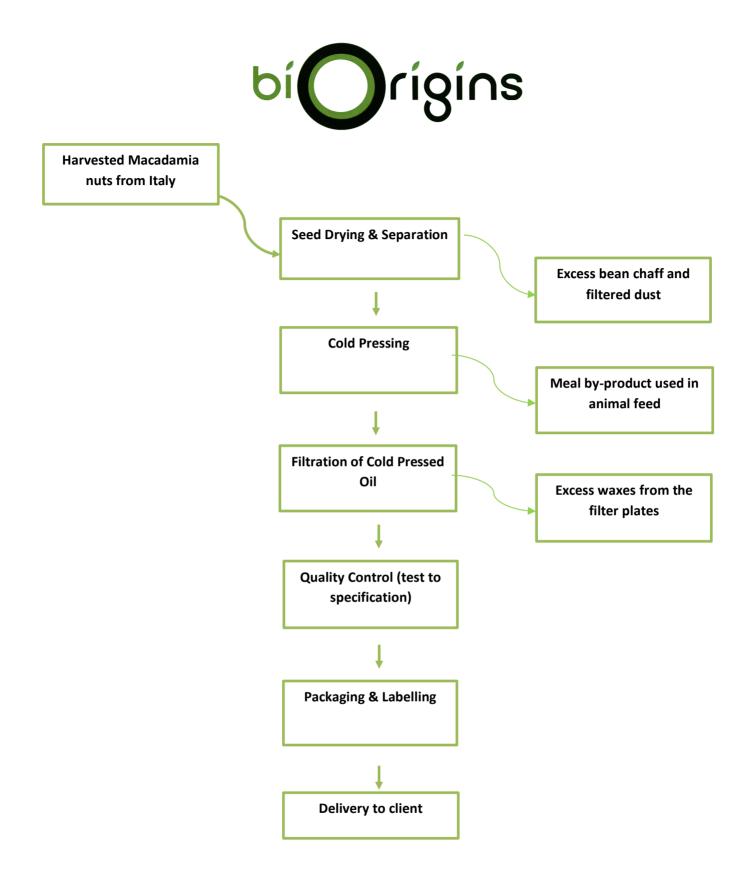


## Composition Statement & Manufacturing Flow Chart:

We can hereby confirm the following composition breakdown & manufacturing process flow;

Macadamia Nut Oil, Cold Pressed

INCI Name	% Inclusion	CAS Number
Macadamia Integrifolia	100	128497-20-1 / 129811-19-4





## **GMO Statement**

PRODUCT NAME: Macadamia Oil

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

20-04-2021



## **Material Safety Data Sheet**

EU Regulation: 2020/878

SECTION 1: Identification of the substance/mixture and of the company/undertaking         1.1         Product Name       MACADAMIA NUT OIL, REFINED         Biological Definition       MACADAMIA INTEGRIFOLIA SEED OIL IS A FIXED OIL OBTAINED FROM THE MACADAMIA NUT         INCI Name       MACADAMIA INTEGRIFOLIA SEED OIL IS A FIXED OIL OBTAINED FROM THE MACADAMIA NUT         Synonyms & Trade Names       MACADAMIA INTEGRIFOLIA SEED OIL SEED OIL         Synonyms & Trade Names       MACADAMIA OIL         CASA-No       438545-25-67       EC No.       NOT LISTED       NOT LISTED         Detrails of the supplier of the safety duttere supplier of the						
Product Identification       MACADAMIA NUT OIL, REFINE         Biological Definition       MACADAMIA INTEGRIFULIA SEED OIL IS A FIXED OIL OBTAINED FROM THE MACADAMIA NUT         INCI Name       MACADAMIA INTEGRIFULIA SEED OIL OBTAINED FROM THE MACADAMIA NUT         Synonyms & Trade Names       MACADAMIA INTEGRIFULIA SEED OIL OBTAINED FROM THE MACADAMIA NUT         General Synonyms & Trade Names       MACADAMIA INTEGRIFULIA SEED OIL SEED OIL OBTAINED FROM THE MACADAMIA NUT         Synonyms & Trade Names       MACADAMIA OIL         Synonyms & Trade Names       MACADAMIA OIL         Image: Synonyms & Trade Names       Singerification         Synonyms & Trade Names       EC No.       Not ListeD       EINECS No.       Not ListeD       Not ListeD <th>SECTION 1: Identification of</th> <th>the substance/</th> <th>mixture a</th> <th>nd of the company/u</th> <th>undertaking</th> <th></th>	SECTION 1: Identification of	the substance/	mixture a	nd of the company/u	undertaking	
Biological Definition       MacAdamia INTEGRIFOLIA SEED OIL IS A FIXED OIL OBTAINED FROM THE MACADAMIA NUT         INCI Name       MacAdamia INTEGRIFOLIA SEED OIL IS A FIXED OIL OBTAINED FROM THE MACADAMIA NUT         Synonyms & Trade Names       MacAdamia INTEGRIFOLIA SEED OIL         Kanadamia INTEGRIFOLIA SEED OIL IS A FIXED OIL OBTAINED FROM THE MACADAMIA NUT         MacAdamia INTEGRIFOLIA SEED OIL         Synonyms & Trade Names       MacAdamia OIL         Kanadamia OIL       Integrifolia Seed OIL IS A FIXED OIL ISTED         MacAdamia OIL       Integrifolia Seed OIL ISTED         CAS-No       438545-25-6; 159518-86-2       EC No.       Not ListeD       EINECS No.       Not ListeD         Integrifolia Seed OIL ISTED Seed OIL       AlXXUF 7cfdcfUflcb @a JYX %. T & S GUbXYYVUh '#bXi gft[U' 9JUHY2: cfXb[ Vf]X[ YZGD' '%D5       Integrifolia Seed OIL         Integrifolia Set Seed Seed Seed Seed Seed Seed Seed						
INCLINATION       MACADAMIA INTEGRIFOLIA SEED OIL         Synonyms & Trade Names       MACADAMIA OIL         CASS-No       438545-25-6; 19518-86-2       EC No.       Not Listed       EINECS No.       Not Listed         International Sector       Macadamia Oil       State       State       State       State         CASS-No       438545-25-6; 19518-86-2       EC No.       Not Listed       EINECS No.       Not Listed         International Sector       Macadamia Oil       State       State       State       State         International Sector       State       State       State       State       State       State         International Sector       State       State       State       State       State       State       State         International Sector       State       State       State       State       State       State       State         International Sector       State       State       State       State       State       State       State         International Sector       State         International Sector       State       State       State <th>Product Name</th> <th>Macadamia Nut Oi</th> <th>L, REFINED</th> <th></th> <th></th> <th></th>	Product Name	Macadamia Nut Oi	L, REFINED			
Synonyms & Trade Names         MACADAMIA OIL           CAS-No         438545-25-6; 159518-86-2         EC No.         NOT LISTED         EINECS No.         NOT LISTED           I.2         Details of the supplier of the safety ddress         Hereir Strade Markes         AUXUF 7cfdcfUlfcb '@ IYX % '1 & & GUbX YVYUh 'bXi dffU' '9d UlYZ: cfXb[ VffX[ YZGD' '%D5           I.3         Details of the supplier of the safety ddress         Auxuf 7c fdc fulfcb '@ IYX % '1 & & GUbX YVYUh 'bXi dffU' '9d UlYZ: cfXb[ VffX[ YZGD' '%D5	Biological Definition	Macadamia Integri	folia Seed Oil	IS A FIXED OIL OBTAINED FROM THI	E MACADAMIA NUT	
CAS-No       438545-25-6; 159518-86-2       EC No.       NOT LISTED       EINECS No.       NOT LISTED         I.2 Details of the supplier of the safety data sheet         Company Address         A UXUF 7cfdcfUl7cb @a ]YX % 1 && CdDX YV/UN ±Xi df[U *QtUNZ: cfX]b[ Vf]X[ YZCD* %D5 technical@madarcorporation.co.uk         I.3 Details of the supplier of the safety data sheet	INCI Name	Macadamia Integri	Macadamia Integrifolia Seed Oil			
CAS-No     159518-86-2     EC NO.     NOT LISTED     EINECS NO.     NOT LISTED       1.2     Details of the supplier of the safety data sheet     Image: Sheet she	Synonyms & Trade Names	MACADAMIA OIL				
CAS-No     159518-86-2     EC NO.     NOT LISTED     EINECS NO.     NOT LISTED       1.2     Details of the supplier of the safety data sheet     Image: Sheet she						
Details of the supplier of the safety data sheet         Company Address       A UXUF7cfdcfUfjcbi@a]YX         % '1 & GUbX 'YYUH' ± Xi dffU' 9dfUH'Z: cfX]b[ Vf[X[ YZGD* %D5]         Email       technical@madarcorporation.co.uk	CAS-No		EC No.	Not Listed	EINECS No.	Not Listed
Details of the supplier of the safety data sheet         Company Address       A UXUF7cfdcfUfjcbi@a]YX         % '1 & GUbX 'YYUH' ± Xi dffU' 9dfUH'Z: cfX]b[ Vf[X[ YZGD* %D5]         Email       technical@madarcorporation.co.uk						
% '! & GUbXY\YUN` ±Xi df]U' 9tUlYZ: cfX]b[ Vf]X[ YZ GD* '%D5         Email       technical@madarcorporation.co.uk         1.3       Details of the supplier of the safety data sheet						
Email     technical@madarcorporation.co.uk       1.3     Details of the supplier of the safety data sheet	Company Address	A UXUF 7 cfdcfUfjcb @a ]}YX % 1: &\$ `QubX`Y\YUN`±Xi dffU``9thUY7: cfX1bi VfIXi Y7QD* `%D5				
Details of the supplier of the safety data sheet	Email					
Emergency Contacts 01425 655 555						
	Emergency Contacts	01425 655 555				



#### **SECTION 2: Hazards Identification**

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 Ingredien	ts	
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.

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

## SECTION 7: Handling & Storage

7.1 Precautions for safe-handling	Handle in accordance with good hygiene and safety practice. Keep containers sealed when not in use. Prevent spills & leaks to avoid slip hazard. Always wear personal protective clothing (refer to 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.	
7.2 Conditions for safe storage, including any incompatibilities	Keep the product container tightly closed, in a dry, ventilated area (at temperatures <20°C). Keep away from potential sources of ignition and protected from light. Maintain limited contact with oxygen.	
7.3 Specific end use(s)	No Data.	
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	n <sub>None.</sub>	
Respiratory Equipment	t None.	



Hygiene Measures	None.
Engineering Measures	None.
5 . 5	Note:

## SECTION 9: Physical & Chemical Properties

9.1 Physical & Chemical Properties	
Appearance	OILY LIQUID
Colour	CLEAR - LIGHT YELLOW
Odour	Odourless
Relative Density	NO DATA.
Refractive Index	1.465 – 1.470
Flash Point (°C)	>280°C.
Melting Point (°C)	NOT APPLICABLE.
Boiling Point (°C)	>100°C.
Vapour Pressure	NO DATA.
Solubility in Water @ 20°C	INSOLUBLE.
9.2 Other Information	ΝΟ ΔΑΤΑ.

## SECTION 10: Stability & Reactivity

10.1 Reactivity	Not Applicable.
10.2 Chemical stability	Stable under suggested storage conditions (<20°C).
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 Hazardous decomposition products	This product does not decompose under normal conditions. Under fire conditions the product 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	>90% (OECD)	
Persistence & degradability 12.3		
Bio- accumulative potential	None.	
12.4 Mobility in soil	Low – None.	
12.5 Results of PBT & VPVB assessment	Not Available.	
12.6	Neg	
Other adverse effects	None.	
SECTION 13: Disposal Information		
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	
EU Directives	Regulation (EC) No 1907/2006 of the European Parliament and of the council of 18 <sup>th</sup> December 2006. Concerning the registration, evaluation, authorization & restriction of chemicals (REACH), establishing a European Chemicals Agency, 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).
Statutory Instruments	The Chemicals (Hazard Information & Packaging for Supply Regulations 2009 (S.I.2009 No 716).
Approved Code of Practice	Classification & labelling of substances & preparations dangerous for supply. Safety data
	sheets for substances & preparations.
Guidance Notes	sheets for substances & preparations. Workplace exposure limits EH40. CHIP for everyone HSG 108.

SECTION 16: Other Information	
Allergens:	Nut/ Nut Oil
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 <sup>th</sup> April 2018	Data Launch
November 2020	Review
January 2023	Review



# Specification Sheet Product Name: Macadamia Nut Oil, Refined Product Inci: Macadamia Integrifolia Seed Oil Cas Number: 438545-25-6; 159518-86-2 Einecs Number: not listed Manufacturing Method: Expeller Pressed & Refined Shelf Life: 18 Months Documentation Reviewed: 2021

ANALYTICAL DETAILS	RANGE %
APPEARANCE	Clear - Light Yellow Oily Liquid
COLOUR LOVIBOND (51/4" CELL)	<20Y, <2.0r
Odour	Odourless
SPECIFIC GRAVITY @ 20°C	0.910 - 0.930
REFRACTIVE INDEX @ 20°C	1.465 – 1.470
SAPONIFICATION VALUE	187 - 200
UNSAPONIFIABLE MATTER	<1.5
FREE FATTY ACID (% AS OLEIC)	<1.0
PEROXIDE VALUE	<10.0
IODINE VALUE	70 - 85

FATTY ACID PROFILE		RANGE %
C16:0	Palmitic	6.0 - 12.0
C16:1	Palmitoleic	9.0 - 20.0
C18:0	STEARIC	2.0 - 8.0
C18:1	Oleic	50.0 – 67.0
C18:2	Linoleic	3.0 – 7.0
C18:3	Linolenic	< 3.0
C20:0	ARACHIDIC	< 5.0
C20:1	Eicosanoic	< 3.0
C22:0	BEHENIC	< 2.0
C24:0	LIGNOCERIC	<2.0



## Vegetarian & Vegan Suitability Statement

PRODUCT NAME: Macadamia Oil

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.

20-04-2021