



## CERTIFICATE OF ANALYSIS

**PRODUCT NAME: CAMELINA OIL, COLD PRESSED**

**LOT NUMBER: 4359202**

**PRODUCT INCI: CAMELINA SATIVA OIL**

**CAS NUMBER: 943248-37-1**

**EINECS NUMBER: NOT APPLICABLE.**

**MANUFACTURING METHOD: COLD PRESSED**

**BEST BEFORE DATE: May 2021**

ANALYTICAL DETAILS	RANGE %	RESULTS
APPEARANCE	OILY LIQUID	-
ODOUR	CHARACTERISTIC	-
COLOUR	DARK AMBER - YELLOW	-
COLOUR (LOVIBOND 5.25" CELL)	<15Y, 3R	13Y, 1.6R
REFRACTIVE INDEX @ 20°C	1.470 – 1.480	1.475
SPECIFIC GRAVITY @ 20°C	0.920 – 0.950	0.935
FREE FATTY ACIDS (% AS OLEIC)	<5.0	2.5
ACID VALUE	<10.0	1.2
PEROXIDE VALUE (MEQ O <sub>2</sub> / KG)	<20.0	1.2
IODINE VALUE	140.0 – 185.0	162.5
SAPONIFICATION VALUE	180.0 – 220.0	-

FATTY ACID PROFILE		RANGE %	RESULTS
<b>C-CHAIN</b>	<b>ACID NAME</b>		
C16:0	PALMITIC	4.0 – 6.0	5.8
C16:1	PALMITOLEIC	<0.5	-
C18:0	STEARIC	2.0 - 5.0	3.9
C18:1	OLEIC	14.0 – 20.0	20.4
C18:2	LINOLEIC	16.0 – 25.0	23.1
C18:3	LINOLENIC	30.0 - 45.0	36.9
C20:0	ICOSANOIC	<3.0	2.8
C20:1	ICOSENOIC	10.0 – 16.0	-
C22:0	BEHENIC	<1.0	0.8
C22:1	DOCOSENOIC	1.0 – 8.0	6.4
C24:0	LIGNOCERIC	<1.5	-

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## Allergen Declaration:

<b>PRODUCT NAME:</b> Camelina Oil, Refined				
<b>INCI:</b> Camelina Sativa				
<b>COSMETIC ALLERGENS</b>				
<small>The Following is from the 7th amendment of the cosmetic directive of the European Union Annex III.</small>				
<b>Annex IIIa Reference:</b>		<b>CAS NUMBER:</b>	<b>TOTAL ALLERGEN INCLUSION (%):</b>	
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	AMYLGIN-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	
79	HYDROXY- METHYLPENTYL CYCLOHEXENE CARBOXYALDEHYDE	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	
<b>FOOD ALLERGENS</b>				
<small>The following is from the commission directive 2007/68/EC of 27th November 2007 amending Annex IIIa to Directive 200/13/EC of the European Parliament &amp; Council with regards to specific food ingredients.</small>				
<b>Annex IIIa Reference:</b>		<b>PRESENT IN PRODUCT:</b>	<b>CONTAMINATION PRESENCE:</b>	<b>FACTORY PRESENCE:</b>
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	NO	NO	YES
9	CELERY & CELERIAC	NO	NO	NO
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



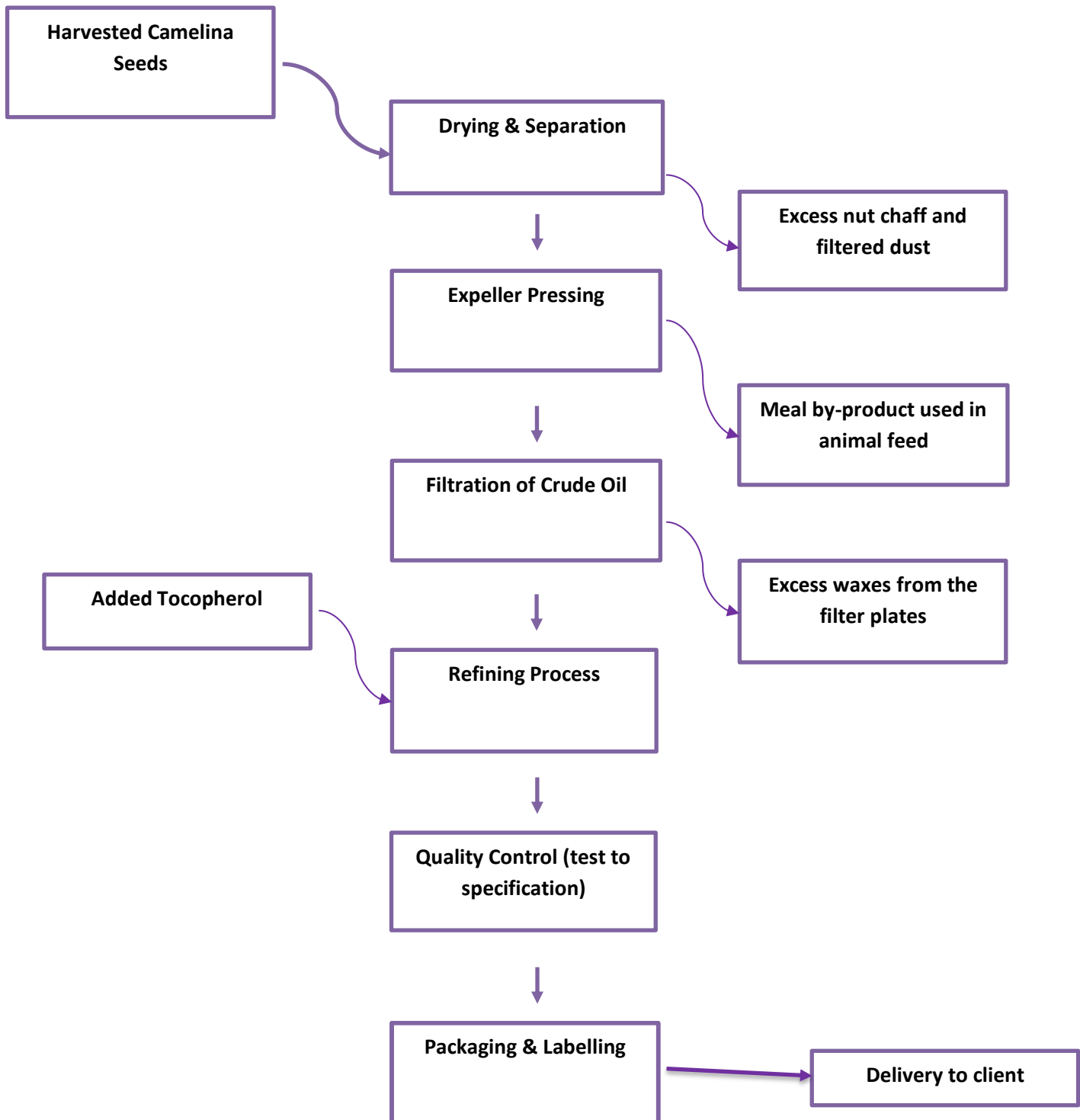
## Composition Statement & Manufacturing Flow Chart:

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

**Camelina Oil, Refined**

INCI Name	% Inclusion	CAS Number
Camelina Sativa Seed	99.5	943248-37-1
Tocopherol	0.5	59-02-9

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## **GMO Statement**

PRODUCT NAME: Camelina Oil

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

12/02/18



## Material Safety Data Sheet

EU Regulation: 1907/2006

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

<b>1.1 Product Identification</b>						
<b>Product Name</b>	CAMELINA OIL, REFINED					
<b>Biological Definition</b>	CAMELINA SATIVA SEED OIL IS A FIXED OIL OBTAINED FROM THE CAMELINA SEEDS					
<b>INCI Name</b>	CAMELINA SATIVA SEED & TOCOPHEROL					
<b>Synonyms &amp; Trade Names</b>	CAMELINA OIL					
<b>Internal Product Code</b>						
<b>CAS-No</b>	943248-37-1 & 59-02-9	<b>EC No.</b>	NOT APPLICABLE & 142-2	<b>200-</b>	<b>EINECS No.</b>	NOT APPLICABLE & 200-142-2
<b>1.2 Details of the supplier of the safety data sheet</b>						
<b>Company Address</b>	Madar Corporation Limited 19 - 20 Sandleheath Industrial Estate, Fordingbridge, Hampshire, SP6 1PA.					
<b>Email</b>	technical@madarcorporation.co.uk					
<b>1.3 Details of the supplier of the safety data sheet</b>						
<b>Emergency Contacts</b>	01425 655555					

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<b>SECTION 2: Hazards Identification</b>	
<b>2.1</b>	
<b>Classification of the substance or mixture</b>	
<b>Classification (67/548/EEC)</b>	This product is not dangerous according to REACH Regulation 1907/2006.
<b>Classification (EU1272/2008)</b>	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.
<b>2.2</b>	
<b>Label Elements</b>	
<b>GHS Label</b>	None.
<b>Signal Word</b>	None.
<b>Contains</b>	None.
<b>Hazards Statement</b>	None.
<b>Signal Word</b>	None.
<b>Precautionary Statements</b>	None.
<b>Supplementary Precautionary Statements</b>	None.
<i>Section 16 (Other Information): Risk &amp; Safety phrases in full.</i>	
<b>2.3</b>	
<b>Other Hazards</b>	
<b>Adverse physio-chemical properties</b>	None.
<b>Adverse effects on human health</b>	None.
<b>SECTION 3: Composition of Ingredients</b>	
<b>3.1</b>	
<b>Substances</b>	Not Applicable.
<b>3.2</b>	
<b>Mixtures</b>	Not Applicable.

<b>SECTION 4: First Aid Measures</b>	
<b>4.1</b>	
<b>Description of First Aid Measures</b>	
<b>General Information</b>	Always remove contaminated clothing immediately.
<b>Inhalation</b>	Not expected for this particular product, however always best avoiding proactive inhalation.

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<b>Ingestion</b>	No instruction as this is a non-toxic product.
<b>Skin Contact</b>	No instruction as this is a non-toxic product.
<b>Eye Contact</b>	Wash immediately & thoroughly with clean tap water.
<b>4.2 Most important symptoms &amp; effects (Acute &amp; Delayed)</b>	None.
<b>4.3 Indication of any immediate medical attention or special treatment required</b>	Not Applicable.

### SECTION 5: Fire Fighting Measures

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

### SECTION 6: Accidental Release Measures

<b>6.1 Personal precautions</b>	None Required.
<b>6.2 Environmental precautions</b>	None Required.
<b>6.3 Methods &amp; material for containment and cleaning up</b>	Spills can be absorbed by cloth or sawdust, washed away with water & cleaned with sodic products.
<b>6.4 References to other sections</b>	Refer & consider section 8. Refer & consider section 13.

### SECTION 7: Handling & Storage

<b>7.1 Precautions for safe-handling</b>	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.
<b>7.2 Conditions for safe storage, including any incompatibilities</b>	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.
<b>7.3 Specific end use(s)</b>	No Data.

### SECTION 8: Exposure Controls & Personal Protection

<b>8.1 Control Parameters</b>	None.
<b>8.2 Exposure Controls</b>	
<b>Eye Protection</b>	Not required as a non-toxic product, however we still recommend taking precautions by wearing protective eye-wear when handling the product.
<b>Hand Protection</b>	None.
<b>Respiratory Equipment</b>	None.
<b>Hygiene Measures</b>	None.
<b>Engineering Measures</b>	None.

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

Tel: 01425 655555 Email: technical@madarcorporation.co.uk



<b>SECTION 9: Physical &amp; Chemical Properties</b>	
<b>9.1</b> Physical & Chemical Properties	
<b>Appearance</b>	OILY LIQUID
<b>Colour</b>	LIGHT – DARK YELLOW
<b>Odour</b>	ODOURLESS
<b>Relative Density</b>	NO DATA.
<b>Refractive Index</b>	1.47 – 1.48
<b>Flash Point (°C)</b>	>280°C.
<b>Melting Point (°C)</b>	NOT APPLICABLE.
<b>Boiling Point (°C)</b>	>100°C.
<b>Vapour Pressure</b>	NO DATA.
<b>Solubility in Water @ 20°C</b>	INSOLUBLE.
<b>9.2</b> Other Information	NO DATA.
<b>SECTION 10: Stability &amp; Reactivity</b>	
<b>10.1</b> Reactivity	Not Applicable.
<b>10.2</b> Chemical stability	Stable under suggested storage conditions (<20°C).
<b>10.3</b> Possibility of hazardous reactions	No.
<b>10.4</b> Conditions to avoid	Storage at high temperatures. Do not store above 20°C.
<b>10.5</b> Incompatible materials	Concentrated acids, alkalis & oxidising agents.
<b>10.6</b> Hazardous decomposition products	This product does not decompose under normal conditions. Under fire conditions the product will produce a mixture of irritating fumes & smoke.

<b>SECTION 11: Toxicological Information</b>	
<b>11.1</b> Toxicological effects	
<b>Acute Toxicity</b>	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).
<b>Skin irritation</b>	Not Applicable.
<b>Eye damage or irritation</b>	Not Applicable.
<b>Respiratory or skin sensitivity</b>	Not Applicable.
<b>Germ cell mutagenicity</b>	Not Applicable.
<b>Carcinogenicity</b>	Not Applicable.
<b>Reproductive toxicity</b>	Not Applicable.

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<b>STOT – single exposure</b>	Not Applicable.
<b>STOT – repeated exposure</b>	Not Applicable.
<b>Aspiration hazard</b>	Not Applicable.
<b>Other information</b>	Not Applicable.
<b>SECTION 12: Ecological Information</b>	
<b>12.1 Toxicity</b>	Low - None.
<b>12.2 Persistence &amp; degradability</b>	>90% (OECD)
<b>12.3 Bio- accumulative potential</b>	None.
<b>12.4 Mobility in soil</b>	Low – None.
<b>12.5 Results of PBT &amp; VPVB assessment</b>	Not Available.
<b>12.6 Other adverse effects</b>	None.
<b>SECTION 13: Disposal Information</b>	
<b>13.1 Waste treatment methods</b>	Always recover spilled product. Discard waste material with authorized waste management services. Act in accordance with local & national waste regulations.

<b>SECTION 14: Transport Information</b>	
<b>14.1 Transport Information</b>	
<b>Warning icon</b>	Road (ADR), Rail (RID), Sea (IMDG) and Air (ICAO), transport not restricted in drums or food tankers.
<b>Shipping Name</b>	Not Applicable.
<b>UN Number (Road)</b>	Not Applicable.
<b>ADR Class</b>	Not Applicable.
<b>Hazard Number (ADR)</b>	Not Applicable.
<b>Hazchem Code</b>	Not Applicable.
<b>UN Number (Sea)</b>	Not Applicable.
<b>IMDG Class</b>	Not Applicable.
<b>IMDG Pack GR.</b>	Not Applicable.
<b>EMS</b>	Not Applicable.
<b>UN Number (Air)</b>	Not Applicable.
<b>Air Class</b>	Not Applicable.
<b>Air Pack GR.</b>	Not Applicable.
<b>SECTION 15: Regulatory Information</b>	
<b>15.1</b>	

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<b>Product specific safety, health &amp; environmental regulations &amp; legislation</b>	
<b>EU Directives</b>	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).
<b>Statutory Instruments</b>	The Chemicals (Hazard Information & Packaging for Supply Regulations 2009 (S.I.2009 No 716).
<b>Approved Code of Practice</b>	Classification & labelling of substances & preparations dangerous for supply. Safety data sheets for substances & preparations.
<b>Guidance Notes</b>	Workplace exposure limits EH40. CHIP for everyone HSG 108.
<b>15.2 Chemical Safety Assessment</b>	Assessment has not been carried out as this is a non-hazardous material according to article 31 of REACH 1907/2006.

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

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<b>Documentation Revision</b>	
<b>Date</b>	<b>Change Description</b>
10 <sup>th</sup> April 2018	Data Launch

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## SPECIFICATION SHEET

PRODUCT NAME: **CAMELINA OIL, REFINED**

PRODUCT INCI: CAMELINA SATIVA SEED & TOCOPHEROL

CAS NUMBER: 943248-37-1 & 59-02-9

EINECS NUMBER: NOT APPLICABLE & 200-142-2

MANUFACTURING METHOD: EXPPELLER PRESSED, REFINED, + TOCOPHEROL

SHELF LIFE: 24 MONTHS

**DOCUMENTATION REVIEWED: MAY 2018**

ANALYTICAL DETAILS	RANGE
APPEARANCE	OILY LIQUID
ODOUR	ODOURLESS
COLOUR	LIGHT – DARK YELLOW
FREE FATTY ACID (% AS PALMITIC)	< 5.0
PEROXIDE VALUE (MEQ O <sub>2</sub> / KG)	<10.0
SPECIFIC GRAVITY @ 20°C	0.920 – 0.950
REFRACTIVE INDEX @ 20°C	1.47 – 1.48

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## **Vegetarian & Vegan Suitability Statement**

PRODUCT NAME: Camelina 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.

12/02/2018