



CERTIFICATE OF ANALYSIS

Product: Safflower Organic
Batch Number: 4437009
Best Before End: June 2023

Appearance: A clear liquid, pale yellow to yellow
Odour: Characteristic

TEST	SPECIFICATION	ANALYSIS
Specific Gravity @ 20°C (g/ml)	0.918 – 0.924	0.922
Refractive Index @ 20°C	1.473 – 1.479	1.475
Acid Value mgKOH/g	0.6 maximum	0.15
Iodine Value mg/g	135 - 150	141.6
Peroxide Value (meq O ₂ /kg)	10.0 maximum	Complies
Unsaponifiable Matter	2.0 maximum	Complies
Saponification Value	188 - 194	192.1

FATTY ACID COMPOSITION (%)		
C16:0 Palmitic Acid	4.0 – 10.0	6.6
C18:0 Stearic Acid	1.0 – 5.0	2.5
C18:1 Oleic Acid	8.0 – 21.0	13.9
C18:2 Linoleic Acid	68.0 – 83.0	74.3
C18:3 Alpha Linolenic Acid	0.5 maximum	0.1
C20:0 Arachidic Acid	0.5 maximum	0.3



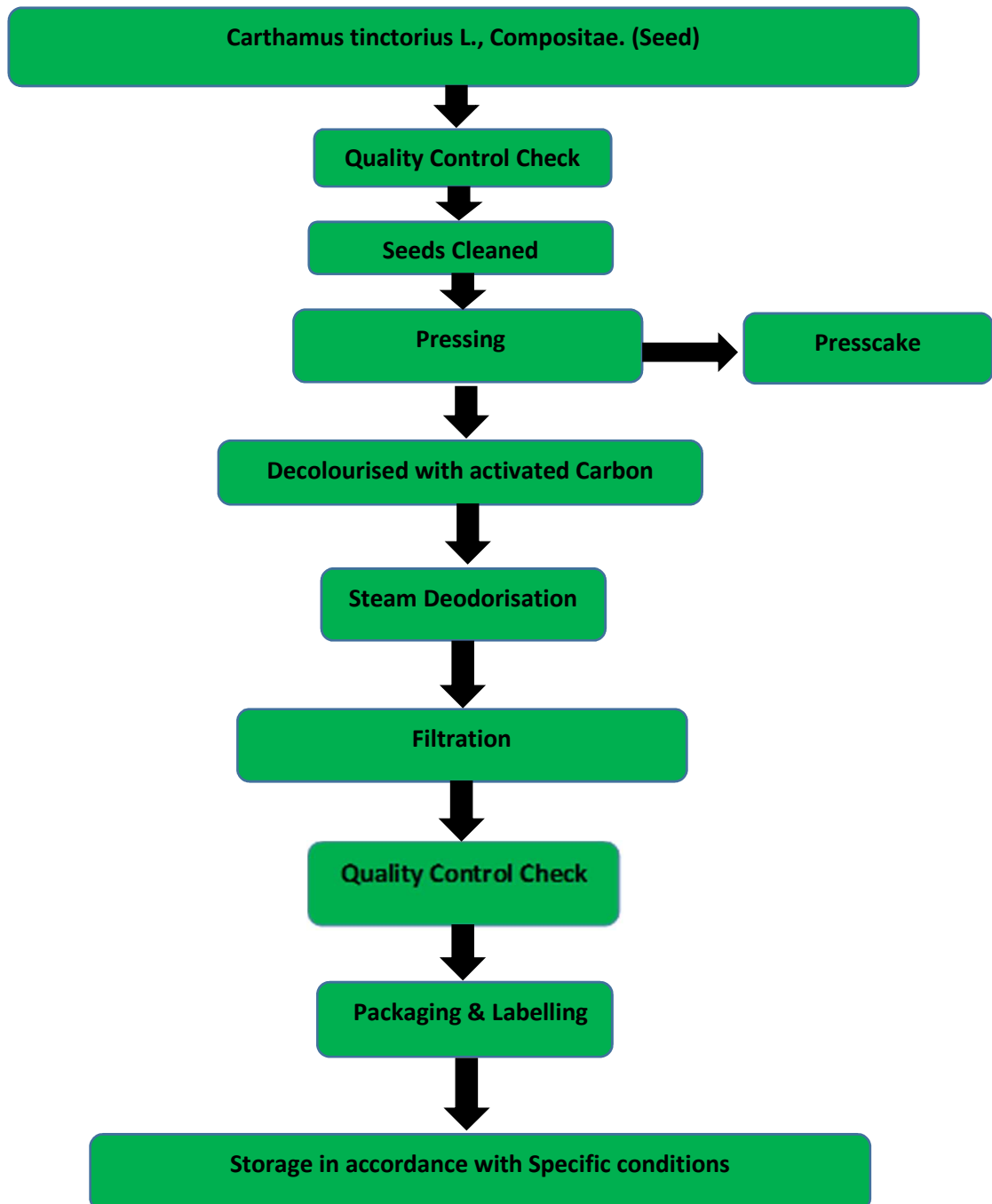
ALLERGENS DECLARATION

Product Name	Organic Safflower Oil Refined				
INCI Name	Carthamus Tinctorius seed Oil				
Date	25/08/2016	Product Code	OVCSAFF	Revision	1

Material	CAS Number	Cosmetic Allergens Inclusion (%)
AMYL CINNAMAL	122-40-7	-
BENZYL ALCOHOL	100-51-6	-
CINNAMYL ALCOHOL	104-54-1	-
CITRAL	5392-40-5	-
EUGENOL	97-53-0	-
HYDROXYCITRONELLAL	107-75-5	-
ISO EUGENOL	97-54-1	-
AMYL CINNAMYL ALCOHOL	101-85-9	-
BENZYL SALICYLATE	118-58-1	-
CINNAMAL	104-55-2	-
COUMARIN	91-64-5	-
GERANIOL	106-24-1	-
HYDROXYISOHEXYL 3-CYCLOHEXENE CARBOXALDEHYDE	31906-04-4	-
ANISE ALCOHOL	105-13-5	-
BENZYL CINNAMATE	103-41-3	-
FARNESOL	4602-84-0	-
BUTYLPHENYLMETHYLPROPIONAL	80-54-6	-
LINALOOL	78-70-6	-
BENZYL BENZOATE	120-51-4	-
CITRONELLOL	106-22-9	-
HEXYL CINNAMAL	101-86-0	-
LIMONENE	5989-27-5	-
METHYL 2-OCTYNOATE	111-12-6	-
ALPHA-ISOMETHYLIONONE	127-51-5	-
EVERNIA PRUNASTRI EXTRACT	90028-68-5	-
EVERNIA FURFURACEA EXTRACT	90028-67-4	-

Manufacturing Flow Chart

Product Name	Organic Safflower Oil
Date	01.11.2016





Document Date: **March 2018**

STATEMENT

We hereby certify that Organic Safflower Oil, is free of genetically modified materials and components. No ingredients, additives or processing aids of GM origin are used in the processing and purifying of the oil.



01. IDENTIFICATION OF THE SUBSTANCE/PREPARATION & THE COMPANY/UNDERTAKING

1.1 Product Identifier					
Product Name		Organic Safflower Oil			
Biological Definition		Carthamus Tinctorius Seed Oil is the oily liquid obtained from the seeds of Safflower, Carthamus tinctorius L., Compositae. It consists principally of the triglycerides of linoleic acid.			
INCI Name		Carthamus Tinctorius Seed Oil			
Synonyms & Trade Names		-			
CAS-No	8001-23-8	EC No.	232-276-5	EINECS No.	232-276-5
1.2 Relative identified uses of the substance or mixture and uses advised against					
Component of; Food, Animal Food, Cosmetic products, Pharmaceutical products and Technical applications.					
1.3 Details of the supplier of the safety data sheet					
Madar Corporation Limited 19 - 20 Sandleheath Industrial Estate Fordingbridge SP6 1PA					
1.4 Emergency Tel. No.		+ 44 (0) 1425 655 555			

02. HAZARD IDENTIFICATION

2.1 Classification of the substance or mixture	
Not classed as a hazardous substance.	
Classification (EC 1272/2008)	
Not classed as a hazardous substance.	
2.2 Label Elements	
Label in accordance with (EC) No 1272/2008	
None.	
Signal Word	None.
Contains	Contains no hazardous substances.
Hazard Statements	
None.	
Precautionary Statements	
None.	
Supplementary Precautionary Statements	
None.	
2.3 Other Hazards	

PBT or vPvB according to Annex XIII	No additional data
Adverse physio-chemical properties	No additional data
Adverse effects on human health	No additional data

03. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

100% Carthamus Tinctorius Seed Oil
 CAS: 8001-23-8
 Classification:
 - Not classed as a hazardous substance.

04. FIRST AID MEASURES

4.1 Description of first aid measures

Inhalation	Remove to fresh air. If discomfort occurs/continues, seek medical attention.
Ingestion	If discomfort occurs/continues, seek medical attention.
Skin Contact	Remove contaminated clothing. Wash skin with soap and water. If discomfort occurs/continues, seek medical attention.
Eye Contact	Rinse eyes immediately with clean water for a minimum of fifteen minutes. If safe to do, remove contact lenses and continue rinsing. If discomfort occurs/continues seek medical attention.

4.2 Most important symptoms and effects, both acute and delayed

No additional data

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

05. FIRE-FIGHTING MEASURES

5.1 Extinguishing Media

Carbon dioxide, Dry Chemical Powder, Foam.
 - Do NOT use water.

5.2 Special hazards arising from the product

This product is made up of inflammable material with low risk. The product may only form ignitable mixtures or burn only upon heating above the flash point. However, minor contamination by lightly volatile hydrocarbons may increase the hazard. Ignition hazard at welding at the empty container. Dangerous combustion residues: smoke, carbon monoxide, carbon dioxide.

5.3 Advice for firefighters

Wear self-contained respiratory equipment and appropriate protective clothing at all times.

06. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures


Remove sources of ignition, provide adequate ventilation, avoid contact with skin and eye contact.

6.2 Environmental Precautions
Do not discharge into drains, water courses or onto the ground. Dispose of in line with Local authority guidelines.
6.3 Methods and material for containment and cleaning up.
Cover with an inert, inorganic, non-combustible absorbent material (e.g. dry-lime, sand, soda ash). Place in covered containers and dispose of in accordance with current laws and regulations. If Spillage on water occurs; Confine the spill immediately with booms. Warn other ships. Notify port and other relevant authorities. Remove from the surface by skimming or with suitable absorbents. In running waters, apply appropriate dispersants in accordance with local regulation.
6.4 Reference to other sections
Section 13

07. HANDLING AND STORAGE

7.1 Precautions for safe handling
Keep containers leak proof closed and dry. Prevent spills and leakages to avoid slip hazard. Adhere to all good hygiene, health and safety practices. If handling large/heavy packages or drums, ensure the use of suitable mechanical equipment. Do not eat, drink or smoke whilst handling this product.
7.2 Conditions for safe storage, including any incompatibilities
Store in a cool, dry, well-ventilated area. Protect from heat, freezing and direct light including sunlight. Do not store above room temperature. Keep all containers tightly sealed when not in use. Intrusion into soil should be prevented. Protect from all potential sources of ignition. Electrical equipment and fittings must comply with local regulations.
7.3 Specific end use(s)
No additional data

08. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters	
None.	
8.2 Exposure controls	
Protective Equipment	
	
Process Conditions	No additional data
Engineering Measures	Install sufficient ventilation.



Respiratory Equipment	Not usually required for use with this product when sufficient ventilation has been provided. Respiratory equipment/protection may become necessary in the event of ventilation failure or airborne contamination.
Hand Protection	Wear appropriate protective gloves.
Eye Protection	Wear protective eyewear.
Other Protection	No additional data
Hygiene Measures	Good hygiene practices are always recommended especially when handling oils, chemicals or any other similar type of material.
Personal Protection	Use personal protection according to Directive 89/686/EEC.
Skin Protection	No additional data
Environmental Exposure Controls	Avoid discharging into drainage water.

09. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance	Clear Liquid.
Colour	Light yellow
Odour	Neutral
Relative Density	~0.921 @ 20°C
Flash Point (°C)	>200.0°C
Refractive Index	~1.476 @ 20°C
Melting Point (°C)	No additional data
Boiling Point (°C)	>350.0
Vapour Pressure	No additional data
Solubility in Water @20°C	Insoluble in water
Auto-ignition temperature (°C)	No additional data

9.2 Other information

No additional data

10. STABILITY AND REACTIVITY

10.1 Reactivity

Oxidation with atmospheric oxygen. Formation of free fatty acids.

10.2 Chemical stability

Stable under the recommended handling and storage conditions.

10.3 Possible hazardous reactions

Reacts with oxidants.

10.4 Conditions to Avoid

Heat, flames, sunlight and other sources of ignition.

10.5 Incompatible materials

Strong oxidising agents

10.6 Hazardous Decomposition Products

Product does not decompose at proper handling.

11. TOXOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute Toxicity	In compliance with generally accepted uses and quantities are no negative impacts to be expected. LD50 oral: not determined LD50 dermal: not determined LC50: not determined Inhalation: There is no expected negative impact. Ingestion: There is no expected negative impact. Skin contact: There is no expected negative impact. Eye contact: There is no expected negative impact.
Skin corrosion / irritation	In compliance with generally accepted uses and quantities are no negative impacts to be expected.
Serious eye damage / irritation	In compliance with generally accepted uses and quantities are no negative impacts to be expected.
Respiratory or skin sensitisation	In compliance with generally accepted uses and quantities are no negative impacts to be expected.
Germ Cell Mutagenicity	No additional data
Carcinogenicity	No expected negative impact.
Reproductive toxicity	No expected negative impact.
STOT-single exposure	No additional data
STOT-repeated exposure	No additional data
Aspiration hazard	No additional data
Photo-toxicity	No additional data
Other Information	No additional data

12. ECOLOGICAL INFORMATION

12.1 Toxicity

No additional data

12.2 Persistence & degradability

Biodegradable.

12.3 Bioaccumulation Potential

Possible.

12.4 Mobility in soil

No additional data

12.5 Results of PBT and vPvB Assessment

No additional data

12.6 Other adverse effects
Do not allow product to enter streams, sewers or other waterways.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods
Collect and dispose of waste product at an authorised disposal facility. Product remainders should not intrude soil or waters.

14. TRANSPORT INFORMATION

14.1 UN number	
UN No. Road	No additional data
UN No. SEA	No additional data
UN No. AIR	No additional data
14.2 UN proper shipping name	
	No additional data available.
14.3 Transport hazard class(es)	
	No additional data
14.4 Packing group	
	No additional data
14.5 Environmental hazards	
	No hazard label necessary – non-hazardous product.
14.6 Special precautions for user	
	See sections 6 – 8.
14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC code	
	Not defined.

15. REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
No additional data
15.2 Chemical safety assessment
No additional data

16. OTHER INFORMATION

Hazard Statements in Full	None
Revision Date	23/01/2020
Rev No	3



DISCLAIMER: This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.



Product Name	Organic Safflower Oil		
Date	22/01/2020	Product Code	Rev 3

Description	Carthamus Tinctorius Seed Oil is the oily liquid obtained from the seeds of Safflower, Carthamus tinctorius L., Compositae. It consists principally of the triglycerides of linoleic acid.		
Appearance	Clear Liquid, Light Yellow		
Odour	Neutral		
Origin	Mexico		
INCI Name	Carthamus Tinctorius Seed Oil		
CAS Number	8001-23-8	EC Number	232-276-5

TEST SPECIFICATION

Analytical Test	Specification Range
Specific Gravity @ 20°C (g/ml)	0.918 - 0.924
Refractive Index @ 20°C	1.473 - 1.479
Acid value (mgKOH/g)	≤ 0.6
Iodine Value (mg/g)	135.0 – 150.0
Saponification value (mgKOH/g)	188.0 – 194.0
Fatty Acid Profile (%)	
Myristic Acid	≤ 0.2
Palmitic Acid	4.0 - 10.0
Stearic Acid	1.0 - 5.0
Oleic Acid	8.0 - 21.0
Linoleic Acid	68.0 - 83.0
Linolenic Acid	≤ 0.5
Arachidic Acid	≤ 0.5
Eicosenoic Acid	≤ 0.5
Behenic Acid	≤ 1.0

STORAGE

Store in a cool, dry, well-ventilated place. Keep away from heat and sunlight.

STABILITY

If stored for twenty-four months, check quality of product before use.



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Please note as this is a wholly natural material some parameters, in particular, appearance, colour and odour, may change due to natural variation and climate change. This in no way affects the quality and efficacy of the product.



Date: 15/01/2019

Re: Vegan – Safflower Organic Oil

We can confirm that the above named product supplied by MADAR Corporation Limited is suitable for Vegans.