

#### **CERTIFICATE OF ANALYSIS**

Product Marula
Batch No: 4526612
Best Before End: Dec 2025

Appearance: Liquid yellow to pale yellow

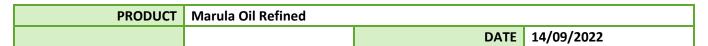
Odour: Characteristic

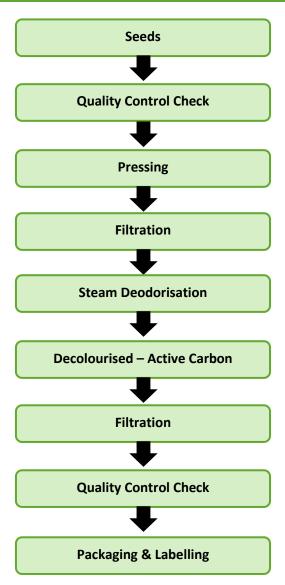
TEST	SPECIFICATION	ANALYSIS
Specific Gravity @ 20°C (g/ml)	0.910 – 0.925	0.917
Refractive Index @ 20°C	1.462 – 1.479	1.472
Optical Rotation @ 20°C	-10.0° to +10.0°	0.56
Acid Value (mg/KOH/g)	1.0 maximum	0.10
Iodine Value (mg/g)	100.0 – 120.0	109.76
Saponification Value	187.0 – 197.0	Complies

FATTY ACID PROFILE (%)		
C16:0 Palmitic	8.0 maximum	4.9
C18:0 Stearic	8.0 maximum	2.5
C18:1 Oleic Acid	48.0 – 62.0	54.9
C18:2 Linoleic	27.0 – 47.0	35.5



#### **Flowchart**





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. 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. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.



Document Date: December 2018

#### **STATEMENT**

We hereby certify that the Marula Oil we sell 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	Marula Oil Refined	
	PRODUCT CODE	WHC370	
	INCI NAME	Sclerocarya Birrea Se	eed Oil
	CAS	-	
	EC	-	
1.2	RELEVANT 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		
	COMPANY Madar Corporation Limited  ADDRESS 19 - 20 Sandleheath Industrial Estate Fordingbridge. SP6 1PA		
	EMAIL ADDRESS technical@madarcorporation.co.uk		
1.4	4 EMERGENCY TELEPHONE NUMBER		+ 44 (0) 1425 655 555

02. HAZARDS IDENTIFICATION			
2.1	CLASSIFICATION OF THE SUBSTANCE OR MIXTURE		
	CLASSIFICATION (EC 1	272/2008)	
	Not classified as hazar	dous.	
2.2	LABEL ELEMENTS		
	LABEL IN ACCORDANCE	E WITH (EC) NO 127	72/2008
	None		
	SIGNAL WORD None		
	HAZARD STATEMENTS		
	None		
	PRECAUTIONARY STATEMENTS AND/OR SUPPLEMENTARY STATEMENTS		
	None		
	SUPPLEMENTARY STATEMENTS		
	None		
2.3	OTHER HAZARDS		
	ADVERSE EFFECTS ON HUMAN HEALTH No additional data		
	ADVERSE PHYSIO-CHEMICAL PROPERTIES No additional data		

03. COMPOSITION/INFORMATION ON INGREDIENTS	
3.1/3.2	SUBSTANCES/MIXTURES



No additional data

04. FIRST AID MEASURES			
4.1	DESCRIPTION OF FIRST AID MEASURES		
	INHALATION Remove to fresh air and remain in a position which is comfortable for breathing. Seek medical attention.		
	INGESTION Do NOT induce vomiting. Ingestion may cause nausea and vomiting. Immediately rinse mouth and provide fresh air. Seek medical attention.		
	SKIN CONTACT  Remove contaminated clothing and wash before reuse. Wash skin thoroughly with soap and water. If discomfort occurs/continues, seek medical attention.		
	EYE CONTACT  Rinse eyes with clean water for a minimum of fifteen minutes. If safe to do so, remove contact lenses and continue to rinse. 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.		

<u>05. FIRE</u>	05. FIREFIGHTING MEASURES		
5.1	EXTINGUISHING METHODS		
	<ul> <li>Carbon Dioxide</li> <li>Alcohol Resistant Foam</li> <li>Dry Chemical Powder</li> <li>Do NOT use water.</li> </ul>		
5.2	HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE		
	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 in-crease the hazard. Ignition hazard at welding at the empty container. In the event of fire this product can generate oxides of carbon and other toxic gases. A fire will often produce a thick black smoke. Exposure to decomposition products may be hazardous to health. Do not breathe in smoke.		
5.3	ADVICE FOR FIREFIGHTERS		
	Wear self-contained respiratory equipment and appropriate protective clothing at all times. Do not inhale any gases or fumes which may be generated. Containers in close proximity to fire should be removed to a safe distance and the exterior of the container cooled with water.		

06. ACC	06. ACCIDENTAL RELEASE MEASURES		
6.1	PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES		
	Wear protective clothing as recommended at all times. Handle the product using protective gloves resistant to the chemicals exposed. Avoid contact with skin and inhalation of its vapours. Maintain adequate ventilation in the working area after spilling.		
6.2	ENVIROMENTAL PRECAUTIONS		



	Do not allow the product to enter drains or sewers, water course or the ground. Do not allow the product to enter the environment.
6.3	METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP THIS PRODUCT
	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. EXPOSURE CONTROLS AND/OR PERSONAL PROTECTION		
7.1	PRECAUTIONS FOR SAFE HANDLING	
	Adhere to all good health, safety and hygiene practices. If handling large/heavy packages or drums, ensure the use of suitable mechanical equipment at all times. Avoid contact with skin, eyes and clothing. Remove and wash contaminated clothing before re-use. Wear personal protective equipment. Do not breathe vapours or spray mist. Use only in area provided with adequate ventilation. 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 freezing, heat and light including sunlight. Protect from all potential sources of ignition. Keep all containers tightly sealed when not in use. Intrusion into soil to be avoided. Take precautions to avoid static discharges in working area. Electrical equipment and fittings must comply with local regulations.	
7.3	SPECIFIC END USE(S)	

08. EXP	08. EXPOSURE CONTROLS		
8.1	CONTROL PARAMETERS		
	No additional data		
8.2	EXPOSURE CONTROLS		
	PROTECTIVE EQUIPMENT		
	Use all equipment as required and/or recommended for safe handling.		
	PROCESS CONDITIONS No additional data		
	ENGINEERING MEASURES Install sufficient ventilation across all areas. Install readily available eyev stations and safety showers.		
	RESPIRATORY EQUIPMENT  In the event of airborne contamination or ventilation failure ensure the usuitable respiratory equipment/protection.		
	HAND PROTECTION Wear appropriate protective chemically resistant gloves which comply w		



	EN374.
EYE PROTECTION	Wear appropriate protective safety goggles which comply with EN166.
HYGIENE MEASURES	Good hygiene practices are always recommended, especially when handling oils, chemicals or any other similar type of material.
SKIN PROTECTION	Wear appropriate protective chemically resistant clothing at all times to prevent any potential skin contact with this product.
ENVIRONMENTAL EXPOSURE CONTROLS	Do not allow the product to enter drains or sewers, water course or the ground. Prevent environmental contamination.
OTHER AND/OR PERSONAL PROTECTIVE MEASURES	No additional data

09. PHYSICAL AND CHEMICAL PROPERTIES		
7.1 INFORMATION ON BASIC PHYSICAL & CHEMICAL PROPERTIES		
APPEARANCE (E.G. LIQUID)	Liquid	
COLOUR	Pale – Yellow	
ODOUR	Characteristic	
SPECIFIC GRAVITY ~0.917 @ 20°C		
REFRACTIVE INDEX	~1.470 @ 20°C	
FLASH POINT (°C)	>250.0	
AUTO-IGNITION TEMPERATURE (°C)	No additional data	
MELTING POINT (°C)	No additional data	
BOILING POINT (°C)	No additional data	
SOLUBILITY	Insoluble in water. Soluble in oil, ethanol.	
VAPOUR PRESSURE	No additional data	
9.2 ADDITIONAL INFORMATION	No additional data	

10. STABILITY & REACTIVITY			
10.1	REACTIVITY		
	Expected to remain stable under recommended storage conditions.		
10.2	CHEMICAL STABILITY		
	Expected to remain stable under recommended storage conditions.		
10.3	POSSIBLE HAZARDOUS REACTIONS		
	Reacts with oxidants.		
10.4	CONDITIONS TO AVOID		
	Heat. Extremes of temperature. Any potential source of ignition including but not limited to sparks and flames.		
10.5	INCOMPATIBLE MATERIALS		
	Strong Acids, Alkalis, Oxidizing Agents		



10.6	HAZARDOUS DECOMPOSITION PRODUCTS
	In the event of fire this product may generate oxides of carbon and other toxic gases.

11. TO	11. TOXOLOGICAL INFORMATION		
11.1	ACUTE TOXICITY		
	No additional data		
11.2	SKIN CORROSION/IRRITATION		
	No additional data		
11.3	SERIOUS EYE DAMAGE/IRRITATION		
	No additional data		
11.4	RESPIRATORY/SKIN SENSITIZATION		
	No additional data		
11.5	GERM CELL MUTAGENICITY/CARCINOGENICITY/REPRODUCTIVE TOXICITY		
	No additional data		
11.6	STOT – SINGLE EXPOSURE		
	No additional data		
11.7	STOT – REPEATED EXPOSURE		
	No additional data		
11.8	ASPIRATION HAZARD		
	No additional data		
11.9	GENERAL AND/OR ADDITIONAL DATA; E.G. PHOTOTOXICITY		
	No additional data		

12. ECC	12. ECOLOGICAL AFFECTS		
12.1	TOXICITY		
	No additional data		
12.2	PERSISTENCE & DEGRADABILITY		
	No additional data		
12.3	BIOACCUMULATIVE POTENTIAL		
	No additional data		
12.4	MOBILITY IN SOIL AND/OR WATER		
	No additional data		
12.5	RESULTS OF A PBT/vPvB ASSESSMENT		
	No additional data		
12.6	OTHER ADVERSE EFFECTS		
	No additional data		



#### **13. DISPOSAL CONSIDERATIONS**

#### 13.1 WASTE TREATMENT METHODS

Always dispose of this product in accordance with local and national regulations. Do not allow entry into drains or waterways. Do not contaminate the ground or water with waste. Do not dispose of waste into the environment. Waste management is carried out without endangering human health, without harming the environment and, in particular without risk to water, air, soil, plants or animals. Recycling is always preferable to disposal. When containers have been fully emptied, ensure the labelling remains.

14. TRA	14. TRANSPORT INFORMATION		
14.1	UN NUMBER	Not restricted	
14.2	UN PROPER SHIPPING NAME	Not applicable	
14.3	TRANSPORT HAZARD CLASS(ES)	Not applicable	
14.4	PACKING GROUP	Not applicable	
14.5	ENVIRONMENTAL HAZARDS	Not applicable	
14.6	SPECIAL PRECAUTIONS FOR USER	Details throughout document: 6, 7, 8	
14.7	TRANSPORT IN BULK ACCORDING TO ANNEX II OF MARPOL73/78 AND THE IBC CODE	No additional data	

15. REGULATORY INFORMATION			
15.1	SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS/LEGISLATION SPECIFIC FOR THE SUBSTANCE OR MIXTURE		
	This Safety Data Sheet was prepared in accordance with EC Regulation (EC) 1907/2006 (REACH), 1272/2008 (CLP), EC 453/2010&830/2015.		
15.2	CHEMICAL SAFETY ASSESSMENT		
	No additional data		

16. OTHER INFORMATION		
16.1 HAZARD STATEMENTS None		None
16.2	REVISION DATE	30/09/2022
16.3	REVISION NUMBER	6



# **Product Specification**

PRODUCT	Marula Oil Refined				
CODE		DATE	29/07/2022	REVISION	6

DESCRIPTION	Sclerocarya Birrea Seed Oil is the oil expressed from the seeds of the Sclerocarya birrea, Anacardiaceae		
INCI NAME	Sclerocarya Birrea Seed Oil		
CAS NUMBER	- EC NUMBER -		-

<u>CHARACTERISTICS</u>	
APPEARANCE AT ROOM TEMPERATURE Liquid	
COLOUR	Yellow
ODOUR	Characteristic

<u>ANALYSIS</u>		
SPECIFIC GRAVITY (g/ml)	0.910 – 0.925 @ 20°C	
REFRACTIVE INDEX	1.462 – 1.479 @ 20°C	
OPTICAL ROTATION (°)	-10.0 to +10.0 @ 20°C	
ACID VALUE (mg KOH/g)	≤1.00	
IODINE VALUE (mg/g)	100.0 – 120.0	

FATTY ACID PROFILE (%)		
C16:0	PALMITIC ACID	≤8.00
C18:0	STEARIC ACID	≤8.00
C18:1	OLEIC ACID	48.00 – 62.00
C18:2	LINOLEIC ACID	27.00 – 47.00



## **Vegetarian & Vegan Suitability Statement**

PRODUCT NAME: Marula Oil

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