<u>CERTIFICATE OF ANALYSIS</u> <u>VIRGIN FLAXSEED OIL</u>

Batch No:4564560209Best Before Date :November 2026

TEST	SPECIFICATION	ANALYSIS
Acid Value (mg KOH/g)	3.0 maximum	1.60
Saponification Value (mg KOH/g)	188 - 195	Complies
Iodine Value (gl ₂ /100g oil)	160 - 200	186.3
Peroxide Value (meqO ₂ /kg)	15.0 maximum	3.3
Unsaponifiable Matter (%)	1.5 maximum	0.9
Refraction Index (23°C)	1.478- 1.483	Complies
Relative Density (20°C)	0.926- 0.933	Complies
Volatile	0.2% maximum	Complies
Ash	0.15% maximum	Complies

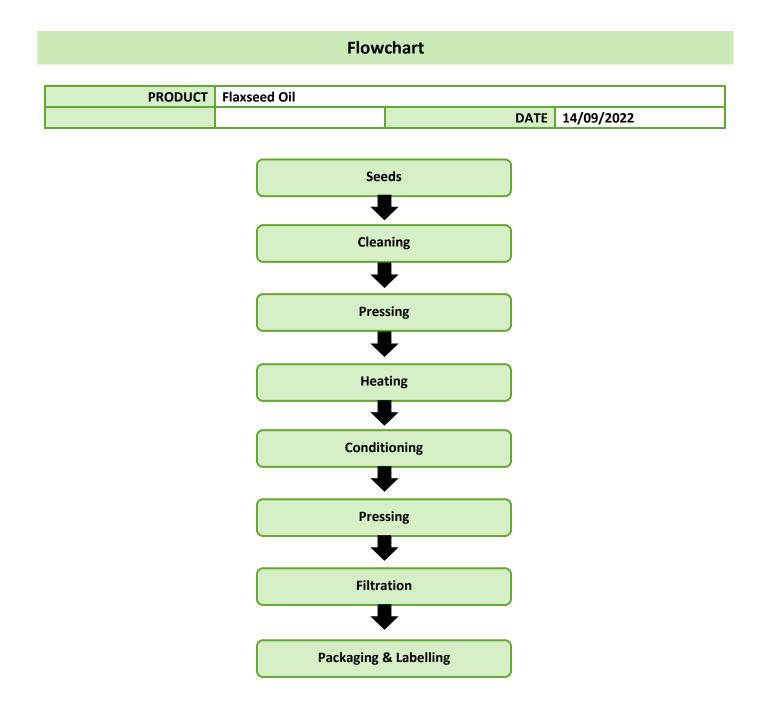
FATTY ACID PROFILE (%)		
C16:0 Palmitic	5.0-7 .0	Complies
C18:0 Stearic	2.0 – 8.0	Complies
C18:1 Oleic	20.0-30.0	Complies
C18:2 Linoleic	15.0 – 20.0	Complies
C18:3 Linolenic	45.0-55.0	Complies

GMO, Vegetarian & Vegan Suitability Statement

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.

We hereby state and certify that the the above is also not derived/ produced from a raw material that has been genetically modified.

16/06/2022



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:

April 2019

STATEMENT

We hereby certify that **Flaxseed 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	Flaxseed Oil	
	PRODUCT CODE	WHC016	
	INCI NAME	Linum Usitatissimum	Seed Oil
	CAS	8001-26-1	
	EC	232-278-6	
	REACH REGISTRATION NO. (if applicable)	Exempt	
1.2	RELEVANT IDENTIFIED USES OF THE SUBSTANCE OR MIXTURE, AND USES ADVISED AGAINST		
	Technical use, professional applications only. Not suitable for food.		у.
1.3	DETAILS OF THE SUP	PLIER OF THE SAFETY	DATA SHEET
	COMPANY Madar Corporation Limited ADDRESS 19 - 20 Sandleheath Industrial Estate Fordngbridge, SP6 1PA		
EMAIL ADDRESS technical@madarcorporation.co.uk			technical@madarcorporation.co.uk
1.4	1.4 EMERGENCY TELEPHONE NUMBER		+ 44 (0) 1425 655 555
Available during office hours.			Available during office hours.

02. HAZARDS IDENTIFICATION			
2.1	CLASSIFICATION OF THE SUBSTANCE OR MIXTURE		
	CLASSIFICATION (EC 1	272/2008)	
	None		
2.2	LABEL ELEMENTS		
	LABEL IN ACCORDANC	CE WITH (EC) NO 12	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 None		
	ADVERSE PHYSIO-CHEMICAL PROPERTIES None		

<u>03. CON</u>	03. COMPOSITION/INFORMATION ON INGREDIENTS				
3.1/3.2	SUBSTANCES/MIXTURES				
	PERCENTAGE	NAME	CAS	REACH REGISTRATION NO. (if applicable)	HAZARD CLASSIFICATION
	100.0	Linum Usitatissimum Seed Oil	8001-26-1	-	Not classified as hazardous.

04. FIRS	04. FIRST AID MEASURES		
4.1	DESCRIPTION OF FI	RST 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. Never give anything by mouth to a person who is unconscious. 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 including underneath eyelids. If safe to do so, remove to 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.		

05. FIRE	FIGHTING MEASURES	
5.1	EXTINGUISHING METHODS	
	 Carbon Dioxide Alcohol Resistant Foam Dry Chemical Powder 	
	Do NOT use water.	
5.2	HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE	
	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	DENTAL 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	
	Absorb product, if possible, with a suitable inert absorbent material (sand, earth, sawdust, universal binder, vermiculite) and shovel into appropriate containers for disposal (see section 13). If absorbed in special oil absorbers, sawdust or clothes, keep in fire-safe place as self-ignition may occur, therefore, it is advised to use inert absorbents only.	
6.4	REFERENCE TO OTHER SECTIONS	
	Sections 8 & 13	

<u>07. EXP</u>	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.		
7.3	SPECIFIC END USE(S)		
	No additional data		

<u>08. EXP</u>	OSURE 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 eyewash stations and safety showers.	

Material Safety Data Sheet

RESPIRATORY EQUIPMENT	In the event of airborne contamination or ventilation failure, use suitable respiratory equipment/protection.	
HAND PROTECTION	Wear appropriate protective chemically resistant gloves which comply with 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 pre- any potential skin contact with this product.		
ENVIRONMENTAL EXPOSURE CONTROLS		
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	Brown - Amber	
ODOUR	Characteristic	
SPECIFIC GRAVITY	0.9260 – 0.9330	
REFRACTIVE INDEX	1.4780 - 1.4830	
FLASH POINT (°C)	No additional data	
AUTO-IGNITION TEMPERATURE (°C)	No additional data	
MELTING POINT (°C)	~ -20.0	
BOILING POINT (°C)	No additional data	
FLAMMABILITY	No additional data	
EXPLOSION LIMITS	No additional data	
DECOMPOSITION TEMPERATURE (°C)	Decomposition expected to take place before boiling.	
SOLUBILITY	Insoluble in water.	
рН	No additional data	
VISCOSITY	No additional data	
PARTITION COEFFICIENT N- OCTANOL/WATER (log value)	No additional data	
VAPOUR PRESSURE	@ 20.00°C - very low @ 100.0°C - very low	
VAPOUR DENSITY	No additional data	
9.2 ADDITIONAL INFORMATION	No additional data	

10. STABILITY & REACTIVITY

10.1	REACTIVITY		
	No additional data		
10.2	CHEMICAL STABILITY		
	Expected to remain stable under recommended storage conditions.		
10.3	POSSIBLE HAZARDOUS REACTIONS		
	Hazardous polymerization does not occur.		
10.4	CONDITIONS TO AVOID		
	Extremes of temperature. All potential sources of ignition. Very fine dispersion in contact with air (possible danger of self-ignition). Keep away from direct sunlight. Avoid exposure to air (oxygen). Used earthed equipment where possible.		
10.5	INCOMPATIBLE MATERIALS		
	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. TOXOLOGICAL INFORMATION		
11.1	ACUTE TOXICITY	
	LD50 oral > 5.000 mg/kg	
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. ECOLOGICAL AFFECTS		
12.1	ΤΟΧΙCΙΤΥ	

	LC/EC/IC50 > 1.00	
12.2	PERSISTENCE & DEGRADABILITY	
	Readily biodegradable	
12.3	BIOACCUMULATIVE POTENTIAL	
	BCF < 10.0	
12.4	MOBILITY IN SOIL AND/OR WATER	
	No additional data	
12.5	RESULTS OF A PBT/vPvB ASSESSMENT	
	Not classed as PBT/vPvB	
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.	

<u>14. TRAI</u>	14. TRANSPORT INFORMATION		
14.1	UN NUMBER	Not regulated	
	UN MODEL REGULATIONS	Not applicable	
14.2	IMDG	Not applicable	
14.2	ADR, RID, AND	Not applicable	
	ICAO TI	Not applicable	
14.3	TRANSPORT HAZARD CLASS(ES)	Not applicable	
14.4	PACKING GROUP	Not applicable	
14.5	ENVIRONMENTAL HAZARDS	Not applicabe	
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	
16.2	CONCENTRATION PERCENTAGE LIMITS	No additional data	
16.3	TOTAL FRACTIONAL VALUES	No additional data	
16.4	KEY - ABBREVIATIONS		
16.5	REVISION DATE	13/02/2023	
16.6	REVISION NUMBER	8	
16.7	REVISION REASON	Document review, new format	

Product Specification

PRODUCT	Flaxseed Oil Cold Pressed	r		
	DATE	10/06/2022 REVISION 11		
DESCRIPTION		Linum Usitatissimum Seed Oil is the expressed oil from the dried ripe seed of the Linseed, Linum usitatissimum L., Linaceae		
INCI NAME	Linum Usitatissimum Seed O	il		
CAS NUMBER	8001-26-1	EC NUMBER 232-278-6		
CHARACTERISTICS				
	APPEARANCE AT ROOM TEMPERATURE	Liquid		
	COLOUR	Brown – Amber		
	ODOUR	Characteristic		
	ANA	LYSIS		
	SPECIFIC GRAVITY	0.9260 – 0.9330 @ 20°C		
	REFRACTIVE INDEX	1.4780 – 1.4830 @ 20°C		
	ACID VALUE	≤3.000		
	IODINE VALUE (WIJS)	≥175.0		
	COLOUR (GARDNER)	≤13.00		
	SAPONIFICATION VALUE	188.00 - 195.00		
	UNSAPONIFIABLE MATTER (%)	≤1.500		
	VOLATILE (%)	≤2.000		
	ASH (%)	≤0.150		

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Document Date: April 2019

STATEMENT

We hereby confirm that Flaxseed Oil WHC016 is suitable for vegans. It is used for technical applications but not food approved.