

# **CERTIFICATE OF ANALYSIS**

PRODUCT NAME: MORINGA SEED OIL, COLD PRESSED

PRODUCT INCI: MORINGA OLEIFERA SEED OIL

PRODUCT CODE: OCMORI CAS NUMBER: 93165-54-9 EINECS NUMBER: 296-941-1

MANUFACTURING METHOD: COLD PRESSED M<sub>ANUFACTURING</sub> D<sub>ATE</sub>: 19/04/2022

ANALYTICAL DETAILS	Range %	RESULTS
Appearance	OILY LIQUID	-
Odour	Characteristic	-
Colour	LIGHT YELLOW - GREEN	-
Refractive Index @ 20°C	1.450 – 1.472	1.4672
SPECIFIC GRAVITY @ 20°C	0.905 – 0.975	0.9097
PEROXIDE VALUE (MEQ O <sub>2</sub> / KG)	<20.0	0.1
ACID VALUE	<25.0	12.1
IODINE VALUE	50 - 77	66.33

FATTY ACID PROFILE		RANGE %	RESULTS
C-CHAIN	ACID NAME		
C16:0	PALMITIC	2.0 – 10.0	6.78
C16:1	PALMITOLEIC	<3	1.36
C18:1	OLEIC	65.0 – 88.0	70.25
C18:2	LINOLEIC	<5.0	0.69
C18:3	Alpha Linolenic	<25.0	0.17



# **ALLERGEN STATEMENT**

PRODUCT NAME: MORINGA SEED OIL, REFINED

#### **COSMETIC ALLERGENS**

Annex Illa			TOTAL ALLERGEN
Reference:		CAS NUMBER:	INCLUSION (%):
67	AMYL CINNAMAL	122-40-7	0.000
68	BENZYL ALCOHOL	100-51-6	0.000
69	CINNAMYL ALCOHOL	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	31906-04-4	0.000
79	CARBOXALDEHYDE	51900-04-4	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	NO	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:

Ekokoza s.r.o. can hereby confirm the following composition breakdown & manufacturing process flow;

Moringa Seed Oil, Cold Pressed

INCI Name	% Inclusion	CAS Number
Moringa Oleifera Seed	100	93165-54-9



**Harvested Moringa** seeds **Seed Drying & Separation Excess bean chaff and** filtered dust **Cold Pressing** Meal by-product used in animal feed **Filtration of Cold Pressed** Oil **Excess waxes from the** filter plates **Quality Control (test to** specification) **Packaging & Labelling Delivery to client** 

## **GMO Statement**

PRODUCT NAME: Moringa Refined

Ekokoza s.r.o. can confirm that the above listed product is  $\mbox{GMO}\mbox{ Free}.$ 

14-11-23



## **Material Safety Data Sheet**

EU Regulation: 2020/878

SECTION 1: Identification of	the substance/	mixture c	ınd of the company/u	ındertaking	
1.1 Product Identification					
Product Name	Moringa Seed Oil, I	REFINED			
Biological Definition	Moringa Oleifera S	SEED OIL IS A FI	XED OIL OBTAINED FROM THE MORI	INGA TREE	
INCI Name	Moringa Oleifera Seed Oil				
Synonyms & Trade Names	MORINGA OIL				
Internal Product Code					
CAS-No	93165-54-9	EC No.	296-941-1	EINECS No.	296-941-1
1.2 Details of the supplier of the safety data sheet					
Company Address	Ekokoza s.r.o., IČ:07508247, Fryčovice 297, 73945 Fryčovice, eshop@ekokoza.cz, +420605779993				
1.3 Details of the supplier of the safety data sheet					
Emergency Contacts	Nouzové telefonní číslo: +420224919293 , +420224915402 (telefon 24hod/				
denně) Toxikologické informační středisko, Na Bojišti 1, 128 08 Praha2)			8 Praha2)		



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 2020/878.
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.	
SECTION E. Fire Finhaire Menoure		
SECTION 5: Fire Fighting Measures		
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 Measur	es	
6.1 Personal precautions	None Required.	
6.2 Environmental precautions	None Required.	
6.3 Methods & material for containment and cleaning up	Spills can be absorbed by cloth or sawdust, washed away with water & cleaned with sodic products.	
6.4 References to other sections	Refer & consider section 8. Refer & consider section 13.	
SECTION 7: Handling & Storage		
7.1 Precautions for safe-handling	spills & leaks to avoid slip hazard. Always wear personal protective clothing (refer to section 8). Do not eat,	
	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.	
Precautions for safe-handling  7.2  Conditions for safe storage, including any incompatibilities  7.3	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.  Keep the product container tightly closed, in a dry, ventilated area (at temperatures <20°C). Keep away from	
Precautions for safe-handling  7.2 Conditions for safe storage, including any incompatibilities  7.3 Specific end use(s)  SECTION 8: Exposure Controls &	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.	
Precautions for safe-handling  7.2 Conditions for safe storage, including any incompatibilities  7.3 Specific end use(s) SECTION 8: Exposure Controls & Personal Protection	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.  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.	
Precautions for safe-handling  7.2 Conditions for safe storage, including any incompatibilities  7.3 Specific end use(s) SECTION 8: Exposure Controls & Personal Protection  8.1 Control Parameters 8.2	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.  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.  No Data.	
Precautions for safe-handling  7.2 Conditions for safe storage, including any incompatibilities  7.3 Specific end use(s) SECTION 8: Exposure Controls & Personal Protection  8.1 Control Parameters 8.2	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.  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.  No Data.  None.	
Precautions for safe-handling  7.2 Conditions for safe storage, including any incompatibilities  7.3 Specific end use(s)  SECTION 8: Exposure Controls & Personal Protection  8.1 Control Parameters 8.2 Exposure Controls	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.  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.  No Data.	
Precautions for safe-handling  7.2 Conditions for safe storage, including any incompatibilities  7.3 Specific end use(s)  SECTION 8: Exposure Controls & Personal Protection  8.1 Control Parameters 8.2 Exposure Controls  Eye Protection	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.  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.  No Data.  None.  Not required as a non-toxic product, however we still recommend taking precautions by wearing protective eye-wear when handling the product.	
Precautions for safe-handling  7.2 Conditions for safe storage, including any incompatibilities  7.3 Specific end use(s)  SECTION 8: Exposure Controls & Personal Protection  8.1 Control Parameters 8.2 Exposure Controls  Eye Protection  Hand Protection	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.  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.  No Data.  None.  Not required as a non-toxic product, however we still recommend taking precautions by wearing protective eye-wear when handling the product.  None.	
Precautions for safe-handling  7.2 Conditions for safe storage, including any incompatibilities  7.3 Specific end use(s)  SECTION 8: Exposure Controls & Personal Protection  8.1 Control Parameters 8.2 Exposure Controls  Eye Protection  Hand Protection  Respiratory Equipment	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 handlin of drums & heavy packages.  Keep the product container tightly closed, in a dry, ventilated area (at temperatures <20°C). Keep away fr potential sources of ignition and protected from light. Maintain limited contact with oxygen.  No Data.  None.  Not required as a non-toxic product, however we still recommend taking precautions by wearing protective eye-wear when handling the product.  None.	

**Properties** 



9.1 Physical & Chemical Properties		
Appearance	SLIGHTLY VISCOUS OILY LIQUID	
Colour	CLEAR – LIGHT YELLOW - GREEN	
Odour	Odourless	
Relative Density	NO DATA.	
Refractive Index	1.462 – 1.476	
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	NO DATA.	
9.2.1 Information with regard to physical hazard classes	None.	
9.2.2 Other safety characteristics	NONE.	
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.
11.2 Information on other hazards	Not Applicable.
SECTION 12: Ecological Information	
12.1	Low - None.
Toxicity 12.2 Persistence & degradability	>90% (OECD)
12.3 Bio- accumulative potential	None.
12.4 Mobility in soil	Low – None.
12.5 Results of PBT & VPVB assessment	Not Available.
12.6 Endocrine disrupting propertis	None.
12.7 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.	
Maritime transport in bulk according to IMO instruments	Not Applicable.	
SECTION 15: Regulatory Information		
15.1 Product specific safety, health & environmental regulations & legislation		
EU Directives	Regulation (EC) No 2020/878 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	Workplace exposure limits EH40. CHIP for everyone HSG 108.	
15.2 Chemical Safety Assessment	Assessment has not been carried out as this is a non-hazardous material according to article 31 of REACH 2020/878.	

SECTION 16: Other Information		
Allergens:	None.	
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.
ı	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: MORINGA SEED OIL, REFINED

PRODUCT INCI: MORINGA OLEIFERA SEED OIL

CAS NUMBER: 93165-54-9 EINECS NUMBER: 296-941-1

MANUFACTURING METHOD: COLD PRESSED & REFINED

SHELF LIFE: 12 MONTHS

DOCUMENTATION REVIEWED: 2021

ANALYTICAL DETAILS	RANGE %
APPEARANCE	SLIGHTLY VISCOUS OILY LIQUID
COLOUR	CLEAR — LIGHT YELLOW - GREEN
Odour	Odourless
SPECIFIC GRAVITY @ 20°C	0.898 – 0.910
REFRACTIVE INDEX @ 20°C	1.450 – 1.476
FREE FATTY ACID (OLEIC)	<4.0
SAPONIFICATION VALUE	164 – 190
PEROXIDE VALUE	<10.0
IODINE VALUE	65.0 – 112.0
ACID VALUE	<8.0

FATTY ACID PROFILE		RANGE %
C-CHAIN	ACID NAME	
C16:0	Palmitic	<9.0
C18:0	STEARIC	5.0 – 10.0
C18:1	OLEIC	65.0 – 80.0
C20:0	Arachidic	<5.0
C20:1	GONDOIC	<4.0
C22:0	BEHENIC	2.0 – 8.0

## **Vegetarian & Vegan Suitability Statement**

PRODUCT NAME: Moringa Refined

Ekokoza s.r.o. 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.

14-11-23