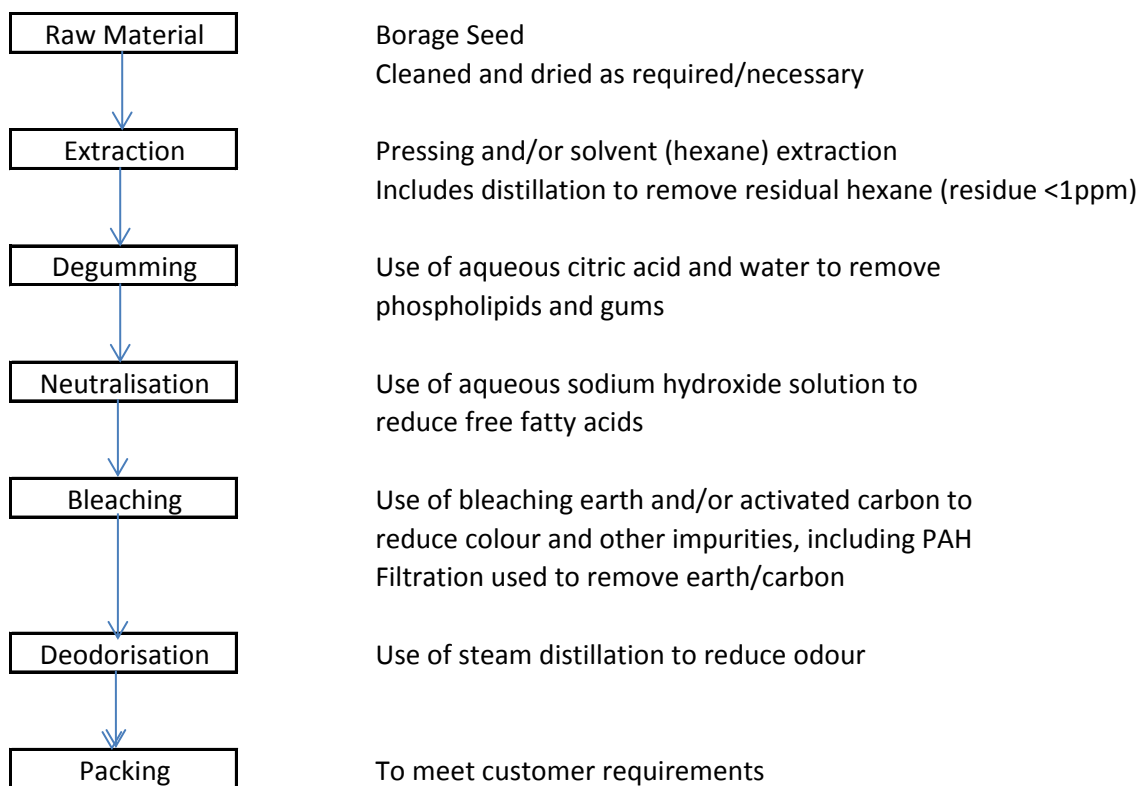




Borage Oil Production Process





Product Information

Borage Oil Refined (Starflower Oil)

INCI Name	Borago officinalis seed oil (100%)
Origin	100% Vegetable (suitable for vegetarians and vegans).
ISO 16128 status	100% Natural.
BSE/TSE	No materials of animal origin are contained in the product or used during the processing of the product. There is no risk of the presence of BSE/TSE.
Palm Oil	The product contains no palm oil or any material derived from palm oil.
GMO	No genetically modified organisms (GMO) or material obtained from GMO are present in the product.
REACH	The product is exempt from the requirements for registration (under annex V).
REACH Annex XIV	No substances subject to authorisation (SVHC, vPvB or PBT) under this annex are present in the product.
Allergens	No food (EU and US labelling regulations) or fragrance (EU cosmetic regulations) allergens are present. The oil is gluten free.
Proposition 65	The product contains no substances included in current Proposition 65 lists.
CMR	The product contains no substances classed as being CMR.
Nanomaterials	The product contains no nanomaterials.
Animal Testing	No animal testing of the product has been performed by, or on behalf of, the company at any time.
Halal/Kosher	Not certified but will meet requirements.

25/06/2021



Material Safety Data Sheet

Borage Oil

Relating to EC1907/2006

Date of issue: 12/01/2021

1. Identification of the substance/preparation and of the company/undertaking

Trade Name:	Borage Oil
REACH Registration:	Exempt (annex V)
Supplier:	Ekokoza s.r.o. Fryčovice 297 73945 Fryčovice eshop@ekokoza.cz +420605779993 IČ:07508247

Use of substance:	Cosmetics, Pharmaceuticals, Food
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Technical/Emergency contact person:	Nouzové telefonní číslo: +420224919293 , +420224915402 (telefon 24hod/denně) Toxikologické informační středisko, Na Bojišti 1, 128 08 Praha2)
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2. Identification of hazards

Critical hazards to man and the environment:	None
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3. Composition/information on ingredients

Identity:	Borage Oil (INCI – Borago officinalis seed
CAS no.:	oil) 225234-12-8
EINECS no.:	-
Substances presenting health hazards (R- phrases):	None.

Ekokoza s.r.o.
Fryčovice 297, 73945, Fryčovice
IČ: 07508247, eshop@ekokoza.cz, +420605779993

4. First Aid Procedures

General Recommendations:	No immediate medical attention required.
Inhalation:	No vapours generated under normal handling conditions.
Skin contact:	Wash with soap and water.
Eye Content:	Rinse with plenty of water. If discomfort persists, seek medical attention.
Ingestion:	Not dangerous, oils are generally edible.
Advice for medical staff:	This safety data sheet. Accident with vegetable oil of edible quality.

5. Fire Fighting Measures

Suitable fire extinguisher:	Fire blanket, foam, dry powder and CO ₂ .
Unsuitable fire extinguisher:	Water jet.
Special exposure hazards:	Formation of carbon monoxide is possible.
Protective equipment:	Suitable respiratory protection.

6. Accidental Release Measures

Personal Precautions:	No special precautions under normal conditions.
Environmental precautions:	Keep away from drains, surface and ground water.
Methods for cleaning up:	Physical methods, adsorbent material. Clean with hot water and detergent.
Further measures:	See sections 8 and 13.

7. Handling and Storage

Handling:	Handle with care and avoid spillage on the floor (spillage can cause slipping hazard).
Measures for safe handling:	Normal working hygiene will suffice.

Measures for fire protection:	Keep away from open fire.
Storage conditions:	Store in a cool and dry place in the original containers, or store in a tank (preferably stainless steel).
Measures for storage rooms and tanks:	No special measures. Bunding or similar precautions are recommended to contain spillage or leaks.
Incompatible materials:	Pro-oxidants.

8. Exposure Controls – Personal Protection

Specific control measures (threshold limit values or biological standards)	Not applicable for this substance under normal working procedures.
Respiratory protection:	In case of aerosol formation, use dust mask filter.
Hand protection:	No special measures required under normal conditions.
Eye protection:	Use safety glasses/goggles if there is a risk of splashing.
Skin protection:	No special measures required under normal conditions.

9. Physical and Chemical Properties

Appearance:	Yellow liquid
Odour:	Neutral or slight characterisitic
pH value:	Not relevant, insoluble in water
Boiling point:	No known data
Melting point:	Liquid at ambient temperatures
Flash point:	>300°C
Autoflammability:	Not possible
Explosive properties:	Not explosive
Oxidising properties:	Not oxidising
Vapour pressure at 200°C:	<0.01 mmHg
Density at 25°C:	0.90 – 0.93 g/ml
Solubility in water:	Insoluble
Solubility in fat:	Soluble in vegetable oils

Partition Coefficient:n-octanol/water:	Not applicable
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Viscosity at 20°C: 60 – 90 cP

10. Stability and Reactivity

Stability: Generally stable, becomes rancid on prolonged exposure to air.

Conditions to avoid: Oxidation promoting conditions (heat and UV light).

Materials to avoid: Pro-oxidants.

Hazardous decomposition products: None.

11. Toxicological Information

Acute Toxicity LD50: The substance is a non-toxic vegetable oil of edible quality.

Short and long term effects on exposure: Based upon the composition and reports based upon similar products there are no negative effects to be expected.

Effects from human exposure: No adverse effects reported for administration by oral/dermal routes. Inhalation is unlikely. Slight irritation may occur on eye contact.

Sensitisation, CMR effects: No known effects.

12. Ecological Information

General: the information given in this section is based upon evaluation of the components and ecotoxic data on similar products.

Motility: Floats on water. Immobilises by adsorption to soil particles.

Persistence and degradability: Readily biodegradable.

Bioaccumulative potential: No bioaccumulation is expected.

Other information: Presents no ozone depletion potential and is CO₂ neutral.

13. Disposal Considerations



Substance: No specific danger. Dispose according to local authority advice. May be burned together with household waste, if this is accepted by the authorities.

Contaminated packaging; Dispose according to local authority advice.

14. Transport Information

Land transport (ADR/RID, GGVS/GGVE): Not classified.

Sea transport (IMDG/GGVSee): Not classified.

Air transport (ICAO-TI, IATA-DGR): Not classified.

15. Regulatory Information

Classification according to EC directives: Not classified as a dangerous material.

Symbols and phrases according to health hazards (R- and S- phrases): None

Dangerous substances to label: None

16. Other information

Use and restrictions: The information provided in this safety data sheet is accurate to the best of our knowledge and is valid for the product as supplied. The information is intended for use as a guide for safety measures, and no liability arising out of the use, application or processing of the material is accepted.



Product Specification

Refined Borage Oil min. 18% GLA

Description: A pale yellow to golden yellow oil, clear and bright at ambient temperatures.

Specification Parameters

Acid Value	1.0 maximum
Peroxide Value	10 meq/kg maximum
Iodine Value	135 – 155
Colour (Lovibond 5¼")	3.5 red 35 yellow maximum
Refractive Index (40°C)	1.461 – 1.469

Fatty Acid Profile (%):

C16:0 Palmitic	9 - 13
C18:0 Stearic	3 - 5
C18:1 Oleic	10 – 22
C18:2 Linoleic	34 – 46
C18:3 α -linolenic	0.4 maximum
C18:3 gamma-linolenic	18 minimum
C20:1 Eicosenoic	2 – 6
C22:1 Erucic	1 – 3.5
C24:1 Nervonic	0.5-3.5

Shelf Life & Storage: The product should be stored in unopened drums out of direct sunlight at a temperature of between 15 and 25°C. The product should be fit for use until the date of expiry given provided that they are stored under these recommended conditions. However, this product contains a high level of functional and essential fatty acids and is sensitive to oxidation, and it is therefore recommended that customers do not purchase more material than will be used within 3 months of purchase. Northstar Lipids UK will not be responsible for product deterioration once drums are opened and in use other than for the purpose of sampling. It is recommended that partially used drums should be purged with nitrogen in order to reduce the onset of oxidation.

Date: 11/01/2021



Borage Oil Refined

Ekokoza s.r.o. confirms that the above product is of 100% vegetable origin and that no products of animal origin are used during its processing. The product is therefore suitable for vegans.

30/01/2023