#### Page: 1/9



### CHEMICAL SAFETY DATA SHEET

### according to 2020/878/EC (1907/2006/EC Article 31)

1768202

Reviewed on: 14.12.2022 Printing date: 14.12.2022

### SECTION 01: Identification of the substance/mixture and of the company/undertaking

### 1.1 Product identifier

- Trade name:
  - Lovage root oil
- Article number:
- F7680
- CAS Number:
  - 8016-31-7
- EC Number:
  - 284-292-7
- No CAS EINECS:

84837-06-9

- 1.2 Relevant identified uses of the substance or mixture and uses advised against
- Application of the substance / the preparation

Perfume ingredient

- Flavouring agent Only for industrial use
  - 1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier:

BIOLANDES, BP2

TEL: +33(0)5.58.51.00.00 email: fds@biolandes.com

2760 Route de Bélis 40420 LE SEN

**FRANCE** 

1.4 Emergency telephone number: FR-ORFILA (INRS):+33(0)1 45 42 59 59

### SECTION 02: Hazards identification

- 2.1 Classification of the substance or mixture
- Classification according to Regulation (EC) No 1272/2008



GHS07

Skin Sens. 1 - H317 May cause an allergic skin reaction. Aquatic Chronic 3 - H412 Harmful to aquatic life with long lasting

- 2.2 Label elements
- Labelling according to Regulation (EC) No 1272/2008
- Hazard pictograms



### GHS07

- Signal word
- Warning
- Hazard statements

H317 May cause an allergic skin reaction.

H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P272 Contaminated work clothing should not be allowed out of the workplace.

P273 Avoid release to the environment.

- P280 Wear protective gloves.
- P302+P352 IF ON SKIN: Wash with plenty of water.
- P501 Dispose of contents/container in accordance with local/regional/ national/international regulations.

#### 2.3 Other hazards

- · Results of PBT and vPvB assessment
- PBT:
- Not applicable.
- vPvB:

(continued on page 2)





### according to 2020/878/EC (1907/2006/EC Article 31)

1768202

Reviewed on: 14.12.2022 Printing date: 14.12.2022

(continued of page 1)

#### **PRODUCT:** Lovage root oil

Not applicable.

Determination of endocrine-disrupting properties

Substance is not listed.

# SECTION 03: Composition/information on ingredients

3.1 Substances CAS No. Description

- 8016-31-7 Lovage root oil • Identification number(s)
  - EC number:

	284-292-7		
	Dangerous co	omponents:	
	CAS Number	•	%
*	127-91-3	beta-Pinene	0,101-1,00
*		EC number: 204-872-5	
*		🕸 Asp. Tox. 1 - H304; 🚸 Flam. Liq. 3	
*		- H226; 🔱 Skin Irrit. 2 - H315, Skin	
*		Sens. 1B - H317	
*	5989-27-5	d-limonene	0,101-1,00
*		EC number: 227-813-5	
*		Asp. Tox. 1 - H304;  Flam. Liq. 3	
*		- H226; 🕚 Skin Irrit. 2 - H315, Skin	
*		Sens. 1B - H317; 🄄 Aquatic Acute 1 -	
*		H400; Aquatic Chronic 3 - H412	
*	80-56-8	pin-2(3)-ene	0,101-1,00
*		EC number: 201-291-9	
*		🕸 Asp. Tox. 1 - H304; 🕚 Flam. Liq. 3	
*		- H226; 🕚 Acute Tox. 4 - H302, Skin	
*		Irrit. 2 - H315, Skin Sens. 1B - H317	
*	586-62-9	Terpinolene	0,101-1,00
*		EC number: 209-578-0	
*		🕸 Asp. Tox. 1 - H304; 🕚 Skin Sens.	
*		1B - H317; 🤄 Aquatic Acute 1 - H400,	
*		Aquatic Chronic 1 - H410	
*	17369-59-4	3-propylidenephthalide	0,01-0,100
*		EC number: 241-402-8	
*		Acute Tox. 4 - H302, Skin Sens. 1B -	
*		H317	
*	97-54-1	isoeugenol	0,01-0,100
*		EC number: 202-590-7	
*		Acute Tox. 4 - H302, Acute Tox. 4 -	
*		H312, Skin Irrit. 2 - H315, Eye Irrit. 2 -	
*		H319, Skin Sens. 1A - H317;	
*		Skin Sens. 1A; H317: C >= 0,01 %	
	- EU		

(continued on page 3)



### according to 2020/878/EC (1907/2006/EC Article 31)

1768202

Reviewed on: 14.12.2022 Printing date: 14.12.2022

(continued of page 2)

PRODUCT: Lovage root oil

### SECTION 04: First aid measures

4.1 Description of first aid measures

· General information:

Seek immediate medical advice.

• After inhalation:

Supply fresh air and to be sure call for a doctor.

• After skin contact:

If skin irritation continues, consult a doctor.

Immediately wash with water and soap and rinse thoroughly.

Immediately rinse with water.

• After eye contact:

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

· After swallowing:

Seek immediate medical advice.

Information for doctor:

4.2 Most important symptoms and effects, both acute and delayed

No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

# SECTION 05: Firefighting measures

- 5.1 Extinguishing media
- Suitable extinguishing agents:

CO2, sand, extinguishing powder. Do not use water.

Use fire extinguishing methods suitable to surrounding conditions.

 For safety reasons unsuitable extinguishing agents: Water with full jet

- \* 5.2 Special hazards arising from the substance or mixture
- \* Formation of toxic gases is possible during heating or in case of fire.
  - 5.3 Advice for firefighters
  - Protective equipment:

Do not inhale explosion gases or combustion gases.

· Additional information

Cool endangered receptacles with water spray.

### SECTION 06: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

\* Ensure adequate ventilation

Keep away from ignition sources.

#### 6.2 Environmental precautions:

Do not allow product to reach sewage system or any water course.

Inform respective authorities in case of seepage into water course or sewage system.

- \* 6.3 Methods and material for containment and cleaning up:
- Dispose contaminated material as waste according to item 13.
- Ensure adequate ventilation.

#### 6.4 Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

ΕU

(continued on page 4)



### according to 2020/878/EC (1907/2006/EC Article 31)

1768202

Reviewed on: 14.12.2022 Printing date: 14.12.2022

(continued of page 3)

Page: 4/9

**PRODUCT:** Lovage root oil

### SECTION 07: Handling and storage

7.1 Precautions for safe handling

Keep receptacles tightly sealed.

Keep away from heat and direct sunlight.

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

Handle with care. Avoid jolting, friction and impact.

Information about fire - and explosion protection:

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

#### 7.2 Conditions for safe storage, including any incompatibilities Storage:

- Requirements to be met by storerooms and receptacles:
- Store only in the original receptacle.

Prevent any seepage into the ground.

- Use only receptacles specifically permitted for this substance/ product.
  - Information about storage in one common storage facility:
- Not required.
- Further information about storage conditions:
- Keep container tightly sealed.

Protect from heat and direct sunlight.

Store receptacle in a well ventilated area.

#### 7.3 Specific end use(s)

No further relevant information available.

### SECTION 08: Exposure controls/personal protection

#### 8.1 Control parameters

- Ingredients with limit values that require monitoring at the workplace: Not required.
- Additional information:

The lists valid during the making were used as basis.

#### 8.2 Exposure controls

- · Individual protection measures, such as personal protective equipment
- General protective and hygienic measures:
- The usual precautionary measures are to be adhered to when handling chemicals. Immediately remove all soiled and contaminated clothing
- Wash hands before breaks and at the end of work.
- Do not inhale gases / fumes / aerosols.
  - Do not inhale dust / smoke / mist.
    - Avoid contact with the skin.
- Respiratory protection:
  - In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
    - Use suitable respiratory protective device in case of insufficient ventilation.
  - Protection of hands:

Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

- Penetration time of glove material
  - The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- Eye/face protection Safety glasses

ΕU



# according to 2020/878/EC (1907/2006/EC Article 31)

1768202

Reviewed on: 14.12.2022 Printing date: 14.12.2022

	(continued o
SECTION 09: Physical and chemica	properties
9.1 Information on basic physical and chen	nical properties
General Information	
Physical state	Fluid
Colour:	green-yellow, dark brown
Odour:	spicy
Odour threshold:	Not determined.
Boiling point or initial boiling point and boiling range	Not determined.
Flammability	Not determined.
Lower and upper explosion limit	
Lower:	Not determined.
Upper:	Not determined.
Flash point:	> 61,0 °C NFT 60-103 CC
Decomposition temperature:	Not determined.
pH	Not determined.
Viscosity:	
Kinematic viscosity	Not determined.
Dynamic:	Not determined.
Solubility	
water:	Not determined.
Partition coefficient n-octanol/water (log	Not determined.
value)	
Vapour pressure:	Not determined.
Density and/or relative density	
Density:	Not determined.
Relative density	1,0080 1,0880 (D20/4)
Vapour density	Not determined.
9.2 Other information	No further relevant information available.
Appearance:	
Form:	liquid to semi-crystallized
Important information on protection of hea	lth and environment, and on safety.
Auto-ignition temperature:	Not determined.
Explosive properties:	Not determined.
Solvent content:	
Solids content:	0,00 %
Change in condition	
Evaporation rate	Not determined.
Information with regard to physical hazard	
Explosives	not applicable
Flammable gases	not applicable
Aerosols	not applicable
Oxidising gases	not applicable
Gases under pressure	not applicable
Flammable liquids	not applicable
Flammable solids	not applicable
Self-reactive substances and mixtures	not applicable
Pyrophoric liquids	not applicable
Pyrophoric solids	not applicable
Self-heating substances and mixtures	
	not applicable
Substances and mixtures, which emit flammable gases in contact with water	not applicable

Page: 6 / 9



### CHEMICAL SAFETY DATA SHEET

### according to 2020/878/EC (1907/2006/EC Article 31)

1768202

Reviewed on: 14.12.2022 Printing date: 14.12.2022

		(continued of page 5)
Oxidising liquids	not applicable	
Oxidising solids	not applicable	
Organic peroxides	not applicable	
Corrosive to metals	not applicable	
Desensitised explosives	not applicable	

### SECTION 10: Stability and reactivity

- 10.1 Reactivity
- No further relevant information available.
  - 10.2 Chemical stability
  - 10.3 Possibility of hazardous reactions

No dangerous reactions known.

10.4 Conditions to avoid

No further relevant information available.

10.5 Incompatible materials:

No further relevant information available.

10.6 Hazardous decomposition products:

Not determined.

# SECTION 11: Toxicological information

- 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008
- Acute toxicity

LD/LC50 values relevant for classification:

ISO LD/LC

- \* 5989-27-5 (R)-p-mentha-1,8-diene
- Oral, LD50: 4400 mg/kg (rat)
- 97-54-1 isoeugenol
- Oral, LD50: 1560 mg/kg (rat)
  - Primary irritant effect:
  - Skin corrosion/irritation
    - No irritant effect.
  - Serious eye damage/irritation
    - No irritating effect.
  - Respiratory or skin sensitisation
  - Sensitization possible through skin contact.
  - Germ cell mutagenicity
    - Not determined.
  - Carcinogenicity
- Not determined.
- Reproductive toxicity

  Not determined.
- Not determined.
  - STOT-single exposure Not determined.
- STOT-repeated exposure Not determined.
  - Aspiration hazard
    - Not determined.
- Subacute to chronic toxicity:
  - Not determined.
  - 11.2 Information on other hazards
- Endocrine disrupting properties

  \* Substance is not listed.

ΕU

#### Page: 7 / 9



### CHEMICAL SAFETY DATA SHEET

### according to 2020/878/EC (1907/2006/EC Article 31)

1768202

Reviewed on: 14.12.2022 Printing date: 14.12.2022

(continued of page 6)

PRODUCT: Lovage root oil

### SECTION 12: Ecological information

#### 12.1 Toxicity

· Aquatic toxicity:

5989-27-5 (R)-p-mentha-1,8-diene

LD50: 0,71 mg/l (fish) (OECD 203)

- \* 12.2 Persistence and degradability
   \* No further relevant information available.
  - Behaviour in environmental systems: Not determined.

### 12.3 Bioaccumulative potential

No further relevant information available.

### 12.4 Mobility in soil

No further relevant information available.

#### 12.5 Results of PBT and vPvB assessment

- PBT:
- Not applicable.
- vPvB:

Not applicable.

12.6 Endocrine disrupting properties

\* The product does not contain substances with endocrine disrupting properties.

#### 12.6 Other adverse effects

No further relevant information available.

- Ecotoxical effects:
  - Not determined.
- Remark:
  - Harmful to fish
  - Additional ecological information:
- General notes:

Harmful to aquatic organisms

The material is harmful to the environment.

### SECTION 13: Disposal considerations

#### 13.1 Waste treatment methods

- Recommendation
  - Must be specially treated adhering to official regulations.
- Uncleaned packaging:
- Recommendation:

Disposal must be made according to official regulations.

### SECTION 14: Transport information

14.1 UN number or ID number ADR Void IMDG Void IATA Void 14.2 UN proper shipping name ADR Void IMDG Void IATA Void IATA Void IATA Void IATA Void 14.3 Transport hazard class(es) ADR

Class Void
IMDG

Class Void

(continued on page 8)

#### Page: 8 / 9



### CHEMICAL SAFETY DATA SHEET

### according to 2020/878/EC (1907/2006/EC Article 31)

1768202

Reviewed on: 14.12.2022 Printing date: 14.12.2022

(continued of page 7)

PRODUCT: Lovage root oil

IATA
Class Void

14.4 Packing group

ADR Void
IMDG Void
IATA Void

14.5 Environmental hazards:

Not applicable.

14.6 Special precautions for user

Not applicable.

14.7 Maritime transport in bulk according to IMO instruments Not applicable.

 Transport/Additional information: Not applicable.

### SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

- DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment Annex II
- Substance is not listed.
  - REGULATION (EU) 2019/1148
  - Annex I RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))
- Substance is not listed.
  - Annex II REPORTABLE EXPLOSIVES PRECURSORS
  - Substance is not listed.
  - Regulation (EC) No 273/2004 on drug precursors
- Substance is not listed.
  - Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors
- Substance is not listed.
  - National regulations:
  - Technical instructions (air):
  - Class Share in %
  - I 0,03
    - Waterhazard class:
- \* Water hazard class 1 (Self-assessment): slightly hazardous for water.
  - 15.2 Chemical safety assessment:

A Chemical Safety Assessment has not been carried out.

### SECTION 16: Other information

- The information in this safety data sheet is based on the state of our knowledge at the date indicated. The information in this sheet must be regarded as a description of the safety requirements for the product, they are not to be considered a warranty or quality specification and have no contractual value on properties and application areas thereof. The information contained in this safety data sheet relate to the specific material designated and may not be valid with respect to the product associated with another product or process, unless it is specified in the text of this document.
- \* The required information complies with EU regulations in force. It does not exempt the user from knowing and applying all the national regulations in force.
  - · Relevant phrases

H226 Flammable liquid and vapour.

H302 Harmful if swallowed.

H304 May be fatal if swallowed and enters airways.

\* H312 Harmful in contact with skin.

\* H315 Causes skin irritation.

(continued on page 9)

#### Page: 9/9



### CHEMICAL SAFETY DATA SHEET

### according to 2020/878/EC (1907/2006/EC Article 31)

1768202

Reviewed on: 14.12.2022 Printing date: 14.12.2022

	PRODUCT:	Lovage root oil	
			(continued of page 8)
*	H317	May cause an allergic skin reaction.	
*	H319	Causes serious eye irritation.	
*	H400	Very toxic to aquatic life.	
*	H410	Very toxic to aquatic life with long lasting effects.	
*	H412	Harmful to aquatic life with long lasting effects.	

#### · Training hints

Minimum training in occupational risk prevention is recommended for personnel who will handle this product, in the purpose of facilitating the understanding and interpretation of this form of safety data in the same way as the labeling of the product.

#### · Abbreviations and acronyms:

IFRA:International Fragrance Association IOFI:International Organization of the Flavor Industry IFRA:International Fragrance Association IOFI:International Organization of the Flavor Industry

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road) ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road) RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail) RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IMDG: International Maritime Code for Dangerous Goods IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation DOT: US Department of Transportation

IATA: International Air Transport Association IATA: International Air Transport Association

ICAO: International Civil Aviation Organisation ICAO: International Civil Aviation Organisation

GHS: Globally Harmonised System of Classification and Labelling of Chemicals GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances ELINCS: European List of Notified Chemical Substances CAS: Chemical Abstracts Service (division of the American Chemical Society) CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative vPvB: very Persistent and very Bioaccumulative

CE50: effective concentration at 50% ErC50:concentration of test substance which results in a 50 percent reduction in either growth rate (ErC50)relative to the control within 72hrs exposure.

#### Sources

IFRA/IOFI Labelling Manual, REACH registration dossier, supplier information

• \* Data compared to the previous version altered.