BIOLANDES

CHEMICAL SAFETY DATA SHEET

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

1497802

Reviewed on: 15.12.2022
Printing date: 15.12.2022

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

1.1 Product identifier

- Trade name:
  HELICHRYSUM ORGANIC OIL
- Article number:
  N3448
- CAS Number:
  8023-95-8
- EC Number:
  289-918-2
- No CAS EINECS:
  90045-56-0

1.2 Relevant identified uses of the substance or mixture and uses advised against
Application of the substance / the preparation
Perfume ingredient
Only for industrial use

1.3 Details of the supplier of the safety data sheet
Manufacturer/Supplier:
BIOLANDES, BP2
2760 Route de Bélis
40420 LE SEN
FRANCE
TEL: +33(0)5.58.51.00.00
email: fds@biolandes.com

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

GHS08

Asp. Tox. 1 - H304 May be fatal if swallowed and enters airways.

GHS02

Flam. Liq. 3 - H226 Flammable liquid and vapour.

GHS07

Skin Irrit. 2 - H315 Causes skin irritation.
Eye Irrit. 2 - H319 Causes serious eye irritation.
Skin Sens. 1 - H317 May cause an allergic skin reaction.

GHS09

Aquatic Acute 1 - H400 Very toxic to aquatic life.
Aquatic Chronic 1 - H410 Very toxic to aquatic life with long lasting effects.

2.2 Label elements

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

GHS08 GHS02 GHS07 GHS09

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- Signal word
  Danger
- Hazard statements
  H226 Flammable liquid and vapour.
  H304 May be fatal if swallowed and enters airways.
  H315 Causes skin irritation.
  H317 May cause an allergic skin reaction.
  H319 Causes serious eye irritation.
  H410 Very toxic to aquatic life with long lasting effects.
- Precautionary statements
  P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
  P233 Keep container tightly closed.
  P240 Ground and bond container and receiving equipment.
  P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.
  P403+P235 Store in a well-ventilated place. Keep cool.
  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:
  Not applicable.
- Determination of endocrine-disrupting properties
  Substance is not listed.

SECTION 03: Composition/information on ingredients

3.1 Substances

CAS No. **Description**
8023-95-8 Helichrysum italicum G. Don (Syn Helichrysum angustifolium (Lam.) DC.)

- Identification number(s)
- EC number:
  289-918-2

- Dangerous components:

CAS Number		%
141-12-8	**Neryl acetate** **EC number: 205-459-2** **Skin Irrit. 2 - H315, Skin Sens. 1B - H317**	**10,001-20,00**
80-56-8	**pin-2(3)-ene** **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**	**10,001-20,00**
87-44-5	**beta-Caryophyllene** **EC number: 201-746-1** **Asp. Tox. 1 - H304; Skin Sens. 1B - H317**	**1,001- 5,00**
5989-27-5	**d-limonene** **EC number: 227-813-5** **Asp. Tox. 1 - H304; Flam. Liq. 3 - H226; Skin Irrit. 2 - H315, Skin Sens. 1B - H317; Aquatic Acute 1 - H400; Aquatic Chronic 3 - H412**	**1,001- 5,00**
106-25-2	**Nerol** **EC number: 203-378-7**	**1,001- 5,00**

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	Skin Irrit. 2 - H315, Eye Irrit. 2 - H319, Skin Sens. 1B - H317	
13474-59-4	**Bergamotene trans alpha** **EC number: 603-860-0** **Asp. Tox. 1 - H304**	**1,001- 5,00**
78-70-6	**Linalool** **EC number: 201-134-4** **Skin Irrit. 2 - H315, Eye Irrit. 2 - H319, Skin Sens. 1B - H317**	**1,001- 5,00**
127-91-3	**beta-Pinene** **EC number: 204-872-5** **Asp. Tox. 1 - H304; Flam. Liq. 3 - H226; Skin Irrit. 2 - H315, Skin Sens. 1B - H317**	**0,101-1,00**
586-62-9	**Terpinolene** **EC number: 209-578-0** **Asp. Tox. 1 - H304; Skin Sens. 1B - H317; Aquatic Acute 1 - H400, Aquatic Chronic 1 - H410**	**0,101-1,00**
99-86-5	**1-isopropyl-4-methylcyclohexa-1,3-diene** **EC number: 202-795-1** **Asp. Tox. 1 - H304; Flam. Liq. 3 - H226; Acute Tox. 4 - H302, Skin Sens. 1 - H317; Aquatic Chronic 2 - H411** **Oral: ATE = 1680 mg/kg**	**0,101-1,00**
23696-85-7	**1-(2,6,6-Trimethylcyclohexa-1,3-dienyl)-2-buten-1- one** **EC number: 245-833-2** **Skin Irrit. 2 - H315, Skin Sens. 1A - H317; Aquatic Chronic 2 - H411**	**0,01-0,100**

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.
- 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.

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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.

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.
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.

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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.
  Keep away from foodstuffs, beverages and feed.
  Immediately remove all soiled and contaminated clothing
  Wash hands before breaks and at the end of work.
  Avoid contact with the eyes.
- Respiratory protection:
  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

SECTION 09: Physical and chemical properties

9.1 Information on basic physical and chemical properties	
General Information	
Physical state	Fluid
Colour:	colourless to light yellow
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:	48,0 °C NFT 60-103 CC
Decomposition temperature:	Not determined.
pH	Not determined.
Viscosity:	
Kinematic viscosity	at 40,00 °C 6,00 mm2/s
Dynamic:	Not determined.
Solubility	
water:	Not determined.
Partition coefficient n-octanol/water (log value)	Not determined.
Vapour pressure:	Not determined.
Density and/or relative density	
Density:	Not determined.

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Relative density	0,8950 - 0,9150 D20/20
Vapour density	Not determined.
9.2 Other information	No further relevant information available.
Appearance:	
Form:	fluid
Important information on protection of health 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 classes	
Explosives	not applicable
Flammable gases	not applicable
Aerosols	not applicable
Oxidising gases	not applicable
Gases under pressure	not applicable
Flammable liquids	Flammable liquid and vapour.
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
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.

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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

87-44-5 beta-Caryophyllene
Oral, LD50: > 5000 mg/kg (rat) (Hart and Wong 1971)

5989-27-5 (R)-p-mentha-1,8-diene
Oral, LD50: 4400 mg/kg (rat)

78-70-6 Linalool
Oral, LD50: 2790 mg/kg (rat)
Dermal, LD50: 5610 mg/kg (Rabbit)

99-86-5 p-mentha-1,3-diene
Oral, LD50: 1680 mg/kg (ATE)

- Primary irritant effect:
- Skin corrosion/irritation
  Irritant to skin and mucous membranes.
  Causes skin irritation.
- Serious eye damage/irritation
  Irritating effect.
  Causes serious eye irritation.
- Respiratory or skin sensitisation
  Sensitization possible through skin contact.
- Germ cell mutagenicity

87-44-5 beta-Caryophyllene
OECD 471 AMES: NEGATIVE (in vitro) (Heck and al., 1989)

78-70-6 Linalool
OECD 471 AMES: NEGATIVE (in vitro) (Letizia and al., 2007)

- Carcinogenicity

78-70-6 Linalool
Micronoyau: NEGATIVE (mouse) (in vivo, Letizia and al., 2007)
Micronoyau: NEGATIVE (in vitro) (DiSotto and al., 2011)

- Reproductive toxicity
  Not determined.
- STOT-single exposure
  Not determined.
- STOT-repeated exposure
  Not determined.
- Aspiration hazard
  May be fatal if swallowed and enters airways.
  May be fatal if swallowed and enters airways.
- Subacute to chronic toxicity:

87-44-5 beta-Caryophyllene
Oral, NOAEL: 700 mg/kg (rat) (90 days Schmitt 2016)

78-70-6 Linalool
Oral, NOAEL: 200 mg/kg (rat) (maternal toxicity, Politano and al., 2008)

11.2 Information on other hazards

- Endocrine disrupting properties
  Substance is not listed.

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)

78-70-6 Linalool
LD50: 27,8 mg/l (fish) ((OECD 203) RIFM 1991)
ErC50(0-72h): 156,7 mg/l (algae)
ErC50(0-48h): 59 mg/l (daphnia) ((OECD 202)

12.2 Persistence and degradability
No further relevant information available.

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- 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:
  Very toxic for fish
- Additional ecological information:
- General notes:
  Very toxic for 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	UN1993
IMDG	UN1993
IATA	UN1993

14.2 UN proper shipping name

ADR	1993 FLAMMABLE LIQUID, N.O.S. (HELICHRYSUM ANGUSTILOLIUM EXTR.)
IMDG	FLAMMABLE LIQUID, N.O.S. (HELICHRYSUM ANGUSTILOLIUM EXTR.)
IATA	FLAMMABLE LIQUID, N.O.S. (HELICHRYSUM ANGUSTILOLIUM EXTR.)

14.3 Transport hazard class(es)

ADR

Class 3 (F1) Flammable liquids.

Label

IMDG

Class 3 Flammable liquids.

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Label 3

IATA

Class 3 Flammable liquids.

Label 3

14.4 Packing group

ADR	III
IMDG	III
IATA	III

14.5 Environmental hazards:

Marine pollutant: Yes

14.6 Special precautions for user

Warning: Flammable liquids.

Danger code (Kemler):	30
EMS Number:	F-E,S-E

14.7 Maritime transport in bulk according to IMO instruments

Not applicable.

- Transport/Additional information:
  Not applicable.

ADR

Excepted quantities (EQ):	E1
Limited quantities (LQ)	5L
Transport category	3
Tunnel restriction code	D/E

IMDG

Limited quantities (LQ)	5L
Excepted quantities (EQ)	E1

- UN "Model Regulation":
  UN 1993 FLAMMABLE LIQUID, N.O.S. (HELICHRYSUM ANGUSTILOLIUM EXTR.), 3, III, ENVIRONMENTALLY HAZARDOUS

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.

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- 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

- Waterhazard class:
  Water hazard class 2 (Self-assessment): 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.
H315	Causes skin irritation.
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.
H411	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.

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

- * Data compared to the previous version altered.