

CHEMICAL SAFETY DATA SHEET
according to 1907/2006/EC Article 31, as amended by N°
453/2010

2313900

Reviewed on: 16/07/19
Printing date: 16/07/2019

PRODUCT : HELICHRYSUM BRACTE ORG OIL

(continued of page 1)

- H411 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.

SECTION 03: Composition/information on ingredients

3.1 Chemical characterization: Substances

CAS No.	Description
8023-95-8	Helichrysum bracteiferum Humbert

- Identification number(s)
- EC number:
- - -

- Dangerous components:

CAS Number		%
470-82-6	Eucalyptol EC number: 207-431-5 ⚠ Flam. Liq. 3 - H226; ⚠ Skin Sens. 1B - H317	20,001-50,00
127-91-3	beta-Pinene ⚠ Asp. Tox. 1 - H304; ⚠ Flam. Liq. 3 - H226; ⚠ 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	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	5,001-10,00
562-74-3	4-Carvomenthenol EC number: 209-235-5 ⚠ Acute Tox. 4 - H302, Skin Irrit. 2 - H315, Eye Irrit. 2 - H319	1,001- 5,00
98-55-5	p-menth-1-en-8-ol EC number: 202-680-6 ⚠ Skin Irrit. 2 - H315, Eye Irrit. 2 - H319	1,001- 5,00
5989-27-5	d-limonene ⚠ Asp. Tox. 1 - H304; ⚠ Flam. Liq. 3	1,001- 5,00

(continued on page 3)

CHEMICAL SAFETY DATA SHEET
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PRODUCT : HELICHRYSUM BRACTE ORG OIL

(continued of page 2)

	- H226; Skin Irrit. 2 - H315, Skin Sens. 1B - H317; Aquatic Acute 1 - H400; Aquatic Chronic 3 - H412	
1139-30-6	Caryophyllene oxide EC number: 214-519-7 Aquatic Chronic 2 - H411	1,001- 5,00
123-35-3	Myrcene EC number: 204-622-5 Asp. Tox. 1 - H304; Flam. Liq. 3 - H226; Skin Irrit. 2 - H315, Eye Irrit. 2 - H319	1,001- 5,00
99-87-6	p-cymene EC number: 202-796-7 Asp. Tox. 1 - H304; Flam. Liq. 3 - H226; Aquatic Chronic 2 - H411	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
99-86-5	p-mentha-1,3-diene EC number: 202-795-1 Asp. Tox. 1 - H304; Flam. Liq. 3 - H226; Acute Tox. 4 - H302; Aquatic Chronic 2 - H411	1,001- 5,00
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	1,001- 5,00
79-92-5	camphene EC number: 201-234-8 Flam. Sol. 1 - H228; Aquatic Acute 1 - H400, Aquatic Chronic 1 - H410	0,101-1,00
103-41-3	Benzyl cinnamate Skin Sens. 1B - H317; Aquatic Chronic 2 - H411	0,101-1,00
11028-42-5	Cedrene EC number: 234-257-7 Asp. Tox. 1 - H304; Aquatic Acute 1 - H400, Aquatic Chronic 1 - H410	0,01-0,100

EU

(continued on page 4)

CHEMICAL SAFETY DATA SHEET
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453/2010

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PRODUCT : HELICHRYSUM BRACTE ORG OIL

(continued of page 3)

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.

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.

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.

EU

(continued on page 5)

CHEMICAL SAFETY DATA SHEET
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2313900

Reviewed on: 16/07/19
Printing date: 16/07/2019

PRODUCT : HELICHRYSUM BRACTE ORG OIL

(continued of page 4)

SECTION 07: Handling and storage

- Handling:
 - 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.
 - 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.
- | CAS No. | Designation of material | % | Type | Value | Unit |
|---------------|-------------------------|---|------|-------|------|
| Not required. | | | | | |
- Additional information:
 - The lists valid during the making were used as basis.
- 8.2 Exposure controls
 - 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.
 - Wash hands before breaks and at the end of work.
 - Avoid contact with the skin.
 - 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 protection: Safety glasses

SECTION 09: Physical and chemical properties

9.1 Information on basic physical and chemical properties

General Information

Appearance:

Form:	Fluid
Colour:	colourless to pale yellow

(continued on page 6)

CHEMICAL SAFETY DATA SHEET
according to 1907/2006/EC Article 31, as amended by N°
453/2010

2313900

Reviewed on: 16/07/19
Printing date: 16/07/2019

PRODUCT : HELICHRYSUM BRACTE ORG OIL

(continued of page 5)

Odour:	fresh
Odour threshold:	Not determined.
Change in condition	
Melting point/freezing point:	0,0 °C
Initial boiling point and boiling range:	0,0 °C
Flash point:	60,0 °C NFT 60-103 CC
Flammability (solid, gas):	Not determined.
Auto-ignition temperature:	Not determined.
Explosive properties:	Not determined.
Vapour pressure:	Not determined.
Density:	Not determined.
Relative density :	0,8900 0,9150 D20/20
Solubility in / Miscibility with water:	Not determined.
Partition coefficient: n-octanol/water:	Not determined.
9.2 Other information	No further relevant information available.

SECTION 10: Stability and reactivity

- 10.1 Reactivity
No further relevant information available.
- 10.2 Chemical stability
Thermal decomposition / conditions to be avoided:
Not determined.
- 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 toxicological effects
- Acute toxicity
 - LD/LC50 values relevant for classification:

ISO LD/LC

470-82-6	Eucalyptol
Oral, LD50: 3849 mg/kg (mouse) (Jiao Xu, 2014)	
87-44-5	beta-Caryophyllene
Oral, LD50: > 5000 mg/kg (rat) (Hart and Wong 1971)	
98-55-5	p-menth-1-en-8-ol
Oral, LD50: 4300 mg/kg (rat)	
5989-27-5	(R)-p-mentha-1,8-diene
Oral, LD50: 4400 mg/kg (rat)	
1139-30-6	Caryophyllene oxide
Oral, LD50: >5000 mg/kg (rat) (Moreno 1978)	
78-70-6	Linalool

(continued on page 7)

CHEMICAL SAFETY DATA SHEET
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453/2010

2313900

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Printing date: 16/07/2019

PRODUCT : HELICHRYSUM BRACTE ORG OIL

(continued of page 6)

Oral, LD50: 2790 mg/kg (rat)
Dermal, LD50: 5610 mg/kg (Rabbit)

79-92-5 camphene

Oral, LD50: 5000 mg/kg (rat)
Dermal, LD50: 2500 mg/kg (Rabbit)

103-41-3 Benzyl cinnamate

Oral, LD50: 3280 mg/kg (rat) (Wolven 1972)

- 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.
- 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)

- Germ cell mutagenicity

470-82-6 Eucalyptol

AMES: NEGATIVE (in vitro) (Haworth, 1983)

87-44-5 beta-Caryophyllene

AMES: NEGATIVE (in vitro) (Heck and al., 1989)

1139-30-6 Caryophyllene oxide

AMES: NEGATIVE (in vitro) (Richold and al., 1979)

78-70-6 Linalool

AMES: NEGATIVE (in vitro) (Letizia and al., 2007)

103-41-3 Benzyl cinnamate

AMES: NEGATIVE (in vitro) (Florin 1980)

- 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
Not determined.

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)

123-35-3 Myrcene

LD50: 0,51 mg/l (fish) (OECD 203)
CE50/48h: 0,65 mg/l (daphnia)

99-87-6 p-cymene

LD50: 1,63 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.

(continued on page 8)

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(continued of page 7)

- 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.

- Ecotoxicological effects:
Not determined.
- Additional ecological information:
- General notes:
Toxic for aquatic organisms
The material is harmful to the environment.

12.5 Results of PBT and vPvB assessment

- PBT:
Not applicable.
- vPvB:
Not applicable.

12.6 Other adverse effects
No further relevant information available.

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

ADR UN1169

IMDG UN1169

IATA UN1169

14.2 UN proper shipping name

ADR 1169 EXTRACTS, AROMATIC, LIQUID

IMDG EXTRACTS, AROMATIC, LIQUID (HELICHRYSUM BRACTEIFERUM HUMBERT)

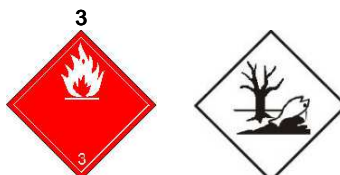
IATA EXTRACTS, AROMATIC, LIQUID

14.3 Transport hazard class(es)

ADR

Class 3 (F1) Flammable liquids.

Label



IMDG

Class 3 Flammable liquids.

(continued on page 9)

CHEMICAL SAFETY DATA SHEET
according to 1907/2006/EC Article 31, as amended by N°
453/2010

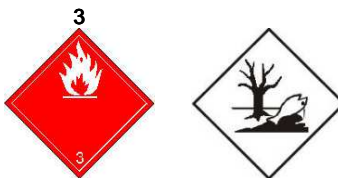
2313900

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Printing date: 16/07/2019

PRODUCT : HELICHRYSUM BRACTE ORG OIL

(continued of page 8)

Label



IATA

Class

3 Flammable liquids.

Label



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-D

14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable.

- Transport/Additional information:
Not applicable.

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 1169 EXTRACTS, AROMATIC, LIQUID, 3, III, ENVIRONMENTALLY HAZARDOUS

SECTION 15: Regulatory information

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

- National regulations:

- Waterhazard class:
Generally not hazardous for water.

15.2 Chemical safety assessment:

A Chemical Safety Assessment has not been carried out.

EU

(continued on page 10)

CHEMICAL SAFETY DATA SHEET
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PRODUCT : HELICHRYSUM BRACTE ORG OIL

(continued of page 9)

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.
H228	Flammable solid.
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
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)
IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation
IATA: International Air Transport Association
ICAO: International Civil Aviation Organisation
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative

• **Sources**

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

• * Data compared to the previous version altered.