

1746104

Reviewed on: 12.15.2022  
Printing date: 12.15.2022

## 01 Identification

### 1.1 Product identifier

- Trade name:  
NEROLI MOROCCO ORGANIC OIL
- Article number:  
N0900
- CAS Number:  
8016-38-4
- EC Number:  
639-655-8

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

- Application of the substance / the preparation  
Perfume ingredient  
Flavouring agents  
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  
2760 Route de Bélis                email: fds@biolandes.com  
40420 LE SEN  
FRANCE

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

## 02 Hazard(s) identification

### 2.1 Classification of the substance or mixture



GHS05

Eye Damage 1 - H318 Causes serious eye damage.



GHS08

Aspiration Hazard 1 - H304 May be fatal if swallowed and enters airways.



GHS02

Flammable Liquids 3 - H226 Flammable liquid and vapor.



GHS07

Skin Irritation 2 - H315 Causes skin irritation.  
Sensitization - Skin 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

- GHS label elements
- Hazard pictograms

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GHS05 GHS08 GHS02 GHS07 GHS09

- Signal word  
Danger

- Hazard statements

H226 Flammable liquid and vapor.  
H304 May be fatal if swallowed and enters airways.  
H315 Causes skin irritation.  
H317 May cause an allergic skin reaction.  
H318 Causes serious eye damage.  
H410 Very toxic to aquatic life with long lasting effects.

- Precautionary statements

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.  
P233 Keep container tightly closed.  
P240 Ground/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.

**03 Composition/information on ingredients**

3.1 Chemical characterization: Substances

- | CAS No.   | Description                    |
|-----------|--------------------------------|
| 8016-38-4 | Citrus aurantium var. amara L. |
- Identification number(s)
  - EC Number:  
639-655-8

• Dangerous components:

CAS Number		%
78-70-6	<b>linalol</b> EC Number: 201-134-4	20,001-50,00
5989-27-5	<b>limonene-d</b> EC Number: 227-813-5	20,001-50,00
127-91-3	<b>pin-2(10)-ene (pinene beta)</b> EC Number: 204-872-5	10,001-20,00
115-95-7	<b>acetate linalyle</b> EC Number: 204-116-4	10,001-20,00
98-55-5	<b>p-menth-1-en-8-ol</b> EC Number: 202-680-6	5,001-10,00
7212-44-4	<b>nerolidol</b> EC Number: 230-597-5	1,001- 5,00
105-87-3	<b>geranyl acetate</b> EC Number: 203-341-5	1,001- 5,00
106-24-1	<b>geraniol</b> EC Number: 203-377-1	1,001- 5,00
4602-84-0	<b>farnesol</b> EC Number: 225-004-1	1,001- 5,00
123-35-3	<b>myrcene</b> EC Number: 204-622-5	1,001- 5,00
80-56-8	<b>pin-2(3)-ene (alpha pinene)</b> EC Number: 201-291-9	0,101-1,00
87-44-5	<b>caryophyllene</b> EC Number: 201-746-1	0,101-1,00
586-62-9	<b>p-mentha-1,4(8)-diene (terpinolene)</b> EC Number: 209-578-0	0,101-1,00

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**99-86-5                      terpinene alpha**  
**EC Number: 202-795-1**

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**0,101-1,00**

#### 04 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.

#### 05 Fire-fighting measures

- Suitable extinguishing agents:  
CO<sub>2</sub>, sand, extinguishing powder. Do not use water.  
Use fire fighting measures that suit the environment.
  - 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.
- Protective equipment:  
Do not inhale explosion gases or combustion gases.
  - Additional information  
Cool endangered receptacles with water spray.

#### 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
- 6.3 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.

#### 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 protection against explosions and fires:  
Keep ignition sources away - Do not smoke.  
Protect against electrostatic charges.
- 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.

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- Further information about storage conditions:  
Keep receptacle 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.

**08 Exposure controls/personal protection**

- Components 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 that were valid during the creation were used as basis.
- Personal protective equipment:
- General protective and hygienic measures:  
The usual precautionary measures for handling chemicals should be followed.  
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 skin.  
Avoid contact with the eyes.
- Breathing equipment:  
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

**09 Physical and chemical properties**

General Information	
<b>Appearance:</b>	
<b>Form:</b>	fluid
<b>Color:</b>	pale yellow to yellow
<b>Odor:</b>	floral
<b>Odor threshold:</b>	Not determined.
<b>Change in condition</b>	
<b>Boiling point/Boiling range:</b>	Undetermined.
<b>Flash point:</b>	53,5 °C NFT 60-103 CC
<b>Flammability (solid, gaseous):</b>	Undetermined.
<b>Auto igniting:</b>	Not determined.
<b>Danger of explosion:</b>	Undetermined.
<b>Vapor pressure:</b>	Not determined.
<b>Density:</b>	Not determined.
<b>Relative density</b>	0,8620 0,8750 D20/20
<b>Solubility in / Miscibility with</b>	
<b>Water:</b>	Not determined.
<b>Partition coefficient (n-octanol/water):</b>	Not determined.

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**Other information**

No further relevant information available.

## 10 Stability and reactivity

- Thermal decomposition / conditions to be avoided:  
Undetermined.
- Incompatible materials:  
No further relevant information available.
- Hazardous decomposition products:  
Undetermined.

## 11 Toxicological information

- Acute toxicity:
- LD/LC50 values that are relevant for classification:

**ISO LD/LC**

**78-70-6 linalol**

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

**5989-27-5 limonene-d**

Oral, LD50: 4400 mg/kg (rat)

**98-55-5 p-menth-1-en-8-ol**

Oral, LD50: 4300 mg/kg (rat)

**7212-44-4 nerolidol**

Oral, LD50: >5000 mg/kg (rat) (RIFM 1973)  
Oral, LD50: 9626 mg/kg (mouse) (RIFM 1967)  
Dermal, LD50: >5000 mg/kg (Rabbit) (RIFM 1973)

**105-87-3 geranyl acetate**

Oral, LD50: >4000 mg/kg (rat) (NTP 1987)

**4602-84-0 farnesol**

Oral, LD50: 20000 mg/kg (rat)  
Dermal, LD50: 15000 mg/kg (rat)

**87-44-5 caryophyllene**

Oral, LD50: > 5000 mg/kg (rat) (Hart and Wong 1971)

**99-86-5 terpinene alpha**

Oral, LD50: 1680 mg/kg (ETA)

- Primary irritant effect:
- on the skin:  
Irritant to skin and mucous membranes.  
Causes skin irritation.
- on the eye:

**7212-44-4 nerolidol**

Irritation of eyes, OECD 405 DRAIZE: NOT CLASSIFIED (Rabbit) (RIFM 1967)  
Strong irritant with the danger of severe eye injury.  
Causes serious eye damage.

- Sensitization:  
Sensitization possible through skin contact.
- Subacute to chronic toxicity:

**78-70-6 linalol**

Oral, NOAEL: 200 mg/kg (rat) (maternal toxicity, Politano and al., 2008)

**115-95-7 acetate linalyle**

Oral, NOAEL: 250 mg/kg (rat) (90days, RIFM 1980)

- OSHA-Ca (Occupational Safety & Health Administration)  
Substance is not listed.
- Specific target organ toxicity - single exposure  
Not determined.
- Specific target organ toxicity - repeated exposure  
Not determined.

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## 12 Ecological information

- Aquatic toxicity:
  - 8016-38-4 Citrus aurantium var. amara L.**  
CE50/48h: 0,445-0,465 mg/l (daphnia) (QSAR 2018)  
96h-LC50: 0,766-0,877 mg/l (algae) (QSAR 2018)
  - 78-70-6 linalol**  
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)
  - 5989-27-5 limonene-d**  
LD50: 0,71 mg/l (fish) (OECD 203)
  - 115-95-7 acetate linalyle**  
ErC50(0-72h): 9,6 mg/l (algae) (RIFM 2015)  
ErC50(0-48h): 15 mg/l (daphnia) (RIFM 2015)  
96h-LC50: 11 mg/l (fish) (RIFM 1998)
  - 123-35-3 7-méthyl-3-méthylèneocta-1,6-diène (myrcene)**  
LD50: 0,51 mg/l (fish) (OECD 203)  
CE50/48h: 0,65 mg/l (daphnia)
- Persistence and degradability  
No further relevant information available.
- Behavior in environmental systems:  
Not determined.
- Bioaccumulative potential  
No further relevant information available.
- Ecotoxicological effects:  
Not determined.
- Additional ecological information:
- General notes:  
Very toxic for aquatic organisms  
The material is harmful to the environment.

## 13 Disposal considerations

- Waste treatment methods
- Recommendation:  
Must be specially treated adhering to official regulations.
- Uncleaned packagings:  
Recommendation:  
Disposal must be made according to official regulations.

## 14 Transport information

- UN-Number
 

<b>DOT</b>	UN1169
<b>ADR</b>	UN1169
<b>IMDG</b>	UN1169
<b>IATA</b>	UN1169
- UN proper shipping name
 

<b>DOT</b>	EXTRACTS, AROMATIC, LIQUID
<b>ADR</b>	1169 EXTRACTS, AROMATIC, LIQUID
<b>IMDG</b>	EXTRACTS, AROMATIC, LIQUID (CITRUS AURANTIUM VAR. AMARA L.)
<b>IATA</b>	EXTRACTS, AROMATIC, LIQUID
- Transport hazard class(es)
 

<b>DOT</b>	
<b>Class</b>	3 Flammable liquids

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**Label**



**ADR**

**Class**

3 (F1) Flammable liquids

**Label**



**IMDG**

**Class**

3 Flammable liquids

**Label**



**IATA**

**Class**

3 Flammable liquids

**Label**



• Packing group

**DOT** III

**ADR** III

**IMDG** III

**IATA** III

• Environmental hazards:

**Marine pollutant:** Yes

• Special precautions for user

Warning: Flammable liquids

**Danger code (Kemler):** 30

**EMS Number:** F-E,S-D

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

Not applicable.

• Transport/Additional information:

Not applicable.

**DOT**

**Quantity limitations** On passenger aircraft/rail: 60 L On cargo aircraft only: 220 L

**IMDG**

**Limited quantities (LQ)** 5L

**Excepted quantities (EQ)** E1

• UN "Model Regulation":

UN 1169 EXTRACTS, AROMATIC, LIQUID, 3, III, DANGEREUX POUR L'ENVIRONNEMENT

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### 15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture  
Non-mandatory
- Hazardous Air Pollutants  
Substance is not listed.

### 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 US 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 vapor.
H227	Combustible liquid.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H320	Causes eye irritation.
H400	Very toxic to aquatic life.
H401	Toxic to aquatic life.
H402	Harmful 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.
- Date of preparation / last revision  
15.12.2022
- 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
  
- Sources  
IFRA/IOFI Labelling Manual, REACH registration dossier, supplier information
  
- \* Data compared to the previous version altered.