

1315908

Reviewed on: 19.12.2022  
Printing date: 19.12.2022

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

#### 1.1 Product identifier

- Trade name:  
GERANIOL EX PALMAROSA
- Article number:  
F1885
- CAS Number:  
106-24-1
- EC Number:  
203-377-1
- No CAS EINECS:  
106-24-1
- Registration number  
01-2119552430-49-0008

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                      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

### SECTION 02: Hazards identification

#### 2.1 Classification of the substance or mixture

- Classification according to Regulation (EC) No 1272/2008



GHS05

Eye Dam. 1 - H318 Causes serious eye damage.



GHS07

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

#### 2.2 Label elements

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



GHS05      GHS07

- Signal word  
Danger

- Hazard statements

- \* H315 Causes skin irritation.
- \* H317 May cause an allergic skin reaction.
- \* H318 Causes serious eye damage.

- Precautionary statements

- P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
- P264 Wash thoroughly after handling.
- P272 Contaminated work clothing should not be allowed out of the workplace.
- P280 Wear protective gloves.
- P302+P352 IF ON SKIN: Wash with plenty of water.

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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
106-24-1	Cymbopogon martinii (Roxb.) Will. Watson var. motia (Syn Andropogon martini Roxb.)

- Identification number(s)
- EC number:  
203-377-1

- Dangerous components:

CAS Number		%
106-24-1	<b>geraniol</b> EC number: 203-377-1 ☠ Eye Dam. 1 - H318; ⚠ Skin Irrit. 2 - H315, Skin Sens. 1 - H317	<b>50,001-100</b>
87-44-5	<b>beta-Caryophyllene</b> EC number: 201-746-1 ☠ Asp. Tox. 1 - H304; ⚠ Skin Sens. 1B - H317	<b>1,001- 5,00</b>
78-70-6	<b>Linalool</b> EC number: 201-134-4 ⚠ Skin Irrit. 2 - H315, Eye Irrit. 2 - H319, Skin Sens. 1B - H317	<b>0,101-1,00</b>
5392-40-5	<b>Citral</b> EC number: 226-394-6 ⚠ Skin Irrit. 2 - H315, Eye Irrit. 2 - H319, Skin Sens. 1B - H317	<b>0,101-1,00</b>

**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.

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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:  
CO<sub>2</sub>, 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.

#### 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.  
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.  
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.

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#### 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.  
Do not inhale gases / fumes / aerosols.  
Do not inhale dust / smoke / mist.  
Avoid contact with the skin.  
Avoid contact with the eyes.
- 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

\* **SECTION 09: Physical and chemical properties**

**9.1 Information on basic physical and chemical properties**

**General Information**

* <b>Physical state</b>	Fluid
<b>Colour:</b>	colourless to pale yellow
<b>Odour:</b>	rose
<b>Odour threshold:</b>	Not determined.
<b>Melting point/freezing point:</b>	-15,0 °C
<b>Boiling point or initial boiling point and boiling range</b>	229,0 °C
<b>Flammability</b>	Not determined.
<b>Lower and upper explosion limit</b>	
* <b>Lower:</b>	Not determined.
* <b>Upper:</b>	Not determined.
<b>Flash point:</b>	108,0 °C NPT 60-103 CC
* <b>Decomposition temperature:</b>	Not determined.
* <b>pH</b>	Not determined.
<b>Viscosity:</b>	
* <b>Kinematic viscosity</b>	Not determined.
* <b>Dynamic:</b>	Not determined.
<b>Solubility</b>	
<b>water:</b>	Not determined.

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	<b>Partition coefficient n-octanol/water (log value)</b>	Not determined.
	<b>Vapour pressure:</b>	Not determined.
	<b>Density and/or relative density</b>	
	<b>Density:</b>	Not determined.
*	<b>Relative density</b>	0,8790 0,8840 D20/20
*	<b>Vapour density</b>	Not determined.
	<b>9.2 Other information</b>	No further relevant information available.
	<b>Appearance:</b>	
	<b>Form:</b>	fluid
	<b>Important information on protection of health and environment, and on safety.</b>	
	<b>Auto-ignition temperature:</b>	Not determined.
	<b>Explosive properties:</b>	Not determined.
	<b>Solvent content:</b>	
*	<b>Solids content:</b>	0,00 %
	<b>Change in condition</b>	
*	<b>Evaporation rate</b>	Not determined.
	<b>Information with regard to physical hazard classes</b>	
*	<b>Explosives</b>	not applicable
*	<b>Flammable gases</b>	not applicable
*	<b>Aerosols</b>	not applicable
*	<b>Oxidising gases</b>	not applicable
*	<b>Gases under pressure</b>	not applicable
*	<b>Flammable liquids</b>	not applicable
*	<b>Flammable solids</b>	not applicable
*	<b>Self-reactive substances and mixtures</b>	not applicable
*	<b>Pyrophoric liquids</b>	not applicable
*	<b>Pyrophoric solids</b>	not applicable
*	<b>Self-heating substances and mixtures</b>	not applicable
*	<b>Substances and mixtures, which emit flammable gases in contact with water</b>	not applicable
*	<b>Oxidising liquids</b>	not applicable
*	<b>Oxidising solids</b>	not applicable
*	<b>Organic peroxides</b>	not applicable
*	<b>Corrosive to metals</b>	not applicable
*	<b>Desensitised explosives</b>	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

**106-24-1 Cymbopogon martinii (Roxb.) Will. Watson var.**

**motia (Syn Andropogon martini Roxb.)**

Oral, LD50: 3600 mg/kg (rat) (Standard acute method)

Dermal, LD50: >5000 mg/kg (Rabbit) (standard acute method)

**87-44-5 beta-Caryophyllene**

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

**78-70-6 Linalool**

Oral, LD50: 2790 mg/kg (rat)

Dermal, LD50: 5610 mg/kg (Rabbit)

**5392-40-5 Citral**

Oral, LD50: 4960 mg/kg (rat)

- Primary irritant effect:

- Skin corrosion/irritation

Irritant to skin and mucous membranes.

Causes skin irritation.

\*

- Serious eye damage/irritation

Strong irritant with the danger of severe eye injury.

Causes serious eye damage.

\*

- Respiratory or skin sensitisation

Sensitization possible through skin contact.

- Germ cell mutagenicity

**106-24-1 Cymbopogon martinii (Roxb.) Will. Watson var.**

**motia (Syn Andropogon martini Roxb.)**

OECD 471 AMES: NEGATIVE (in vitro) (INRS 315 2017)

**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

Not determined.

- Subacute to chronic toxicity:

**106-24-1 Cymbopogon martinii (Roxb.) Will. Watson var.**

**motia (Syn Andropogon martini Roxb.)**

Oral, NOAEL: 1000 mg/kg (rat) (103 weeks, INRS 315 2017)

**87-44-5 beta-Caryophyllene**

Oral, NOAEL: 700 mg/kg (rat) (90 days Schmitt 2016)

11.2 Information on other hazards

- Endocrine disrupting properties  
Substance is not listed.

### SECTION 12: Ecological information

12.1 Toxicity

- Aquatic toxicity:

**106-24-1 Cymbopogon martinii (Roxb.) Will. Watson var.**

**motia (Syn Andropogon martini Roxb.)**

CE50/48h: 10,8 mg/l (daphnia) (OECD 202)

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ErC50(0-72h): 13,9 mg/l (algae) (OECD 201)

**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.

• **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.

• **Ecotoxicological effects:**  
Not determined.

**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

**14.3 Transport hazard class(es)**

**ADR**

**Class** Void

**IMDG**

**Class** Void

**IATA**

**Class** Void

**14.4 Packing group**

**ADR** Void

**IMDG** Void

**IATA** Void

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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
- 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
 

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.

- 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:

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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.