

1379107

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:
NUTMEG ABSOLUTE
- Article number:
F1806
- CAS Number:
8008-45-5
- EC Number:
282-013-3
- No CAS EINECS:
84082-68-8

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



GHS08

Muta. 2 - H341 Suspected of causing genetic defects.
Carc. 1A - H350 May cause cancer.
Asp. Tox. 1 - H304 May be fatal if swallowed and enters airways.



GHS07

Skin Sens. 1 - H317 May cause an allergic skin reaction.



GHS09

Aquatic Chronic 2 - H411 Toxic to aquatic life with long lasting effects.

2.2 Label elements

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



GHS08



GHS07



GHS09

- Signal word
Danger

- Hazard statements

- * H304 May be fatal if swallowed and enters airways.
- * H317 May cause an allergic skin reaction.
- * H341 Suspected of causing genetic defects.
- * H350 May cause cancer.

(continued on page 2)

1379107

Reviewed on: 19.12.2022
Printing date: 19.12.2022

PRODUCT : NUTMEG ABSOLUTE

(continued of page 1)

- H411 Toxic to aquatic life with long lasting effects.
- Precautionary statements
 - P201 Obtain special instructions before use.
 - P202 Do not handle until all safety precautions have been read and understood.
 - P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
 - P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.
 - P405 Store locked up.
 - 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 |
|-----------|---------------------------|
| 8008-45-5 | Myristica fragrans Houtt. |
- Identification number(s)
 - EC number:
282-013-3

- Dangerous components:

| CAS Number | | % |
|------------|--|-------------|
| * | 97-54-1 isoeugenol 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 % | 1,001- 5,00 |
| * | 94-59-7 5-allyl-1,3-benzodioxole EC number: 202-345-4 ⚠ Muta. 2 - H341, Carc. 1B - H350; ⚠ Acute Tox. 4 - H302 | 0,101-1,00 |
| * | 93-15-2 methyl eugenol EC number: 202-223-0 ⚠ Acute Tox. 4 - H302; ⚠ Muta. 2 - H341, Carc. 2 - H351 | 0,101-1,00 |
| * | 97-53-0 Eugenol EC number: 202-589-1 ⚠ Eye Irrit. 2 - H319, Skin Sens. 1B - H317 | 0,101-1,00 |

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.

(continued on page 3)

1379107

Reviewed on: 19.12.2022
Printing date: 19.12.2022

PRODUCT : NUTMEG ABSOLUTE

(continued of page 2)

- 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.

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.
- Open and handle receptacle with care.
- 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.

(continued on page 4)

1379107

Reviewed on: 19.12.2022
Printing date: 19.12.2022

PRODUCT : NUTMEG ABSOLUTE

(continued of page 3)

- * 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.
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing
 - * Wash hands before breaks and at the end of work.
Store protective clothing separately.
 - * 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.
 - * Suitable respiratory protective device recommended.
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 | Solid |
| Colour: | orange-red |
| 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. |

(continued on page 5)

1379107

Reviewed on: 19.12.2022
Printing date: 19.12.2022

PRODUCT : NUTMEG ABSOLUTE

(continued of page 4)

| | | |
|---|--|--|
| * | Upper: | Not determined. |
| * | Flash point: | > 100,0 °C NFT 60-103 CC |
| * | Decomposition temperature: | Not determined. |
| * | pH | Not applicable. |
| | Viscosity: | |
| * | Kinematic viscosity | Not applicable. |
| * | Dynamic: | Not applicable. |
| | Solubility | |
| | water: | Not determined. |
| | Partition coefficient n-octanol/water (log value) | Not determined. |
| * | Vapour pressure: | Not applicable. |
| | Density and/or relative density | |
| | Density: | Not determined. |
| * | Relative density | not available |
| * | Vapour density | Not applicable. |
| | 9.2 Other information | No further relevant information available. |
| | Appearance: | |
| | Form: | pasty |
| | 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 applicable. |
| | 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 | 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 |
| * | 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

(continued on page 6)

1379107

Reviewed on: 19.12.2022
Printing date: 19.12.2022

PRODUCT : NUTMEG ABSOLUTE

(continued of page 5)

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

- | | |
|---|---|
| * | <p>97-54-1 isoeugenol Oral, LD50: 1560 mg/kg (rat)</p> <p>94-59-7 safrole Oral, LD50: 1950 mg/kg (rat) Dermal, LD50: >5000 mg/kg (Rabbit)</p> |
| * | <p>93-15-2 methyl eugenol Oral, LD50: 810 mg/kg (rat) (Beroza and al., 1975)</p> |
| * | <p>97-53-0 Eugenol Oral, LD50: 1930 mg/kg (rat)</p> <ul style="list-style-type: none"> • Primary irritant effect: <ul style="list-style-type: none"> - 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 Suspected of causing genetic defects. |
| * | <ul style="list-style-type: none"> • Carcinogenicity May cause cancer. • Reproductive toxicity Not determined. |
| * | <ul style="list-style-type: none"> • STOT-single exposure Not determined. • STOT-repeated exposure Not determined. |
| * | <ul style="list-style-type: none"> • Aspiration hazard May be fatal if swallowed and enters airways. |
| * | <ul style="list-style-type: none"> • Subacute to chronic toxicity: Not determined. |
| * | <p>11.2 Information on other hazards</p> <ul style="list-style-type: none"> • Endocrine disrupting properties Substance is not listed. |

SECTION 12: Ecological information

- | | |
|---|--|
| * | <p>12.1 Toxicity</p> <ul style="list-style-type: none"> • Aquatic toxicity: |
| * | <p>93-15-2 methyl eugenol</p> |
| * | <p>CE50/48h: 38 mg/l (daphnia) (Ministry of the Environment of Japan 2018)</p> |
| * | <p>ErC50(0-72h): 22 mg/l (algae) (Ministry of the Environment of Japan 2018)</p> |
| * | <p>96h-LC50: 14 mg/l (fish) (Ministry of the Environment of Japan 2018)</p> |

(continued on page 7)

1379107

Reviewed on: 19.12.2022
Printing date: 19.12.2022

PRODUCT : NUTMEG ABSOLUTE

(continued of page 6)

- * 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.
 - Remark:
Toxic for fish
 - * Additional ecological information:
 - * General notes:
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.

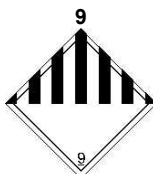
SECTION 14: Transport information

- 14.1 UN number or ID number

| | |
|-------------|--------|
| ADR | UN3077 |
| IMDG | UN3077 |
| IATA | UN3077 |
- 14.2 UN proper shipping name

| | |
|-------------|--|
| ADR | 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (MYRISTICA FRAGRANS HOUTT.) |
| IMDG | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (MYRISTICA FRAGRANS HOUTT.) |
| IATA | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (MYRISTICA FRAGRANS HOUTT.) |
- 14.3 Transport hazard class(es)

| | |
|--------------|---|
| ADR | |
| Class | 9 (M7) Miscellaneous dangerous substances and articles. |
| Label | |



(continued on page 8)

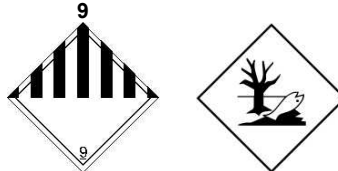
1379107

Reviewed on: 19.12.2022
Printing date: 19.12.2022

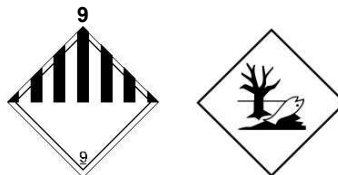
PRODUCT : NUTMEG ABSOLUTE

(continued of page 7)

IMDG
Class 9 Miscellaneous dangerous substances and articles.
Label



IATA
Class 9 Miscellaneous dangerous substances and articles.
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: Miscellaneous dangerous substances and articles.
Danger code (Kemler): 90
EMS Number: F-A,S-F

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) 5 kg
Transport category 3
Tunnel restriction code E

IMDG
Limited quantities (LQ) 5 kg
Excepted quantities (EQ) E1

- UN "Model Regulation":
UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (MYRISTICA FRAGRANS HOUTT.), 9, III

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.

(continued on page 9)

1379107

Reviewed on: 19.12.2022
Printing date: 19.12.2022

PRODUCT : NUTMEG ABSOLUTE

(continued of page 8)

- * 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:
 - * Additional classification according to Decree on Hazardous Materials, Annex II:
Carcinogenic hazardous material group I (extremely dangerous).
 - * Carcinogenic hazardous material group II (very dangerous).
 - * Carcinogenic hazardous material group III (dangerous).
 - * Information about limitation of use:
Workers are not allowed to be exposed to this hazardous material. Exceptions can be made by the authorities in certain cases.
 - * Technical instructions (air):
 - * Class Share in %
I 0,72
 - * 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

| | |
|------|---------------------------------------|
| H302 | Harmful if swallowed. |
| H312 | Harmful in contact with skin. |
| H315 | Causes skin irritation. |
| H317 | May cause an allergic skin reaction. |
| H319 | Causes serious eye irritation. |
| H341 | Suspected of causing genetic defects. |
| H350 | May cause cancer. |
| H351 | Suspected of causing cancer. |
 - 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

(continued on page 10)

1379107

Reviewed on: 19.12.2022
Printing date: 19.12.2022**PRODUCT : NUTMEG ABSOLUTE***(continued of page 9)*

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.