

Safety Data Sheet

according to 29 CFR 1910.1200(g)

NATURAL BETA-PINENE

Revision date: 09/16/2022

Product code: 290300US

Page 1 of 9

1. Identification

Product identifier

NATURAL BETA-PINENE

Substance name: NATURAL BETA-PINENE
 CAS No: 127-91-3

Recommended use of the chemical and restrictions on use

Use of the substance/mixture

Manufacturing of: - Air care products - Perfumes, fragrances - Pharmaceuticals - Cosmetics, personal care products - Flavouring Substances - Other

Details of the supplier of the safety data sheet

| | | |
|-------------------------|----------------------------|-------------------------------|
| Company name: | Axxence Aromatic GmbH | |
| Street: | Tackenweide 28 | |
| Place: | D-46446 Emmerich am Rhein | |
| Telephone: | + 49 2822 68561 0 | Telefax: + 49 2822 68561 39 |
| e-mail: | info@axxence.com | |
| Contact person: | Andreas Goertz | Telephone: + 49 2822 68561 37 |
| e-mail: | andreas.goertz@axxence.com | |
| Internet: | www.axxence.de | |
| Responsible Department: | QM - Regulatory Affairs | |

Emergency phone number: +49 2822 68561 99

2. Hazard(s) identification

Classification of the chemical

29 CFR Part 1910.1200

Flammable liquids: Flam. Liq. 3
 Skin corrosion/irritation: Skin Irrit. 2
 Respiratory or skin sensitization: Skin Sens. 1
 Aspiration hazard: Asp. Tox. 1
 Hazardous to the aquatic environment: Aquatic Acute 1
 Hazardous to the aquatic environment: Aquatic Chronic 1

Label elements

29 CFR Part 1910.1200

Signal word: Danger

Pictograms:



Hazard statements

Flammable liquid and vapor
 May be fatal if swallowed and enters airways
 Causes skin irritation
 May cause an allergic skin reaction

Precautionary statements

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
 Keep container tightly closed.
 Ground/bond container and receiving equipment.
 Use explosion-proof electrical/ventilating/lighting equipment.
 Use only non-sparking tools.

Safety Data Sheet

according to 29 CFR 1910.1200(g)

NATURAL BETA-PINENE

Revision date: 09/16/2022

Product code: 290300US

Page 2 of 9

Take precautionary measures against static discharge.
 Avoid breathing dust/fume/gas/mist/vapors/spray.
 Wash hands thoroughly after handling.
 Contaminated work clothing must not be allowed out of the workplace.
 Wear protective gloves/protective clothing/eye protection/face protection.
 If swallowed: Immediately call a poison center/doctor.
 Do NOT induce vomiting.
 If on skin: Wash with plenty of Water and soap.
 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
 If skin irritation or rash occurs: Get medical advice/attention.
 Take off contaminated clothing and wash it before reuse.
 Store in a well-ventilated place. Keep cool.
 Store locked up.
 Dispose of contents/container to Organic waste.

Hazards not otherwise classified

No information available.

3. Composition/information on ingredients

Substances

Sum formula: C10 H16
 Molecular weight: 136,24

Hazardous components

| CAS No | Components | Quantity |
|----------|---------------------|----------|
| 127-91-3 | NATURAL BETA-PINENE | 100 % |

4. First-aid measures

Description of first aid measures

After contact with skin

After contact with skin, wash immediately with plenty of water and soap. Take off immediately all contaminated clothing and wash it before reuse. Medical treatment necessary.

After contact with eyes

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

After ingestion

Observe risk of aspiration if vomiting occurs. If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention.

Most important symptoms and effects, both acute and delayed

No information available.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media

Carbon dioxide (CO₂), Foam, Extinguishing powder.

Unsuitable extinguishing media

Water.

Safety Data Sheet

according to 29 CFR 1910.1200(g)

NATURAL BETA-PINENE

Revision date: 09/16/2022

Product code: 290300US

Page 3 of 9

Specific hazards arising from the chemical

Flammable. Vapors may form explosive mixtures with air.

Special protective equipment and precautions for fire-fighters

Wear a self-contained breathing apparatus and chemical protective clothing. Full protection suit.

Additional information

Use water spray/stream to protect personnel and to cool endangered containers. Suppress gases/vapors/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

General advice

Remove all sources of ignition. Do not breathe gas/fume/vapor/spray. Avoid contact with skin, eyes and clothes. Use personal protection equipment.

Environmental precautions

Do not allow uncontrolled discharge of product into the environment. Explosion risk.

Methods and material for containment and cleaning up

For cleaning up

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.

Other information

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.

Reference to other sections

Safe handling: see section 7

Personal protection equipment (PPE): see section 8

Disposal: see section 13

7. Handling and storage

Precautions for safe handling

Advice on safe handling

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fume/vapor/spray.

Advice on protection against fire and explosion

Keep away from sources of ignition - No smoking. Take precautionary measures against static discharges. Vapors may form explosive mixtures with air.

Advice on general occupational hygiene

Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme. Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat, drink, smoke, sniff. Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme. Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat, drink, smoke, sniff.

Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed. Keep locked up. Store in a place accessible by authorized persons only. Provide adequate ventilation as well as local exhaust at critical locations. Keep in a cool, well-ventilated place. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Hints on joint storage

Do not store together with: Oxidizing agent. Pyrophoric or self-heating substances.

Safety Data Sheet

according to 29 CFR 1910.1200(g)

NATURAL BETA-PINENE

Revision date: 09/16/2022

Product code: 290300US

Page 4 of 9

8. Exposure controls/personal protection

Control parameters

Exposure limits

| CAS No | Substance | ppm | mg/m ³ | f/cc | Category | Origin |
|----------|--------------------------------------|-----|-------------------|------|-----------|------------|
| 127-91-3 | Selected monoterpenes: pin-2(10)-ene | 20 | | | TWA (8 h) | ACGIH-2022 |

Exposure controls



Appropriate engineering controls

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fume/vapor/spray.

Individual protection measures, such as personal protective equipment

Eye/face protection

Wear eye/face protection.

Hand protection

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves. Suitable gloves type: NBR (Nitrile rubber) + Natural fibres (e.g. cotton)

Skin protection

Use of protective clothing.

Respiratory protection

In case of inadequate ventilation wear respiratory protection.

9. Physical and chemical properties

Information on basic physical and chemical properties

| | |
|---|------------------------|
| Physical state: | Liquid |
| Color: | colorless |
| Melting point/freezing point: | - 61 °C |
| Boiling point or initial boiling point and boiling range: | 166 °C |
| Flammability | |
| Solid/liquid: | not applicable |
| Gas: | not applicable |
| Flash point: | 39 °C |
| Auto-ignition temperature: | 255 °C |
| Decomposition temperature: | not determined |
| pH-Value: | not determined |
| Viscosity / kinematic: (at 40 °C) | 1,9 mm ² /s |
| Water solubility: (at 20 °C) | 0,007 g/L |
| Solubility in other solvents | not determined |

Safety Data Sheet

according to 29 CFR 1910.1200(g)

NATURAL BETA-PINENE

Revision date: 09/16/2022

Product code: 290300US

Page 5 of 9

| | |
|--|------------------------|
| Partition coefficient n-octanol/water: | 4,4 |
| Vapor pressure: (at 20 °C) | 5,19 hPa |
| Vapor pressure: (at 50 °C) | 16,2 hPa |
| Density (at 20 °C): | 0,87 g/cm ³ |
| Relative vapour density: (at 20 °C) | 4,1 |

Other information

Information with regard to physical hazard classes

Explosive properties

The product is not: Explosive.

Oxidizing properties

The product is not: oxidising.

Other safety characteristics

Evaporation rate: not determined

Solvent content: 0%

Solid content: 0%

Viscosity / dynamic:
(at 20 °C) 2,2 mPa·s

10. Stability and reactivity

Reactivity

Flammable.

Chemical stability

The product is stable under storage at normal ambient temperatures.

Possibility of hazardous reactions

No known hazardous reactions.

Conditions to avoid

Keep away from sources of heat (e.g. hot surfaces), sparks and open flames. Vapors may form explosive mixtures with air.

Incompatible materials

No information available.

Hazardous decomposition products

No known hazardous decomposition products.

11. Toxicological information

Information on toxicological effects

Acute toxicity

Based on available data, the classification criteria are not met.

| CAS No | Components | | | | |
|----------|---------------------|---------------|---------|--------|---------------|
| | Exposure route | Dose | Species | Source | Method |
| 127-91-3 | NATURAL BETA-PINENE | | | | |
| | oral | LD50 mg/kg | >5000 | Rat | REACH Dossier |
| | dermal | LD50 mg/kg | >5000 | Rabbit | REACH Dossier |

Safety Data Sheet

according to 29 CFR 1910.1200(g)

NATURAL BETA-PINENE

Revision date: 09/16/2022

Product code: 290300US

Page 6 of 9

Irritation and corrosivity

Causes skin irritation

Serious eye damage/eye irritation: Based on available data, the classification criteria are not met.

Sensitizing effects

May cause an allergic skin reaction (NATURAL BETA-PINENE)

Carcinogenic/mutagenic/toxic effects for reproduction

Based on available data, the classification criteria are not met.

Specific target organ toxicity (STOT) - single exposure

Based on available data, the classification criteria are not met.

Specific target organ toxicity (STOT) - repeated exposure

Based on available data, the classification criteria are not met.

Carcinogenicity (OSHA): Not listed.

Carcinogenicity (IARC): Not listed.

Carcinogenicity (NTP): Not listed.

Aspiration hazard

May be fatal if swallowed and enters airways

Information on other hazards

Endocrine disrupting properties

No information available.

Further information

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP]. Specific hazards arising from the chemical!

12. Ecological information

Ecotoxicity

Very toxic to aquatic life with long lasting effects.

| CAS No | Components | | | | | |
|----------|--------------------------|----------------|-----------|---------|---|---------------------------|
| | Aquatic toxicity | Dose | [h] [d] | Species | Source | Method |
| 127-91-3 | NATURAL BETA-PINENE | | | | | |
| | Acute fish toxicity | LC50 mg/l | 0,502 | 96 h | Pimephales promelas (fathead minnow) | REACH Dossier OECD 203 |
| | Acute algae toxicity | ErC50 mg/l | 0,826 | 72 h | Pseudokirchneriella subcapitata | REACH Dossier OECD 201 |
| | Acute crustacea toxicity | EC50 | 1,2 mg/l | 48 h | Daphnia magna (Big water flea) | REACH Dossier OECD 202 |
| | Acute bacteria toxicity | (EC50 mg/l) | 326 | | Activated sludge | REACH Dossier OECD 209 |

Persistence and degradability

The product has not been tested.

Bioaccumulative potential

The product has not been tested.

Partition coefficient n-octanol/water

| CAS No | Components | Log Pow |
|----------|---------------------|---------|
| 127-91-3 | NATURAL BETA-PINENE | 4,4 |

BCF

| CAS No | Components | BCF | Species | Source |
|----------|---------------------|-----|---------|---------------|
| 127-91-3 | NATURAL BETA-PINENE | 838 | | REACH Dossier |

Safety Data Sheet

according to 29 CFR 1910.1200(g)

NATURAL BETA-PINENE

Revision date: 09/16/2022

Product code: 290300US

Page 7 of 9

Mobility in soil

The product has not been tested.

Endocrine disrupting properties

This substance does not have endocrine disrupting properties with respect to non-target organisms.

Other adverse effects

No information available.

Further information

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

13. Disposal considerations

Waste treatment methods

Disposal recommendations

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil. Dispose of waste according to applicable legislation.

Contaminated packaging

Hazardous waste according to Directive 2008/98/EC (waste framework directive). Handle contaminated packages in the same way as the substance itself.

14. Transport information

U.S. DOT 49 CFR 172.101

| | |
|---|------------------------------|
| <u>UN number or ID number:</u> | UN 2319 |
| <u>Proper shipping name:</u> | TERPENE HYDROCARBONS, N.O.S. |
| <u>Transport hazard class(es):</u> | 3 |
| <u>Packing group:</u> | III |
| Hazard label: | 3 |



Marine transport (IMDG)

| | |
|---|------------------------------|
| <u>UN number or ID number:</u> | UN 2319 |
| <u>UN proper shipping name:</u> | TERPENE HYDROCARBONS, N.O.S. |
| <u>Transport hazard class(es):</u> | 3 |
| <u>Packing group:</u> | III |
| Hazard label: | 3 |



| | |
|---------------------|---|
| Special Provisions: | - |
| Limited quantity: | 5 L |
| Excepted quantity: | E1 |
| EmS: | F-E, S-D |
| Segregation group: | heavy metals and their salts (including their organometallic compounds) |

Air transport (ICAO-TI/IATA-DGR)

| | |
|---|------------------------------|
| <u>UN number or ID number:</u> | UN 2319 |
| <u>UN proper shipping name:</u> | TERPENE HYDROCARBONS, N.O.S. |
| <u>Transport hazard class(es):</u> | 3 |
| <u>Packing group:</u> | III |
| Hazard label: | 3 |

Safety Data Sheet

according to 29 CFR 1910.1200(g)

NATURAL BETA-PINENE

Revision date: 09/16/2022

Product code: 290300US

Page 8 of 9



| | | |
|--|------|-------|
| Limited quantity Passenger: | 10 L | |
| Passenger LQ: | Y344 | |
| Excepted quantity: | E1 | |
| IATA-packing instructions - Passenger: | | 355 |
| IATA-max. quantity - Passenger: | | 60 L |
| IATA-packing instructions - Cargo: | | 366 |
| IATA-max. quantity - Cargo: | | 220 L |

Environmental hazards

ENVIRONMENTALLY HAZARDOUS: Yes



Danger releasing substance: beta-PINENE

Special precautions for user

Warning: Combustible liquid.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

not applicable

15. Regulatory information

U.S. Regulations

National regulatory information

SARA Section 311/312 Hazards:

NATURAL BETA-PINENE (127-91-3): Fire hazard, Immediate (acute) health hazard

State Regulations

Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65, State of California)

This product can not expose you to chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

16. Other information

Revision date: 16.09.2022

Revision No: 101

Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route
(European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonized 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

LC50: Lethal concentration, 50%

LD50: Lethal dose, 50%

CLP: Classification, labelling and Packaging

REACH: Registration, Evaluation and Authorization of Chemicals

GHS: Globally Harmonised System of Classification, Labelling and Packaging of Chemicals

UN: United Nations

DNEL: Derived No Effect Level

DMEL: Derived Minimal Effect Level

Safety Data Sheet

according to 29 CFR 1910.1200(g)

NATURAL BETA-PINENE

Revision date: 09/16/2022

Product code: 290300US

Page 9 of 9

PNEC: Predicted No Effect Concentration
ATE: Acute toxicity estimate
LL50: Lethal loading, 50%
EL50: Effect loading, 50%
EC50: Effective Concentration 50%
ErC50: Effective Concentration 50%, growth rate
NOEC: No Observed Effect Concentration
BCF: Bio-concentration factor
PBT: persistent, bioaccumulative, toxic
vPvB: very persistent, very bioaccumulative
RID: Regulations concerning the international carriage of dangerous goods by rail
ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures)
EmS: Emergency Schedules
MFAG: Medical First Aid Guide
ICAO: International Civil Aviation Organization
MARPOL: International Convention for the Prevention of Marine Pollution from Ships
IBC: Intermediate Bulk Container
VOC: Volatile Organic Compounds
SVHC: Substance of Very High Concern
For abbreviations and acronyms, see table at <http://abbrev.esdscom.eu>
For abbreviations and acronyms, see: ECHA Guidance on information requirements and chemical safety assessment, chapter R.20 (Table of terms and abbreviations).

Other data

The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights. The receiver of our product is singularly responsible for adhering to existing laws and regulations.