

Safety Data Sheet

according to UN GHS (ST/SG/AC.10/11/Rev.9)

NATURAL D-CARVONE

Revision date: 26.06.2023

Product code: 224900WW

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SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

NATURAL D-CARVONE

Substance name: NATURAL D-CARVONE
 CAS No: 2244-16-8

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

Use of the substance/mixture

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

1.3. 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 | |

1.4. Emergency telephone number:

+49 2822 68561 99

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

UN GHS (ST/SG/AC.10/11/Rev.9)

Acute toxicity: Acute Tox. 5 (dermal)
 Acute toxicity: Acute Tox. 5 (oral)
 Respiratory or skin sensitisation: Skin Sens. 1
 Hazardous to the aquatic environment: Aquatic Acute 3

2.2. Label elements

UN GHS (ST/SG/AC.10/11/Rev.9)

Signal word: Warning

Pictograms:



Hazard statements

| | |
|-----------|--|
| H227 | Combustible liquid. |
| H303+H313 | May be harmful if swallowed or in contact with skin. |
| H317 | May cause an allergic skin reaction. |
| H402 | Harmful to aquatic life. |

Precautionary statements

| | |
|------|--|
| P210 | Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. |
| P261 | Avoid breathing dust/fume/gas/mist/vapours/spray. |
| P272 | Contaminated work clothing should not be allowed out of the workplace. |
| P273 | Avoid release to the environment. |
| P280 | Wear protective gloves/protective clothing/eye protection/face protection/hearing |

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| | |
|-----------|--|
| | protection. |
| P301+P317 | IF SWALLOWED: Get medical help. |
| P302+P352 | IF ON SKIN: Wash with plenty of water. |
| P333+P317 | If skin irritation or rash occurs: Get medical help. |
| P362+P364 | Take off contaminated clothing and wash it before reuse. |
| P403 | Store in a well-ventilated place. |
| P501 | Dispose of contents/container to . |

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.1. Substances

| | |
|-------------------|-----------|
| Sum formula: | C10 H14 O |
| Molecular weight: | 150,22 |

Hazardous components

| CAS No | Chemical name | Quantity |
|-----------|--|----------|
| | Classification (UN GHS (ST/SG/AC.10/11/Rev.9)) | |
| 2244-16-8 | NATURAL D-CARVONE | 100 % |
| | Acute Tox. 5, Acute Tox. 5, Skin Sens. 1, Aquatic Acute 3; H313 H303 H317 H402 | |

SECTION 4: First aid measures

4.1. Description of first aid measures

After inhalation

Provide fresh air. When in doubt or if symptoms are observed, get medical advice.

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

Rinse immediately carefully and thoroughly with eye-bath or water. In case of eye irritation consult an ophthalmologist.

After ingestion

Rinse mouth immediately and drink 1 glass of water.

4.2. Most important symptoms and effects, both acute and delayed

No information available.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Co-ordinate fire-fighting measures to the fire surroundings.

5.2. Special hazards arising from the substance or mixture

Non-flammable. Vapours can form explosive mixtures with air.

5.3. Advice for firefighters

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

Additional information

Use water spray jet to protect personnel and to cool endangered containers. Suppress gases/vapours/mists

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with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General advice

Provide adequate ventilation. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes. Use personal protection equipment.

6.2. Environmental precautions

Do not allow to enter into surface water or drains.

6.3. 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.

6.4. Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

No special measures are necessary.

Advice on protection against fire and explosion

No special fire protection measures are necessary.

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.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed.

Hints on joint storage

No special measures are necessary.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.2. Exposure controls



Individual protection measures, such as personal protective equipment

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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 Butyl caoutchouc (butyl rubber)

Skin protection

Use of protective clothing.

Respiratory protection

In case of inadequate ventilation wear respiratory protection.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| | |
|---|--------------------------|
| Physical state: | Liquid |
| Colour: | |
| Melting point/freezing point: | <15 °C |
| Boiling point or initial boiling point and boiling range: | 234 °C |
| Flammability: | not determined |
| Lower explosion limits: | not determined |
| Upper explosion limits: | not determined |
| Flash point: | 93 °C |
| Auto-ignition temperature: | 295 °C |
| Decomposition temperature: | not determined |
| pH-Value (at 25 °C): | 5,71 |
| Viscosity / kinematic: (at 40 °C) | 21,57 mm ² /s |
| Water solubility: (at 18 °C) | 1,3 g/L |
| Solubility in other solvents | not determined |
| Partition coefficient n-octanol/water: | 3,1 |
| Vapour pressure: | not determined |
| Density (at 20 °C): | 0,96 g/cm ³ |
| Relative vapour density: (at 20 °C) | 5,19 |

9.2. Other information

Information with regard to physical hazard classes

Explosive properties

not explosive according to EU A.14

Oxidizing properties

The product is not: oxidising.

Other safety characteristics

| | |
|------------------------------------|----------------|
| Evaporation rate: | not determined |
| Solid content: | not determined |
| Viscosity / dynamic: (at 40 °C) | 20,665 mPa·s |

SECTION 10: Stability and reactivity

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10.1. Reactivity

No hazardous reaction when handled and stored according to provisions.

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

No known hazardous reactions.

10.4. Conditions to avoid

none

10.5. Incompatible materials

No information available.

10.6. Hazardous decomposition products

No known hazardous decomposition products.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

May be harmful if swallowed.

May be harmful in contact with skin.

| CAS No | Chemical name | | | | |
|-----------|-------------------|---------------|---------|--------|--------------------|
| | Exposure route | Dose | Species | Source | Method |
| 2244-16-8 | NATURAL D-CARVONE | | | | |
| | oral | LD50 mg/kg | 3560 | Rat | REACH registration |
| | dermal | LD50 mg/kg | 3840 | Rabbit | REACH registration |

Irritation and corrosivity

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

Sensitising effects

May cause an allergic skin reaction. (NATURAL D-CARVONE)

Carcinogenic/mutagenic/toxic effects for reproduction

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

STOT-single exposure

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

STOT-repeated exposure

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

Aspiration hazard

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

11.2. Information on other hazards

Endocrine disrupting properties

No information available.

Further information

This substance is classified as hazardous according to Regulation (EC) No 1272 (2008).

SECTION 12: Ecological information

12.1. Toxicity

The product is not: Ecotoxic.

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| CAS No | Chemical name | | | | | |
|-----------|--------------------------|------|-----------|---------|--------------------------------|--------------------------------|
| | Aquatic toxicity | Dose | [h] [d] | Species | Source | Method |
| 2244-16-8 | NATURAL D-CARVONE | | | | | |
| | Acute fish toxicity | LC50 | 50 mg/l | 96 h | Danio rerio (zebrafish) | REACH registration OECD 203 |
| | Acute crustacea toxicity | EC50 | 380 mg/l | 48 h | Daphnia magna (Big water flea) | REACH registration OECD 202 |

12.2. Persistence and degradability

The product has not been tested.

| CAS No | Chemical name | | | |
|-----------|---|--------|----|--------------------|
| | Method | Value | d | Source |
| | Evaluation | | | |
| 2244-16-8 | NATURAL D-CARVONE | | | |
| | OECD 301 D | 62-68% | 28 | REACH registration |
| | Readily biodegradable (according to OECD criteria). | | | |
| | OECD 301 D | 60% | 14 | REACH registration |
| | Readily biodegradable (according to OECD criteria). | | | |

12.3. Bioaccumulative potential

The product has not been tested.

Partition coefficient n-octanol/water

| CAS No | Chemical name | Log Pow |
|-----------|-------------------|---------|
| 2244-16-8 | NATURAL D-CARVONE | 3,1 |

BCF

| CAS No | Chemical name | BCF | Species | Source |
|-----------|-------------------|-------|---------|--------------------|
| 2244-16-8 | NATURAL D-CARVONE | 28,51 | | REACH registration |

12.4. Mobility in soil

The product has not been tested.

12.6. Endocrine disrupting properties

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

12.7. Other adverse effects

No information available.

Further information

Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

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

Contaminated packaging

Wash with plenty of water. Completely emptied packages can be recycled.

SECTION 14: Transport information

Marine transport (IMDG)

| | |
|--|--|
| 14.1. UN number or ID number: | No dangerous good in sense of this transport regulation. |
| 14.2. UN proper shipping name: | No dangerous good in sense of this transport regulation. |
| 14.3. Transport hazard class(es): | No dangerous good in sense of this transport regulation. |

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14.4. Packing group: No dangerous good in sense of this transport regulation.

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number or ID number: No dangerous good in sense of this transport regulation.

14.2. UN proper shipping name: No dangerous good in sense of this transport regulation.

14.3. Transport hazard class(es): No dangerous good in sense of this transport regulation.

14.4. Packing group: No dangerous good in sense of this transport regulation.

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

14.6. Special precautions for user

No information available.

14.7. Maritime transport in bulk according to IMO instruments

not applicable

SECTION 15: Regulatory information

National regulatory information

Employment restrictions: Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC).

Skin resorption/Sensitization: Causes allergic hypersensitivity reactions.

SECTION 16: Other information

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

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

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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).

Further Information

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.