

Safety Data Sheet

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

NATURAL GAMMA OCTALACTONE

Revision date: 22.05.2024

Product code: 279600WW

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

1.1. Product identifier

NATURAL GAMMA OCTALACTONE

Substance name: NATURAL GAMMA OCTALACTONE
 CAS No: 104-50-7

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: | Safety Team | Telephone: + 49 2822 68561 0 |
| E-mail: | safety-documentation@axxence.com | |
| Internet: | www.axxence.de | |
| Responsible Department: | Safety Management | |

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.10)

Skin corrosion/irritation: Skin Irrit. 2
 Hazardous to the aquatic environment: Aquatic Acute 3
 Hazardous to the aquatic environment: Aquatic Chronic 3

2.2. Label elements

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

Signal word: Warning

Pictograms:



Hazard statements

H315 Causes skin irritation.
 H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

P264 Wash hands thoroughly after handling.
 P273 Avoid release to the environment.
 P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
 P302+P352 IF ON SKIN: Wash with plenty of Water and soap.
 P332+P317 If skin irritation occurs: Get medical help.
 P362+P364 Take off contaminated clothing and wash it before reuse.
 P501 Dispose of contents/container to organic waste.

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2.3. Other hazards

This substance is not listed as Substance of Very High Concern (SVHC) in the Candidate List according to REACH, Article 59. This substance is not identified as SVHC (substance of very high concern) and is not subject to authorisation according to Annex XIV of REACH.

SECTION 3: Composition/information on ingredients

3.1. Substances

Sum formula: C₈ H₁₄ O₂
 Molecular weight: 142,198 g/mol

Relevant ingredients

| CAS No | Chemical name | Quantity |
|----------|---|----------|
| | Classification (UN GHS (ST/SG/AC.10/11/Rev.10)) | |
| 104-50-7 | NATURAL GAMMA OCTALACTONE | 100 % |
| | Skin Irrit. 2, Aquatic Acute 3, Aquatic Chronic 3; H315 H402 H412 | |

SECTION 4: First aid measures

4.1. Description of first aid measures

After inhalation

Provide fresh air.

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. If skin irritation occurs: Get medical advice/attention.

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. Rinse mouth immediately and drink 1 glass of water. Rinse mouth immediately and drink plenty 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.

5.3. Advice for firefighters

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

Additional information

Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

SECTION 6: Accidental release measures

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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****Eye/face protection**

Wear eye protection/face protection.

Hand protection

When handling with chemical substances, protective gloves must be worn with the CE-label including the four

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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.

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: | -65 °C |
| Boiling point or initial boiling point and boiling range: | 132 °C |
| Flammability: | not determined |
| Lower explosion limits: | not determined |
| Upper explosion limits: | not determined |
| Flash point: | 116 °C |
| Auto-ignition temperature: | 350 °C |
| Decomposition temperature: | not determined |
| pH-Value: | not determined |
| Viscosity / kinematic: | not determined |
| Water solubility: (at 20 °C) | 8,1 g/l |
| Solubility in other solvents | not determined |
| Partition coefficient n-octanol/water: | 1,89 |
| Vapour pressure: (at 20 °C) | 1 hPa |
| Density (at 20 °C): | 0,98 g/cm ³ |
| Relative vapour density: (at 20 °C) | >1 |
| Particle characteristics: | not applicable |

9.2. 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% |

SECTION 10: Stability and reactivity

10.1. Reactivity

No hazardous reaction when handled and stored according to provisions.

10.2. Chemical stability

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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

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

| CAS No | Chemical name | | | | |
|----------|---------------------------|------------------|---------|---------------|----------|
| | Exposure route | Dose | Species | Source | Method |
| 104-50-7 | NATURAL GAMMA OCTALACTONE | | | | |
| | oral | LD50 >5000 mg/kg | Rat | REACH Dossier | OECD 401 |
| | dermal | LD50 >5000 mg/kg | Rabbit | REACH Dossier | OECD 402 |

Irritation and corrosivity

Skin corrosion/irritation: Causes skin irritation.

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

Sensitising effects

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

Carcinogenic/mutagenic/toxic effects for reproduction

Germ cell mutagenicity: Based on available data, the classification criteria are not met.

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

Reproductive toxicity: 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

This substance does not have endocrine disrupting properties with respect to humans.

Other information

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

SECTION 12: Ecological information

12.1. Toxicity

Harmful to aquatic life with long lasting effects.

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| CAS No | Chemical name | | | | | |
|----------|---------------------------|---------------|-----------|---------|---------------------------------|---------------|
| | Aquatic toxicity | Dose | [h] [d] | Species | Source | Method |
| 104-50-7 | NATURAL GAMMA OCTALACTONE | | | | | |
| | Acute fish toxicity | LC50 | 215 mg/l | 96 h | Leuciscus idus (golden orfe) | REACH Dossier |
| | Acute algae toxicity | ErC50 mg/l | 77,816 | 72 h | Pseudokirchneriella subcapitata | REACH Dossier |
| | Acute crustacea toxicity | EC50 mg/l | 70,79 | 48 h | Daphnia magna (Big water flea) | REACH Dossier |
| | Fish toxicity | NOEC mg/l | 46.4 | 4 d | Leuciscus idus (golden orfe) | REACH Dossier |
| | Acute bacteria toxicity | EC50 mg/l () | 285,629 | 3 h | Activated sludge | REACH Dossier |

12.2. Persistence and degradability

The product has not been tested.

| CAS No | Chemical name | | | | |
|----------|---------------------------|-------|----|---------------|--|
| | Method | Value | d | Source | |
| | Evaluation | | | | |
| 104-50-7 | NATURAL GAMMA OCTALACTONE | | | | |
| | | 10% | 2 | REACH Dossier | |
| | Not readily biodegradable | | | | |
| | | 49% | 21 | REACH Dossier | |
| | Not readily biodegradable | | | | |
| | OECD 301D | 49% | 28 | REACH Dossier | |
| | Not readily biodegradable | | | | |

12.3. Bioaccumulative potential

The product has not been tested.

Partition coefficient n-octanol/water

| CAS No | Chemical name | Log Pow |
|----------|---------------------------|---------|
| 104-50-7 | NATURAL GAMMA OCTALACTONE | 1,89 |

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

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

SECTION 13: Disposal considerations

13.1. 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

Non-contaminated packages may be recycled. Handle contaminated packages in the same way as the substance itself.

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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. |
| 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).

SECTION 16: Other information**Changes**

This data sheet contains changes from the previous version in section(s): 2.

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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
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>
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
For abbreviations and acronyms, see: ECHA Guidance on information requirements and chemical safety
assessment, chapter R.20 (Table of terms and abbreviations).
EC/EEC: European Community/European Economic Community
EU: European Union
M-factor: Multiplying factor
IATA: International Air Transport Association
DGR: Dangerous Goods Regulations
ICAO: International Civil Aviation Organization
TI: Technical Instructions
VOC: volatile organic compound

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.