

# Safety Data Sheet

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

## NATURAL GAMMA-NONALACTONE

Revision date: 07.12.2022

Product code: 278100WW

Page 1 of 7

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

#### 1.1. Product identifier

NATURAL GAMMA-NONALACTONE

Substance name: NATURAL GAMMA-NONALACTONE  
CAS No: 104-61-0

#### 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  
E-mail: info@axxence.com  
Contact person: Safety Team  
E-mail: safety-documentation@axxence.com  
Internet: www.axxence.de  
Responsible Department: Safety Management

Telefax: + 49 2822 68561 39

Telephone: + 49 2822 68561 0

#### 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)

Hazardous to the aquatic environment: Aquatic Acute 3

#### 2.2. Label elements

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

##### Hazard statements

H402 Harmful to aquatic life.

##### Precautionary statements

P273 Avoid release to the environment.

#### 2.3. Other hazards

No information available.

### SECTION 3: Composition/information on ingredients

#### 3.1. Substances

Sum formula: 156,22  
Molecular weight: C9 H16 O2 g/mol

##### Relevant ingredients

CAS No	Chemical name	Quantity
	Classification (UN GHS (ST/SG/AC.10/11/Rev.10))	
104-61-0	NATURAL GAMMA-NONALACTONE	100 %
	Aquatic Acute 3; H402	

# Safety Data Sheet

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

## NATURAL GAMMA-NONALACTONE

Revision date: 07.12.2022

Product code: 278100WW

Page 2 of 7

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

##### After inhalation

Provide fresh air.

##### After contact with skin

Wash with plenty of water. Take off contaminated clothing and wash it before reuse.

##### After contact with eyes

Rinse immediately carefully and thoroughly with eye-bath or water.

##### After ingestion

Observe risk of aspiration if vomiting occurs. 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.

#### 5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus.

#### Additional information

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

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

# Safety Data Sheet

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

## NATURAL GAMMA-NONALACTONE

Revision date: 07.12.2022

Product code: 278100WW

Page 3 of 7

### 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

Take off contaminated clothing. Wash hands before breaks and after work. When using do not eat, drink, smoke, sniff. Take off contaminated clothing. Wash hands before breaks and after work. 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 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:	
Odour:	characteristic
Melting point/freezing point:	< -20 °C
Boiling point or initial boiling point and boiling range:	270 °C
Flammability:	not applicable
Lower explosion limits:	not applicable
Upper explosion limits:	not determined
Flash point:	126 °C
Auto-ignition temperature:	256 °C

# Safety Data Sheet

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

## NATURAL GAMMA-NONALACTONE

Revision date: 07.12.2022

Product code: 278100WW

Page 4 of 7

Decomposition temperature:	not determined
pH-Value:	not determined
Viscosity / kinematic: (at 20 °C)	<10 mm <sup>2</sup> /s
Water solubility: (at 20 °C)	2,2 g/l
Solubility in other solvents	not determined
Partition coefficient n-octanol/water:	2,5
Vapour pressure: (at 25 °C)	0,019 hPa
Density (at 20 °C):	0,97 g/cm <sup>3</sup>
Relative vapour density: (at 20 °C)	>1

### 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

Solvent content: 0%

Solid content: 0%

Viscosity / dynamic:  
(at 20 °C) <10 mPa·s

## SECTION 10: Stability and reactivity

### 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

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

# Safety Data Sheet

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

## NATURAL GAMMA-NONALACTONE

Revision date: 07.12.2022

Product code: 278100WW

Page 5 of 7

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
104-61-0	NATURAL GAMMA-NONALACTONE				
	oral	LD50 mg/kg 6600	Rat	REACH Registration	OECD 401
	dermal	LD50 mg/kg >5000	Rabbit	REACH Registration	

### Irritation and corrosivity

Skin corrosion/irritation: Based on available data, the classification criteria are not met.

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

No information available.

### Further information

The substance is classified as not hazardous according to regulation (EC) No 1272/2008 [CLP].

## SECTION 12: Ecological information

### 12.1. Toxicity

The product is not: Ecotoxic.

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h]   [d]	Species	Source	Method
104-61-0	NATURAL GAMMA-NONALACTONE					
	Acute fish toxicity	LC50 mg/l 21,5	96 h	Leuciscus idus (golden orfe)	REACH Registration	DIN 38412
	Acute algae toxicity	ErC50 mg/l 63,5	72 h	Pseudokirchneriella subcapitata	REACH Registration	OECD 201
	Acute crustacea toxicity	EC50 mg/l 59,6	48 h	Daphnia magna (Big water flea)	REACH Registration	EU Method C.2
	Algae toxicity	NOEC mg/l 7,62	3 d	Pseudokirchneriella subcapitata	REACH Registration	
	Acute bacteria toxicity	EC50 ( ) 800 mg/l	0,5 h	Pseudomonas putida	REACH Registration	DIN 38412, part 27

### 12.2. Persistence and degradability

The product has not been tested.

# Safety Data Sheet

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

## NATURAL GAMMA-NONALACTONE

Revision date: 07.12.2022

Product code: 278100WW

Page 6 of 7

CAS No	Chemical name			
	Method	Value	d	Source
	Evaluation			
104-61-0	NATURAL GAMMA-NONALACTONE			
	OECD 301F	82%	28	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
104-61-0	NATURAL GAMMA-NONALACTONE	2,5

### 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)

<u>14.1. UN number or ID number:</u>	No dangerous good in sense of this transport regulation.
<u>14.2. UN proper shipping name:</u>	No dangerous good in sense of this transport regulation.
<u>14.3. Transport hazard class(es):</u>	No dangerous good in sense of this transport regulation.
<u>14.4. Packing group:</u>	No dangerous good in sense of this transport regulation.

### Air transport (ICAO-TI/IATA-DGR)

<u>14.1. UN number or ID number:</u>	No dangerous good in sense of this transport regulation.
<u>14.2. UN proper shipping name:</u>	No dangerous good in sense of this transport regulation.
<u>14.3. Transport hazard class(es):</u>	No dangerous good in sense of this transport regulation.
<u>14.4. Packing group:</u>	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

# Safety Data Sheet

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

## NATURAL GAMMA-NONALACTONE

Revision date: 07.12.2022

Product code: 278100WW

Page 7 of 7

### National regulatory information

## 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  
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.