

according to Regulation (EC) No 1907/2006

### **NATURAL BUTYRIC ACID**

Revision date: 12.05.2023 Product code: 222100 Page 1 of 11

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

### 1.1. Product identifier

NATURAL BUTYRIC ACID

Substance name: NATURAL BUTYRIC ACID

CAS No: 107-92-6 Index No: 607-135-00-X EC No: 203-532-3

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

### Use of the substance/mixture

For Flavour use for food and feed only

#### 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 +49 2822 68561 99

number:

# **SECTION 2: Hazards identification**

# 2.1. Classification of the substance or mixture

## Regulation (EC) No 1272/2008

Acute Tox. 4; H302 Skin Corr. 1B: H314

Full text of hazard statements: see SECTION 16.

## 2.2. Label elements

## Regulation (EC) No 1272/2008

Signal word: Danger

Pictograms:





# **Hazard statements**

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

# **Precautionary statements**

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P264 Wash hands thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing

protection.

P312 Call a POISON CENTER/doctor if you feel unwell.



according to Regulation (EC) No 1907/2006

# **NATURAL BUTYRIC ACID**

Revision date: 12.05.2023 Product code: 222100 Page 2 of 11

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with

water or shower.

P363 Wash contaminated clothing before reuse.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P310 Immediately call a POISON CENTER/doctor.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER/doctor.

P405 Store locked up.

P501 Dispose of contents/container to organic waste.

#### 2.3. Other hazards

No information available.

### **SECTION 3: Composition/information on ingredients**

### 3.1. Substances

Sum formula: C4 H8 O2

Molecular weight: 88,11 g/mol

### Relevant ingredients

CAS No	Chemical name						
	EC No	EC No Index No REACH No					
	Classification (Regulation (EC) No 1272/2008)						
107-92-6	-92-6 NATURAL BUTYRIC ACID						
	203-532-3 607-135-00-X						
	Acute Tox. 4, Skin Corr. 1B; H302 H314						

Full text of H and EUH statements: see section 16.

### Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity		
	Specific Conc. I	Specific Conc. Limits, M-factors and ATE			
107-92-6	203-532-3	03-532-3 NATURAL BUTYRIC ACID			
	dermal: LD50 =	ermal: LD50 = 6096 mg/kg; oral: LD50 = 1632 mg/kg			

## **SECTION 4: First aid measures**

## 4.1. Description of first aid measures

### **General information**

First aider: Pay attention to self-protection! Remove affected person from the danger area and lay down.

## After inhalation

Provide fresh air. Medical treatment necessary.

## 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

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist.

## After ingestion

Observe risk of aspiration if vomiting occurs. Rinse mouth immediately and drink 1 glass of of water. Do NOT induce vomiting. Adverse human health effects and symptoms: Gastric perforation. Call a physician immediately. Do not allow a neutralisation agent to be drunk.



according to Regulation (EC) No 1907/2006

#### NATURAL BUTYRIC ACID

Revision date: 12.05.2023 Product code: 222100 Page 3 of 11

### 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 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

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

#### 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.



according to Regulation (EC) No 1907/2006

### **NATURAL BUTYRIC ACID**

Revision date: 12.05.2023 Product code: 222100 Page 4 of 11

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. Keep locked up. Store in a place accessible by authorized persons only. Provide adequate ventilation as well as local exhaustion at critical locations.

### Hints on joint storage

No special measures are necessary.

## 7.3. Specific end use(s)

For Flavour use for food and feed only

### **SECTION 8: Exposure controls/personal protection**

## 8.1. Control parameters

#### **DNEL/DMEL values**

CAS No	Name of agent							
DNEL type		Exposure route	Effect	Value				
107-92-6	NATURAL BUTYRIC ACID							
Worker DNEL, long-term		inhalation	systemic	36,8 mg/m³				
Worker DNEL, long-term		dermal	systemic	2,67 mg/kg bw/day				
Consumer DNEL, long-term		inhalation	systemic	9,15 mg/m³				
Consumer DNEL, long-term		dermal	systemic	0,66 mg/kg bw/day				
Consumer DNEL, long-term		oral	systemic	0,66 mg/kg bw/day				

## **PNEC** values

CAS No	Name of agent				
Environmental	compartment	Value			
107-92-6	07-92-6 NATURAL BUTYRIC ACID				
Freshwater	0,0451 mg/l				
Freshwater (in	0,451 mg/l				
Marine water		0,00451 mg/l			
Freshwater se	0,368 mg/kg				
Marine sedime	0,0367 mg/kg				
Micro-organisms in sewage treatment plants (STP)					
Soil	Soil				

## 8.2. Exposure controls





### Appropriate engineering controls

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

# Individual protection measures, such as personal protective equipment

### Eye/face protection

Suitable eye protection: goggles.



according to Regulation (EC) No 1907/2006

# NATURAL BUTYRIC ACID

Revision date: 12.05.2023 Product code: 222100 Page 5 of 11

### 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) / FKM (fluoro 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: colourless

Melting point/freezing point:

-6 °C

Boiling point or initial boiling point and

163 °C

boiling range:

Flammability: not determined Lower explosion limits: 2 vol. % Upper explosion limits: 10 vol. % Flash point: 72 °C Auto-ignition temperature: 435 °C Decomposition temperature: not determined pH-Value (at 20 °C): 3

Solubility in other solvents

not determined

Partition coefficient n-octanol/water: 1,11
Vapour pressure: 0,99 hPa

(at 20 °C)

Vapour pressure: 7,29 hPa

(at 50 °C)

Density (at 20 °C): 0,96 g/cm³
Relative vapour density: 3,04

(at 20 °C)

# 9.2. Other information

## Information with regard to physical hazard classes

Explosive properties

The product is not: Explosive. 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: 1,6 mPa·s (at 20 °C)

# **SECTION 10: Stability and reactivity**

#### 10.1. Reactivity

No hazardous reaction when handled and stored according to provisions.



according to Regulation (EC) No 1907/2006

### **NATURAL BUTYRIC ACID**

Revision date: 12.05.2023 Product code: 222100 Page 6 of 11

### 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 hazard classes as defined in Regulation (EC) No 1272/2008

#### **Acute toxicity**

Harmful if swallowed.

CAS No	Chemical name	Chemical name								
	Exposure route	Dose		Species	Source	Method				
107-92-6	NATURAL BUTYRIC AC	NATURAL BUTYRIC ACID								
	oral	LD50 mg/kg	1632	Rat	REACH dossier	OECD 401				
	dermal		6096	Rabbit	REACH dossier	OECD 402				

#### Irritation and corrosivity

Skin corrosion/irritation: Causes severe skin burns and eye damage.

Serious eye damage/eye irritation: Causes serious eye damage.

# 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**

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.



according to Regulation (EC) No 1907/2006

### **NATURAL BUTYRIC ACID**

Revision date: 12.05.2023 Product code: 222100 Page 7 of 11

CAS No	Chemical name							
	Aquatic toxicity	Dose		[h]   [d]	Species	Source	Method	
107-92-6	NATURAL BUTYRIC ACID							
	Acute fish toxicity	LC50	77 mg/l		Pimephales promelas (fathead minnow)	REACH dossier	OECD 203	
	Acute algae toxicity	ErC50 mg/l	45,1	72 h	Desmodesmus subspicatus	REACH dossier	OECD 201	
	Acute crustacea toxicity	EC50	51 mg/l		Daphnia magna (Big water flea)			
	Acute bacteria toxicity	EC50	78 mg/l (		Pseudomonas putida	REACH dossier	DIN 38412-8	

## 12.2. Persistence and degradability

The product has not been tested.

CAS No	Chemical name							
	Method	Value	d	Source				
	Evaluation							
107-92-6	NATURAL BUTYRIC ACID							
	OECD 301E	81%	5	REACH dossier				
	Readily biodegradable (according to OECD crite	ria).						
	OECD 301E         100%         14         REACH dossier							
	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
107-92-6	NATURAL BUTYRIC ACID	1,1

## BCF

CAS No	Chemical name	BCF	Species	Source
107-92-6	NATURAL BUTYRIC ACID	3,162		REACH dossier

### 12.4. Mobility in soil

The product has not been tested.

### 12.5. Results of PBT and vPvB assessment

This substance does not meet the PBT/vPvB criteria of REACH, annex XIII.

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.



according to Regulation (EC) No 1907/2006

# **NATURAL BUTYRIC ACID**

Revision date: 12.05.2023 Product code: 222100 Page 8 of 11

### List of Wastes Code - residues/unused products

160305 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; off-specification batches and unused

products; organic wastes containing hazardous substances; hazardous waste

List of Wastes Code - used product

160305 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; off-specification batches and unused

products; organic wastes containing hazardous substances; hazardous waste

List of Wastes Code - contaminated packaging

150110 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND

PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); packaging containing residues of or contaminated by

hazardous substances; hazardous waste

### Contaminated packaging

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

## **SECTION 14: Transport information**

### Land transport (ADR/RID)

14.1. UN number or ID number:UN 282014.2. UN proper shipping name:BUTYRIC ACID

14.3. Transport hazard class(es):814.4. Packing group:IIIHazard label:8



Other applicable information (land transport)

E1

# Inland waterways transport (ADN)

14.1. UN number or ID number: UN 2820
14.2. UN proper shipping name: BUTYRIC ACID

14.3. Transport hazard class(es):814.4. Packing group:IIIHazard label:8



Classification code: C3
Limited quantity: 5 L
Excepted quantity: E1

Other applicable information (inland waterways transport)

E1

# Marine transport (IMDG)

14.1. UN number or ID number:UN 282014.2. UN proper shipping name:BUTYRIC ACID

14.3. Transport hazard class(es): 8
14.4. Packing group:



according to Regulation (EC) No 1907/2006

### **NATURAL BUTYRIC ACID**

Revision date: 12.05.2023 Product code: 222100 Page 9 of 11

Hazard label:



Special Provisions:

Limited quantity:

Excepted quantity:

EmS:

5 L

E1

EnS:

F-A, S-B

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number or ID number:UN 282014.2. UN proper shipping name:BUTYRIC ACID

14.3. Transport hazard class(es):814.4. Packing group:IIIHazard label:8



Special Provisions:

Limited quantity Passenger:

Passenger LQ:

Excepted quantity:

A803

1 L

Y841

Excepted quantity:

E1

IATA-packing instructions - Passenger:852IATA-max. quantity - Passenger:5 LIATA-packing instructions - Cargo:856IATA-max. quantity - Cargo:60 L

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

# 14.6. Special precautions for user

Warning: strongly corrosive.

## 14.7. Maritime transport in bulk according to IMO instruments

not applicable

## **SECTION 15: Regulatory information**

## 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

## **EU** regulatory information

Restrictions on use (REACH, annex XVII):

Entry 3

Directive 2010/75/EU on industrial 100 % (960 g/l)

emissions:

Directive 2004/42/EC on VOC in 100 % (960 g/l)

paints and varnishes:

Information according to Directive Not subject to 2012/18/EU (SEVESO III)

2012/18/EU (SEVESO III):

National regulatory information

Employment restrictions: Observe restrictions to employment for juveniles according to the 'juvenile

work protection guideline' (94/33/EC).

Water hazard class (D): 1 - slightly hazardous to water

## 15.2. Chemical safety assessment

For this substance a chemical safety assessment has not been carried out.



according to Regulation (EC) No 1907/2006

#### NATURAL BUTYRIC ACID

Revision date: 12.05.2023 Product code: 222100 Page 10 of 11

### **SECTION 16: Other information**

#### Changes

This data sheet contains changes from the previous version in section(s): 1,2,3,4,5,6,7,8,9,11,13,14,15,16.

## Abbreviations and acronyms

Acute Tox: Acute toxicity Skin Corr: Skin corrosion Eye Dam: Eye damage

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).

### Relevant H and EUH statements (number and full text)

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

H318 Causes serious eye damage.

#### **Further Information**

The information is based on the present level of our knowledge. It does not, however, give assurance of



according to Regulation (EC) No 1907/2006

## **NATURAL BUTYRIC ACID**

Revision date: 12.05.2023 Product code: 222100 Page 11 of 11

product properties and establishes no contract legal rights. The receiver of our product is singularly responsible for adhering to existing laws and regulations.

## Identified uses

No	Short title	LCS	SU	PC	PROC	ERC	AC	TF	Specification
	For Flavour use for food and feed only	-	-	-	-	-	-	-	Flavour

LCS: Life cycle stages PC: Product categories

ERC: Environmental release categories

TF: Technical functions

SU: Sectors of use

PROC: Process categories

AC: Article categories