

**Safety Data Sheet**

according to 29 CFR 1910.1200(g)

**NATURAL N-BUTYRALDEHYDE**

Revision date: 01/25/2023

Product code: 221900US

Page 1 of 8

**1. Identification**
**Product identifier**

NATURAL N-BUTYRALDEHYDE

Substance name: NATURAL N-BUTYRALDEHYDE  
 CAS No: 123-72-8

**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. 2  
 Hazardous to the aquatic environment: Aquatic Acute 3

**Label elements**
**29 CFR Part 1910.1200**

**Signal word:** Danger

**Pictograms:**

**Hazard statements**

Highly flammable liquid and vapor

**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.  
 Take precautionary measures against static discharge.  
 Wear protective gloves/protective clothing/eye protection/face protection.  
 In case of fire: Use Water spray jet to extinguish.  
 Store in a well-ventilated place. Keep cool.  
 Dispose of contents/container to Organic waste.

**Safety Data Sheet**

according to 29 CFR 1910.1200(g)

**NATURAL N-BUTYRALDEHYDE**

Revision date: 01/25/2023

Product code: 221900US

Page 2 of 8

**Hazards not otherwise classified**

No information available.

**3. Composition/information on ingredients****Substances**

Sum formula: C<sub>4</sub> H<sub>8</sub> O  
Molecular weight: 72,11

**Hazardous components**

CAS No	Components	Quantity
123-72-8	NATURAL N-BUTYRALDEHYDE	100 %

**4. First-aid measures****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**

Rinse mouth immediately and drink 1 glass of water.

**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 (CO<sub>2</sub>), Foam, Extinguishing powder.**Specific hazards arising from the chemical**

Highly flammable. Vapors may form explosive mixtures with air.

**Special protective equipment and precautions for fire-fighters**

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

**Additional information**

Use water spray/stream to protect personnel and to cool endangered containers. 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.

**Environmental precautions**

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

**Methods and material for containment and cleaning up**

## Safety Data Sheet

according to 29 CFR 1910.1200(g)

### NATURAL N-BUTYRALDEHYDE

Revision date: 01/25/2023

Product code: 221900US

Page 3 of 8

#### 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

No special measures are necessary.

#### 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

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.

### Conditions for safe storage, including any incompatibilities

#### Requirements for storage rooms and vessels

Keep container tightly closed. 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.

## 8. Exposure controls/personal protection

### Control parameters

### Exposure controls



### 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 Butyl caoutchouc (butyl rubber)

#### Skin protection

Flame-retardant protective clothing. Wear anti-static footwear and clothing

## Safety Data Sheet

according to 29 CFR 1910.1200(g)

### NATURAL N-BUTYRALDEHYDE

Revision date: 01/25/2023

Product code: 221900US

Page 4 of 8

#### Respiratory protection

In case of inadequate ventilation wear respiratory protection. Filtering device with filter or ventilator filtering device of type: A

#### Thermal hazards

Flame-retardant protective clothing. Wear anti-static footwear and clothing

## 9. Physical and chemical properties

### Information on basic physical and chemical properties

Physical state:	Liquid
Color:	colorless
Odor:	stinging
Melting point/freezing point:	-97 °C
Boiling point or initial boiling point and boiling range:	75 °C
Flammability:	not determined
Lower explosion limits:	1,7 vol. %
Upper explosion limits:	12,5 vol. %
Flash point:	-11 °C
Auto-ignition temperature:	190 °C
Decomposition temperature:	not determined
pH-Value (at 20 °C):	6,5
Water solubility: (at 20 °C)	50 g/L
Solubility in other solvents	not determined
Partition coefficient n-octanol/water:	0,88
Vapor pressure: (at 20 °C)	144 hPa
Vapor pressure: (at 50 °C)	427 hPa
Density (at 20 °C):	0,81 g/cm <sup>3</sup>
Relative vapour density: (at 20 °C)	2,5

### Other information

#### Information with regard to physical hazard classes

Explosive properties

not hazard of explosion 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%

## 10. Stability and reactivity

### Reactivity

Highly flammable.

### Chemical stability

The product is stable under storage at normal ambient temperatures.

### Possibility of hazardous reactions

## Safety Data Sheet

according to 29 CFR 1910.1200(g)

### NATURAL N-BUTYRALDEHYDE

Revision date: 01/25/2023

Product code: 221900US

Page 5 of 8

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
123-72-8	NATURAL N-BUTYRALDEHYDE				
	oral	LD50 >5000 mg/kg	Rat	REACH reg.	OECD 401
	dermal	LD50 2910 mg/kg	Rabbit	Gestis Stoffdatenbank	

#### **Irritation and corrosivity**

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

#### **Sensitizing effects**

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

#### **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**

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

### **Information on other hazards**

#### **Endocrine disrupting properties**

No information available.

## 12. Ecological information

### **Ecotoxicity**

The product is not: Ecotoxic.

### **Persistence and degradability**

The product has not been tested.

### **Bioaccumulative potential**

The product has not been tested.

## Safety Data Sheet

according to 29 CFR 1910.1200(g)

### NATURAL N-BUTYRALDEHYDE

Revision date: 01/25/2023

Product code: 221900US

Page 6 of 8

#### 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

Avoid release to the environment.

### 13. Disposal considerations

#### 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.

### 14. Transport information

#### **U.S. DOT 49 CFR 172.101**

<b><u>UN number or ID number:</u></b>	UN 1129
<b><u>Proper shipping name:</u></b>	BUTYRALDEHYDE
<b><u>Transport hazard class(es):</u></b>	3
<b><u>Packing group:</u></b>	II
Hazard label:	3



#### **Marine transport (IMDG)**

<b><u>UN number or ID number:</u></b>	UN 1129
<b><u>UN proper shipping name:</u></b>	BUTYRALDEHYDE
<b><u>Transport hazard class(es):</u></b>	3
<b><u>Packing group:</u></b>	II
Hazard label:	3



Special Provisions:	-
Limited quantity:	1 L
Excepted quantity:	E2
EmS:	F-E, S-D

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

<b><u>UN number or ID number:</u></b>	UN 1129
<b><u>UN proper shipping name:</u></b>	BUTYRALDEHYDE
<b><u>Transport hazard class(es):</u></b>	3
<b><u>Packing group:</u></b>	II
Hazard label:	3



## Safety Data Sheet

according to 29 CFR 1910.1200(g)

### NATURAL N-BUTYRALDEHYDE

Revision date: 01/25/2023

Product code: 221900US

Page 7 of 8

Limited quantity Passenger:	1 L	
Passenger LQ:	Y341	
Excepted quantity:	E2	
IATA-packing instructions - Passenger:		353
IATA-max. quantity - Passenger:		5 L
IATA-packing instructions - Cargo:		364
IATA-max. quantity - Cargo:		60 L

#### Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

#### 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:

Butyraldehyde (123-72-8): Fire hazard

SARA Section 313 Toxic release inventory:

Butyraldehyde (123-72-8): De minimis limit = 1.0 %, Reportable threshold = Standard

#### 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: 01/25/2023

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

PNEC: Predicted No Effect Concentration

ATE: Acute toxicity estimate

LL50: Lethal loading, 50%

EL50: Effect loading, 50%

EC50: Effective Concentration 50%

**Safety Data Sheet**

according to 29 CFR 1910.1200(g)

**NATURAL N-BUTYRALDEHYDE**

Revision date: 01/25/2023

Product code: 221900US

Page 8 of 8

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.