

## Safety Data Sheet

according to 29 CFR 1910.1200(g)

### NATURAL ALLYL HEXANOATE (CAPROATE)

Revision date: 06/21/2024

Product code: 203210US

Page 1 of 9

#### 1. Identification

##### Product identifier

NATURAL ALLYL HEXANOATE (CAPROATE)

Substance name: NATURAL ALLYL HEXANOATE (CAPROATE)  
 CAS No: 123-68-2

##### Recommended use of the chemical and restrictions on use

###### **Use of the substance/mixture**

For Flavour use for food and feed only

##### 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	

**Emergency phone number:** +49 2822 68561 99

#### 2. Hazard(s) identification

##### Classification of the chemical

###### **29 CFR Part 1910.1200**

Acute toxicity: Acute Tox. 3 (dermal)  
 Acute toxicity: Acute Tox. 3 (oral)  
 Hazardous to the aquatic environment: Aquatic Acute 1  
 Hazardous to the aquatic environment: Aquatic Chronic 3

##### Label elements

###### **29 CFR Part 1910.1200**

**Signal word:** Danger

**Pictograms:**



##### **Hazard statements**

Combustible liquid  
 Toxic if swallowed or in contact with skin

##### **Precautionary statements**

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.  
 Wash hands thoroughly after handling.  
 Do not eat, drink or smoke when using this product.  
 Wear protective gloves/protective clothing/eye protection/face protection.  
 If swallowed: Immediately call a poison center/doctor.  
 Specific treatment (see ... on this label).  
 Rinse mouth.  
 If on skin: Wash with plenty of water.  
 Call a poison center/doctor if you feel unwell.  
 Specific treatment (see ... on this label).

## Safety Data Sheet

according to 29 CFR 1910.1200(g)

### NATURAL ALLYL HEXANOATE (CAPROATE)

Revision date: 06/21/2024

Product code: 203210US

Page 2 of 9

Take off immediately all contaminated clothing and wash it before reuse.  
In case of fire: Use Water spray jet / alcohol resistant foam / Extinguishing powder / Carbon dioxide (CO<sub>2</sub>) to extinguish.  
Store in a well-ventilated place.  
Store locked up.  
Dispose of contents/container to Organic waste.

### 3. Composition/information on ingredients

#### Substances

Sum formula: C<sub>9</sub> H<sub>16</sub> O<sub>2</sub>  
Molecular weight: 156,22 g/mol

#### Relevant ingredients

CAS No	Components	Quantity
123-68-2	NATURAL ALLYL HEXANOATE (CAPROATE)	100 %

### 4. First-aid measures

#### 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. Call a physician immediately.

##### After contact with eyes

After eye contact: Rinse immediately carefully and thoroughly with eye-bath or water. Consult an ophthalmologist.

##### After ingestion

Observe risk of aspiration if vomiting occurs. Rinse mouth immediately and drink 1 glass of water. Induce vomiting when the affected person is not unconscious. Call a physician immediately.

#### 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

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

#### Specific hazards arising from the chemical

Non-flammable. Vapors may form explosive mixtures with air. Heating causes rise in pressure with risk of bursting.

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

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

## Safety Data Sheet

according to 29 CFR 1910.1200(g)

### NATURAL ALLYL HEXANOATE (CAPROATE)

Revision date: 06/21/2024

Product code: 203210US

Page 3 of 9

## 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

#### General advice

Provide adequate ventilation.

#### For emergency responders

Suppress gases/vapors/mists with water spray jet. Wear a self-contained breathing apparatus and chemical protective clothing.

### Environmental precautions

Do not allow uncontrolled discharge of product into the environment.

### Methods and material for containment and cleaning up

#### For cleaning up

Ventilate affected area.

#### 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

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fume/vapor/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. 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 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.

## 8. Exposure controls/personal protection

### Control parameters

### Exposure controls



## Safety Data Sheet

according to 29 CFR 1910.1200(g)

### NATURAL ALLYL HEXANOATE (CAPROATE)

Revision date: 06/21/2024

Product code: 203210US

Page 4 of 9

#### Appropriate engineering controls

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

#### Individual protection measures, such as personal protective equipment

##### Eye/face protection

Wear eye protection/face protection.

##### Hand protection

Suitable gloves type: NBR (Nitrile rubber) + Natural fibres (e.g. cotton)

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 NBR (Nitrile rubber) + Natural fibres (e.g. cotton)

##### Skin protection

Use of protective clothing.

##### Respiratory protection

In case of inadequate ventilation wear respiratory protection.

## 9. Physical and chemical properties

### Information on basic physical and chemical properties

Physical state:	Liquid
Color:	Colourless to pale yellow
Odor:	pineapple
Melting point/freezing point:	<-20 °C
Boiling point or initial boiling point and boiling range:	187 °C
Flammability:	not determined
Lower explosion limits:	not determined
Upper explosion limits:	not determined
Flash point:	63 °C
Auto-ignition temperature:	268 °C
Decomposition temperature:	not determined
pH-Value:	not determined
Viscosity / kinematic: (at 20 °C)	1,22 mm <sup>2</sup> /s
Water solubility: (at 20 °C)	0,41 g/l
Solubility in other solvents	not determined
Partition coefficient n-octanol/water:	3,2
Vapor pressure: (at 20 °C)	2,69 hPa
Density (at 20 °C):	0,89 g/cm <sup>3</sup>
Relative vapour density: (at 20 °C)	5,39
Particle characteristics:	not applicable

### Other information

#### Information with regard to physical hazard classes

##### Explosive properties

The product is not: Explosive. not explosive according to EU A.14

## Safety Data Sheet

according to 29 CFR 1910.1200(g)

### NATURAL ALLYL HEXANOATE (CAPROATE)

Revision date: 06/21/2024

Product code: 203210US

Page 5 of 9

**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)	1,09 mPa·s

## 10. Stability and reactivity

**Reactivity**

No hazardous reaction when handled and stored according to provisions.

**Chemical stability**

The product is stable under storage at normal ambient temperatures.

**Possibility of hazardous reactions**

No known hazardous reactions.

**Conditions to avoid**

none

**Incompatible materials**

No information available.

**Hazardous decomposition products**

No known hazardous decomposition products.

## 11. Toxicological information

**Information on toxicological effects**

**Acute toxicity**

Toxic if swallowed  
Toxic in contact with skin

CAS No	Components				
	Exposure route	Dose	Species	Source	Method
123-68-2	NATURAL ALLYL HEXANOATE (CAPROATE)				
	oral	LD50 218 mg/kg	Rat	REACH Dossier	OECD 401
	dermal	LD50 820 mg/kg	Rabbit	REACH Dossier	OECD 402

**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.

**Sensitizing 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.

**Specific target organ toxicity (STOT) - single exposure**

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

## Safety Data Sheet

according to 29 CFR 1910.1200(g)

### NATURAL ALLYL HEXANOATE (CAPROATE)

Revision date: 06/21/2024

Product code: 203210US

Page 6 of 9

#### 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

Very toxic to aquatic life. Harmful to aquatic life with long lasting effects.

CAS No	Components					
	Aquatic toxicity	Dose	[h]   [d]	Species	Source	Method
123-68-2	NATURAL ALLYL HEXANOATE (CAPROATE)					
	Acute fish toxicity	LC50 mg/l	0,117	96 h	Danio rerio (zebrafish)	REACH Registration
	Acute algae toxicity	ErC50 mg/l	>4,6	72 h	Desmodesmus subspicatus	REACH Registration
	Acute crustacea toxicity	EC50	2,0 mg/l	48 h	Daphnia magna (Big water flea)	REACH Registration
	Algae toxicity	NOEC mg/l	0,158	72 d	Desmodesmus subspicatus	REACH Registration

#### Persistence and degradability

The product has not been tested.

#### Bioaccumulative potential

The product has not been tested.

#### Partition coefficient n-octanol/water

CAS No	Components	Log Pow
123-68-2	NATURAL ALLYL HEXANOATE (CAPROATE)	3,191

#### BCF

CAS No	Components	BCF	Species	Source
123-68-2	NATURAL ALLYL HEXANOATE (CAPROATE)	102,3	Fish	REACH Registration

#### 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.

No information available.

#### 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.

## 13. Disposal considerations

## Safety Data Sheet

according to 29 CFR 1910.1200(g)

### NATURAL ALLYL HEXANOATE (CAPROATE)

Revision date: 06/21/2024

Product code: 203210US

Page 7 of 9

#### 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**

Hazardous waste according to Directive 2008/98/EC (waste framework directive). Handle contaminated packages in the same way as the substance itself.

### 14. Transport information

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

<b><u>UN number or ID number:</u></b>	UN 2810
<b><u>Proper shipping name:</u></b>	TOXIC LIQUIDS, ORGANIC, N.O.S.
<b><u>Transport hazard class(es):</u></b>	6.1
<b><u>Packing group:</u></b>	III
Hazard label:	6.1



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

<b><u>UN number or ID number:</u></b>	UN 2810
<b><u>UN proper shipping name:</u></b>	TOXIC LIQUID, ORGANIC, N.O.S.
<b><u>Transport hazard class(es):</u></b>	6.1
<b><u>Packing group:</u></b>	III
Hazard label:	6.1



Special Provisions:	223 274
Limited quantity:	5 L
Excepted quantity:	E1
EmS:	F-A, S-A

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

<b><u>UN number or ID number:</u></b>	UN 2810
<b><u>UN proper shipping name:</u></b>	TOXIC LIQUID, ORGANIC, N.O.S.
<b><u>Transport hazard class(es):</u></b>	6.1
<b><u>Packing group:</u></b>	III
Hazard label:	6.1



Special Provisions:	A3 A4 A137
Limited quantity Passenger:	2 L
Passenger LQ:	Y642
Excepted quantity:	E1
IATA-packing instructions - Passenger:	655
IATA-max. quantity - Passenger:	60 L
IATA-packing instructions - Cargo:	663
IATA-max. quantity - Cargo:	220 L

#### **Environmental hazards**

**Safety Data Sheet**

according to 29 CFR 1910.1200(g)

**NATURAL ALLYL HEXANOATE (CAPROATE)**

Revision date: 06/21/2024

Product code: 203210US

Page 8 of 9

ENVIRONMENTALLY HAZARDOUS: Yes



Danger releasing substance: ALLYL HEXANOATE

**Special precautions for user**

Warning: Acute Toxicity.

**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:

NATURAL ALLYL HEXANOATE (CAPROATE) (123-68-2): Immediate (acute) health hazard

**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****Changes**

Revision date: 06/21/2024

Revision No: 101

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



**Safety Data Sheet**

according to 29 CFR 1910.1200(g)

**NATURAL ALLYL HEXANOATE (CAPROATE)**

Revision date: 06/21/2024

Product code: 203210US

Page 9 of 9

**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).  
EC/EEC: European Community/European Economic Community  
EU: European Union  
M-factor: Multiplication factor  
IATA: International Air Transport Association  
DGR: Dangerous Goods Regulations  
ICAO: International Civil Aviation Organization  
TI: Technical Instructions  
VOC: volatile organic compound

**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.