

# Safety Data Sheet

according to Regulation (EC) No 1907/2006

## NATURAL 4-METHYLPENTANOIC ACID

Revision date: 17.02.2025

Product code: 346300

Page 1 of 9

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

#### 1.1. Product identifier

NATURAL 4-METHYLPENTANOIC ACID

Substance name: NATURAL 4-METHYLPENTANOIC ACID  
CAS No: 646-07-1  
EC No: 211-464-0

#### 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

##### Regulation (EC) No 1272/2008

Skin Corr. 1C; H314  
Eye Dam. 1; H318

Full text of hazard statements: see SECTION 16.

#### 2.2. Label elements

##### Regulation (EC) No 1272/2008

Signal word: Danger

Pictograms:



##### Hazard statements

H314 Causes severe skin burns and eye damage.  
H318 Causes serious eye damage.

##### Precautionary statements

P260 Do not breathe dust/fume/gas/mist/vapours/spray.  
P264 Wash ... thoroughly after handling.  
P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.  
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.  
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

# Safety Data Sheet

according to Regulation (EC) No 1907/2006

## NATURAL 4-METHYLPENTANOIC ACID

Revision date: 17.02.2025

Product code: 346300

Page 2 of 9

P310 present and easy to do. Continue rinsing.  
P321 Immediately call a POISON CENTER/doctor.  
Specific treatment (see ... on this label).

### 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: C<sub>6</sub> H<sub>12</sub> O<sub>2</sub>  
Molecular weight: 116,1578 g/mol

#### Relevant ingredients

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification (Regulation (EC) No 1272/2008)			
646-07-1	NATURAL 4-METHYLPENTANOIC ACID			100 %
	211-464-0			
	Skin Corr. 1C, Eye Dam. 1; H314 H318			

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. Limits, M-factors and ATE	
646-07-1	211-464-0	NATURAL 4-METHYLPENTANOIC ACID	100 %
	dermal: LD50 = 968 mg/kg; oral: LD50 = 2050 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

Rinse mouth immediately and drink 1 glass 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.

### 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.

# Safety Data Sheet

according to Regulation (EC) No 1907/2006

## NATURAL 4-METHYLPENTANOIC ACID

Revision date: 17.02.2025

Product code: 346300

Page 3 of 9

### 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.

#### 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.

#### 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 exhaust at critical locations.

##### Hints on joint storage

No special measures are necessary.

#### 7.3. Specific end use(s)

# Safety Data Sheet

according to Regulation (EC) No 1907/2006

## NATURAL 4-METHYLPENTANOIC ACID

Revision date: 17.02.2025

Product code: 346300

Page 4 of 9

Manufacturing of: - Air care products - Perfumes, fragrances - Pharmaceuticals - Cosmetics, personal care products - Flavouring Substances - Other

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

#### 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.

##### Hand protection

Suitable gloves type: Butyl caoutchouc (butyl rubber) / FKM (fluoro rubber).

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.

Recommended material: 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:	
Melting point/freezing point:	No data available
Boiling point or initial boiling point and boiling range:	199-201 °C
Flammability:	No data available
Lower explosion limits:	No data available
Upper explosion limits:	No data available
Flash point:	97,2 °C
Auto-ignition temperature:	No data available
Decomposition temperature:	No data available
pH-Value:	No data available
Viscosity / kinematic:	No data available
Water solubility:	easily soluble
Solubility in other solvents	
not determined	
Partition coefficient n-octanol/water:	No data available
Vapour pressure:	No data available

# Safety Data Sheet

according to Regulation (EC) No 1907/2006

## NATURAL 4-METHYLPENTANOIC ACID

Revision date: 17.02.2025

Product code: 346300

Page 5 of 9

Density (at 25 °C): 0,92 g/cm<sup>3</sup>  
Relative vapour density: No data available  
Particle characteristics: not applicable

### 9.2. Other information

#### Information with regard to physical hazard classes

Explosive properties

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

Sustaining combustion:

No data available

Oxidizing properties

The product is not: oxidising.

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

#### Acute toxicity

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

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
646-07-1	NATURAL 4-METHYLPENTANOIC ACID				
	oral	LD50 2050 mg/kg	Rat		
	dermal	LD50 968 mg/kg	Rabbit		

#### 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.

# Safety Data Sheet

according to Regulation (EC) No 1907/2006

## NATURAL 4-METHYLPENTANOIC ACID

Revision date: 17.02.2025

Product code: 346300

Page 6 of 9

### 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.

#### Other information

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

## SECTION 12: Ecological information

### 12.1. Toxicity

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

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h]   [d]	Species	Source	Method
646-07-1	NATURAL 4-METHYLPENTANOIC ACID					
	Acute fish toxicity	LC50	88 mg/l	96 h	Pimephales promelas (fathead minnow)	
	Acute algae toxicity	ErC50	56,4 mg/l	72 h	Pseudokirchneriella subcapitata	
	Acute crustacea toxicity	EC50	72 mg/l	48 h	Daphnia magna (Big water flea)	
	Crustacea toxicity	NOEC	17,9 mg/l	21 d	Daphnia magna (Big water flea)	

### 12.2. Persistence and degradability

The product has not been tested.

### 12.3. Bioaccumulative potential

The product has not been tested.

#### Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
646-07-1	NATURAL 4-METHYLPENTANOIC ACID	1.56

### 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

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

# Safety Data Sheet

according to Regulation (EC) No 1907/2006

## NATURAL 4-METHYLPENTANOIC ACID

Revision date: 17.02.2025

Product code: 346300

Page 7 of 9

according to applicable legislation.

### 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

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

## SECTION 14: Transport information

### Land transport (ADR/RID)

#### 14.1. UN number or ID number:

UN 2922

#### 14.2. UN proper shipping name:

CORROSIVE LIQUID, TOXIC, N.O.S.

#### 14.3. Transport hazard class(es):

8

#### 14.4. Packing group:

III

Hazard label:

8+6.1



Classification code:

CT1

Special Provisions:

274

Limited quantity:

5 L

Excepted quantity:

E1

Transport category:

3

Hazard No:

86

Tunnel restriction code:

E

### Inland waterways transport (ADN)

#### 14.1. UN number or ID number:

UN 2922

#### 14.2. UN proper shipping name:

CORROSIVE LIQUID, TOXIC, N.O.S.

#### 14.3. Transport hazard class(es):

8

#### 14.4. Packing group:

III

Hazard label:

8+6.1



Classification code:

CT1

Special Provisions:

274 802

Limited quantity:

5 L

Excepted quantity:

E1

### Marine transport (IMDG)

#### 14.1. UN number or ID number:

UN 2922

#### 14.2. UN proper shipping name:

CORROSIVE LIQUID, TOXIC, N.O.S.

#### 14.3. Transport hazard class(es):

8

#### 14.4. Packing group:

III

# Safety Data Sheet

according to Regulation (EC) No 1907/2006

## NATURAL 4-METHYLPENTANOIC ACID

Revision date: 17.02.2025

Product code: 346300

Page 8 of 9

Hazard label:

8+6.1



Special Provisions:

223 274

Limited quantity:

5 L

Excepted quantity:

E1

EmS:

F-A, S-B

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

**14.1. UN number or ID number:**

UN 2922

**14.2. UN proper shipping name:**

CORROSIVE LIQUID, TOXIC, N.O.S.

**14.3. Transport hazard class(es):**

8

**14.4. Packing group:**

III

Hazard label:

8+6.1



Special Provisions:

A3 A4 A803

Limited quantity Passenger:

1 L

Passenger LQ:

Y841

Excepted quantity:

E1

IATA-packing instructions - Passenger:

852

IATA-max. quantity - Passenger:

5 L

IATA-packing instructions - Cargo:

856

IATA-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 2004/42/EC on VOC in  
paints and varnishes:

95 % (874 g/l)

Information according to Directive  
2012/18/EU (SEVESO III):

Not subject to 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):

3 - highly hazardous to water

### 15.2. Chemical safety assessment

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

## SECTION 16: Other information



# Safety Data Sheet

according to Regulation (EC) No 1907/2006

## NATURAL 4-METHYLPENTANOIC ACID

Revision date: 17.02.2025

Product code: 346300

Page 9 of 9

### Abbreviations and acronyms

Skin Corr: Skin corrosion  
 Eye Dam: Eye damage  
 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  
 EC/EEC: European Community/European Economic Community  
 EU: European Union  
 CAS: Chemical Abstracts Service  
 DNEL: Derived No Effect Level  
 DMEL: Derived Minimal Effect Level  
 PNEC: Predicted No Effect Concentration  
 ATE: Acute toxicity estimate  
 LC50: Lethal concentration, 50%  
 LD50: Lethal dose, 50%  
 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  
 M-factor: Multiplying factor  
 ADR: Accord européen sur le transport des marchandises dangereuses par Route  
 (European Agreement concerning the International Carriage of Dangerous Goods by Road)  
 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)  
 IMDG: International Maritime Code for Dangerous Goods  
 EmS: Emergency Schedules  
 MFAG: Medical First Aid Guide  
 IATA: International Air Transport Association  
 DGR: Dangerous Goods Regulations  
 ICAO: International Civil Aviation Organization  
 TI: Technical Instructions  
 MARPOL: International Convention for the Prevention of Marine Pollution from Ships  
 IBC: Intermediate Bulk Container  
 VOC: volatile organic compound  
 SVHC: Substance of Very High Concern  
 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)

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