

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### NATURAL ETHYL 2-METHYLBUTYRATE

Revision date: 31.01.2022

Product code: 244300

Page 1 of 11

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

##### 1.1. Product identifier

NATURAL ETHYL 2-METHYLBUTYRATE

Substance name:	NATURAL ETHYL 2-METHYLBUTYRATE
REACH Registration Number:	01-2119969445-25-XXXX
CAS No:	7452-79-1
EC No:	231-225-4

##### 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	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	

##### 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

Flam. Liq. 3; H226

Full text of hazard statements: see SECTION 16.

##### 2.2. Label elements

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

Signal word: Warning

###### Pictograms:



###### Hazard statements

H226 Flammable liquid and vapour.

###### Precautionary statements

P210 smoking.	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No
P233	Keep container tightly closed.
P240	Ground and bond container and receiving equipment.
P241	Use explosion-proof electrical/ventilating/lighting equipment.
P242	Use non-sparking tools.
P243	Take action to prevent static discharges.
P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### NATURAL ETHYL 2-METHYLBUTYRATE

Revision date: 31.01.2022

Product code: 244300

Page 2 of 11

protection.  
 P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.  
 P370+P378 In case of fire: Use Extinguishing powder / Carbon dioxide (CO<sub>2</sub>) / Foam to extinguish.  
 P403+P235 Store in a well-ventilated place. Keep cool.  
 P501 Dispose of contents/container to .

#### 2.3. Other hazards

No information available.

### SECTION 3: Composition/information on ingredients

#### 3.1. Substances

Sum formula: C<sub>7</sub> H<sub>14</sub> O<sub>2</sub>  
 Molecular weight: 130,19

#### Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification (Regulation (EC) No 1272/2008)			
7452-79-1	NATURAL ETHYL 2-METHYLBUTYRATE			100 %
	231-225-4		01-2119969445-25-XXXX	
	Flam. Liq. 3; H226			

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		
7452-79-1	231-225-4	NATURAL ETHYL 2-METHYLBUTYRATE	100 %
	inhalation: LC50 = 5967 mg/l (vapours); dermal: LD50 = >2000 mg/kg; oral: LD50 = >2000 mg/kg		

### 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

Carbon dioxide (CO<sub>2</sub>), Foam, Extinguishing powder.

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**NATURAL ETHYL 2-METHYLBUTYRATE**

Revision date: 31.01.2022

Product code: 244300

Page 3 of 11

**Unsuitable extinguishing media**

Water.

**5.2. Special hazards arising from the substance or mixture**

Flammable. Vapours can form explosive mixtures with air.

**5.3. Advice for firefighters**

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

**Additional information**

Use water spray jet to protect personnel and to cool endangered containers. 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**

Remove all sources of ignition.

**6.2. Environmental precautions**

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

**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**

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.

Vapours can 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.

**7.2. 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.

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

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

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### NATURAL ETHYL 2-METHYLBUTYRATE

Revision date: 31.01.2022

Product code: 244300

Page 4 of 11

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

##### 8.1. Control parameters

###### DNEL/DMEL values

CAS No	Name of agent		
DNEL type	Exposure route	Effect	Value
7452-79-1	NATURAL ETHYL 2-METHYLBUTYRATE		
Worker DNEL, long-term	inhalation	systemic	52,08 mg/m <sup>3</sup>
Worker DNEL, long-term	dermal	systemic	6,67 mg/kg bw/day
Consumer DNEL, long-term	inhalation	systemic	12,95 mg/m <sup>3</sup>
Consumer DNEL, long-term	dermal	systemic	3,33 mg/kg bw/day
Consumer DNEL, long-term	oral	systemic	3,33 mg/kg bw/day

###### PNEC values

CAS No	Name of agent	
Environmental compartment	Value	
7452-79-1	NATURAL ETHYL 2-METHYLBUTYRATE	
Freshwater	0,026 mg/l	
Marine water	0,0026 mg/l	
Freshwater sediment	0,392 mg/kg	
Marine sediment	0,0392 mg/kg	
Micro-organisms in sewage treatment plants (STP)	0,3 mg/l	
Soil	0,0634 mg/kg	

##### 8.2. 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

Use of protective clothing.

###### Respiratory protection

In case of inadequate ventilation wear respiratory protection.

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### NATURAL ETHYL 2-METHYLBUTYRATE

Revision date: 31.01.2022

Product code: 244300

Page 5 of 11

#### SECTION 9: Physical and chemical properties

##### 9.1. Information on basic physical and chemical properties

Physical state:	Liquid	
Colour:		
Odour:	fruity	
Melting point/freezing point:		<-20 °C
Boiling point or initial boiling point and boiling range:		133 °C
Flammability:		not applicable not applicable
Lower explosion limits:		not determined
Upper explosion limits:		not determined
Flash point:		26 °C
Auto-ignition temperature:		407 °C
Decomposition temperature:		not determined
pH-Value:		not determined
Water solubility: (at 20 °C)		0,6 g/L
Solubility in other solvents		not determined
Partition coefficient n-octanol/water:		2,158
Vapour pressure: (at 20 °C)		11,7 hPa
Vapour pressure: (at 50 °C)		50,1 hPa
Density (at 20 °C):		0,87 g/cm <sup>3</sup>
Relative vapour density: (at 20 °C)		4,5

##### 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: (at 20 °C)		0,831 mPa·s

#### SECTION 10: Stability and reactivity

##### 10.1. Reactivity

Flammable.

##### 10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

##### 10.3. Possibility of hazardous reactions

No known hazardous reactions.

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### NATURAL ETHYL 2-METHYLBUTYRATE

Revision date: 31.01.2022

Product code: 244300

Page 6 of 11

#### **10.4. Conditions to avoid**

Keep away from sources of heat (e.g. hot surfaces), sparks and open flames. Vapours can form explosive mixtures with air.

#### **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
7452-79-1	NATURAL ETHYL 2-METHYLBUTYRATE				
	oral	LD50 >2000 mg/kg	Rat	REACH registration	OECD 423
	dermal	LD50 >2000 mg/kg	Rat	REACH registration	OECD 402
	inhalation (4 h) vapour	LC50 5967 mg/l	Rat	REACH registration	OECD 403

##### **Irritation and corrosivity**

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**

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.

### **SECTION 12: Ecological information**

#### **12.1. Toxicity**

The product is not: Ecotoxic.

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### NATURAL ETHYL 2-METHYLBUTYRATE

Revision date: 31.01.2022

Product code: 244300

Page 7 of 11

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h]   [d]	Species	Source	Method
7452-79-1	NATURAL ETHYL 2-METHYLBUTYRATE					
	Acute fish toxicity	LC50 >100 mg/l	96 h	Cyprinus carpio (Common Carp)	REACH registration	OECD 203
	Acute algae toxicity	ErC50 >100 mg/l	72 h	Pseudokirchneriella subcapitata	REACH registration	OECD 201
	Acute crustacea toxicity	EC50 >61,6 mg/l	48 h	Daphnia magna (Big water flea)	REACH registration	EU Method C.2
	Crustacea toxicity	NOEC 1,3 mg/l	21 d	Daphnia magna (Big water flea)	REACH registration	OECD 211

#### 12.2. Persistence and degradability

The product has not been tested.

CAS No	Chemical name			
	Method	Value	d	Source
	Evaluation			
7452-79-1	NATURAL ETHYL 2-METHYLBUTYRATE			
	EU Method C.4-E	66	28	REACH registration
	Readily biodegradable (according to OECD criteria).			
	EU Method C.4-E	55	14	REACH registration
	Readily biodegradable (according to OECD criteria).			
	EU Method C.4-E	39	7	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
7452-79-1	NATURAL ETHYL 2-METHYLBUTYRATE	2,158

#### 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.

No information available.

#### 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.

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

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### NATURAL ETHYL 2-METHYLBUTYRATE

Revision date: 31.01.2022

Product code: 244300

Page 8 of 11

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 3272  
**14.2. UN proper shipping name:** ESTERS, N.O.S.  
**14.3. Transport hazard class(es):** 3  
**14.4. Packing group:** III  
 Hazard label: 3



Classification code: F1  
 Special Provisions: 274 601  
 Limited quantity: 5 L  
 Excepted quantity: E1  
 Transport category: 3  
 Hazard No: 30  
 Tunnel restriction code: D/E

**Other applicable information (land transport)**

E1

**Inland waterways transport (ADN)**

**14.1. UN number or ID number:** UN 3272  
**14.2. UN proper shipping name:** ESTERS, N.O.S.  
**14.3. Transport hazard class(es):** 3  
**14.4. Packing group:** III  
 Hazard label: 3



Classification code: F1  
 Special Provisions: 274 601  
 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 3272  
**14.2. UN proper shipping name:** ESTERS, N.O.S.  
**14.3. Transport hazard class(es):** 3



## Safety Data Sheet

according to Regulation (EC) No 1907/2006


### NATURAL ETHYL 2-METHYLBUTYRATE

Revision date: 31.01.2022

Product code: 244300

Page 9 of 11


**14.4. Packing group:** III  
**Hazard label:** 3



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

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

**14.1. UN number or ID number:** UN 3272  
**14.2. UN proper shipping name:** ESTERS, N.O.S.  
**14.3. Transport hazard class(es):** 3  
**14.4. Packing group:** III  
**Hazard label:** 3



Special Provisions: A3  
 Limited quantity Passenger: 10 L  
 Passenger LQ: Y344  
 Excepted quantity: E1  
 IATA-packing instructions - Passenger: 355  
 IATA-max. quantity - Passenger: 60 L  
 IATA-packing instructions - Cargo: 366  
 IATA-max. quantity - Cargo: 220 L

**14.5. Environmental hazards**

ENVIRONMENTALLY HAZARDOUS: No

**14.6. Special precautions for user**

Warning: Combustible liquid.

**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, Entry 40

2010/75/EU (VOC): 100 % (870 g/l)

2004/42/EC (VOC): 100 % (870 g/l)

Information according to 2012/18/EU (SEVESO III): P5c FLAMMABLE LIQUIDS

**Additional information**

To follow: 850/2004/EC, 79/117/EEC, 689/2008/EC

**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

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**NATURAL ETHYL 2-METHYLBUTYRATE**

Revision date: 31.01.2022

Product code: 244300

Page 10 of 11

**15.2. Chemical safety assessment**

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

**SECTION 16: Other information****Changes**

This data sheet contains changes from the previous version in section(s):  
1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16.

**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>

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

H226 Flammable liquid and vapour.

**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.

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### NATURAL ETHYL 2-METHYLBUTYRATE

Revision date: 31.01.2022

Product code: 244300

Page 11 of 11

#### Identified uses

No	Short title	LCS	SU	PC	PROC	ERC	AC	TF	Specification
1	Manufacturing of: - Air care products - Perfumes, fragrances - Pharmaceuticals - Cosmetics, personal care products - Flavouring Substances - Other	-	-	-	-	-	-	-	

LCS: Life cycle stages

PC: Product categories

ERC: Environmental release categories

TF: Technical functions

SU: Sectors of use

PROC: Process categories

AC: Article categories