

**Safety data sheet**  
according to 1907/2006/EC, Article 31

Printing date 10.01.2023


Version number 1

Revision: 10.01.2023

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

- **1.1 Product identifier**
- **Trade name: Ethyl-2-Methyl Butyrate EU natural**
- **Product number:** 1116
- **CAS Number:**  
7452-79-1
- **EC number:**  
231-225-4
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**  
No further relevant information available.
- **Application of the substance / the mixture** Flavoring Ingredients
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
Advanced Biotech  
10 Taft Road  
Totowa, NJ 07512 USA
- **Further information obtainable from:**  
Product Safety Department  
productsafety@adv-bio.com
- **1.4 Emergency telephone number:**  
Infotrac: 1-800-535-5053 (Domestic) & 1-352-323-3500 (International)  
Email: responders@infotrac.net & During normal business hours: 1-973-339-6242

**SECTION 2: Hazards identification**

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**
-  GHS02 flame
- Flam. Liq. 3 H226 Flammable liquid and vapour.
- **Labelling according to Regulation (EC) No 1272/2008**  
The substance is classified and labelled according to the GB CLP regulation.
- **Hazard pictograms**



GHS02

- **Signal word** Warning
- **Hazard statements**  
H226 Flammable liquid and vapour.
- **Precautionary statements**
- P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- P241 Use explosion-proof [electrical/ventilating/lighting] equipment.
- 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].

(Contd. on page 2)

## Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 10.01.2023

Version number 1

Revision: 10.01.2023

**Trade name: Ethyl-2-Methyl Butyrate EU natural**

P403+P235  
 P501

(Contd. of page 1)

Store in a well-ventilated place. Keep cool.  
 Dispose of contents/container in accordance with local/regional/national/international regulations.

- **2.3 Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

### SECTION 3: Composition/information on ingredients

- **3.1 Substances**
- **CAS No. Description**  
 CAS: 7452-79-1 Ethyl 2-methylbutyrate
- **Identification number(s)**
- **EC number:** 231-225-4

### SECTION 4: First aid measures

- **4.1 Description of first aid measures**
- **General information:** Immediately remove any clothing soiled by the product.
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** Immediately rinse with water.
- **After eye contact:** Rinse opened eye for several minutes under running water.
- **After swallowing:** If symptoms persist consult doctor.
- **4.2 Most important symptoms and effects, both acute and delayed**  
 No further relevant information available.
- **4.3 Indication of any immediate medical attention and special treatment needed**  
 No further relevant information available.

### SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:**  
 CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **5.2 Special hazards arising from the substance or mixture** No further relevant information available.
- **5.3 Advice for firefighters**
- **Protective equipment:** No special measures required.
- **Additional information**  
 Cool endangered receptacles with water spray.  
 Collect contaminated fire fighting water separately. It must not enter the sewage system.

### SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**  
 Wear protective equipment. Keep unprotected persons away.
- **6.2 Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **6.3 Methods and material for containment and cleaning up:**  
 Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).  
 Dispose contaminated material as waste according to item 13.

(Contd. on page 3)

## Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 10.01.2023

Version number 1

Revision: 10.01.2023

**Trade name: Ethyl-2-Methyl Butyrate EU natural**

(Contd. of page 2)

Ensure adequate ventilation.

· **6.4 Reference to other sections**

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

### SECTION 7: Handling and storage

· **7.1 Precautions for safe handling** No special precautions are necessary if used correctly.

· **Information about fire - and explosion protection:**

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

· **7.2 Conditions for safe storage, including any incompatibilities**

· **Storage:**

· **Requirements to be met by storerooms and receptacles:**

No special requirements.

Please refer to the product specification and/or Certificate of Analysis for product storage requirements.

· **Information about storage in one common storage facility:** Not required.

· **Further information about storage conditions:** Keep container tightly sealed.

· **7.3 Specific end use(s)** No further relevant information available.

### SECTION 8: Exposure controls/personal protection

· **8.1 Control parameters**

· **Ingredients with limit values that require monitoring at the workplace:** Not required.

· **Additional information:** The lists valid during the making were used as a basis.

· **8.2 Exposure controls**

· **Appropriate engineering controls** No further data; see item 7.

· **Individual protection measures, such as personal protective equipment**

· **General protective and hygienic measures:**

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

· **Respiratory protection:** Not required.

· **Hand protection**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material should be based on consideration of the penetration times, rates of diffusion and the degradation

· **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

· **Penetration time of glove material**

The exact break through time has to be determined by the manufacturer of the protective gloves and has to be observed.

(Contd. on page 4)

**Safety data sheet**  
 according to 1907/2006/EC, Article 31

Printing date 10.01.2023

Version number 1

Revision: 10.01.2023

Trade name: Ethyl-2-Methyl Butyrate EU natural

(Contd. of page 3)

· Eye/face protection



Tightly sealed goggles

**SECTION 9: Physical and chemical properties**

· **9.1 Information on basic physical and chemical properties**

|   |                                    |
|---|------------------------------------|
| · <b>General Information</b>                                      | Molecular Weight: 130.19 g/mol     |
| · <b>Physical state</b>   | Fluid                              |
| · <b>Colour:</b>  | According to product specification |
| · <b>Odour:</b>   | According to product specification |
| · <b>Odour threshold:</b>   | Not determined.                    |
| · <b>Melting point/freezing point:</b>                            | Undetermined.                      |
| · <b>Boiling point or initial boiling point and boiling range</b> | 133 °C                             |
| · <b>Flammability</b>   | Flammable.                         |
| · <b>Lower and upper explosion limit</b>                          |                                    |
| · <b>Lower:</b>   | Not determined.                    |
| · <b>Upper:</b>   | Not determined.                    |
| · <b>Flash point:</b>   | 28 °C                              |
| · <b>Decomposition temperature:</b>                               | Not determined.                    |
| · <b>pH</b>   | Not determined.                    |
| · <b>Viscosity:</b>   |                                    |
| · <b>Kinematic viscosity</b>                                      | Not determined.                    |
| · <b>Dynamic:</b>   | Not determined.                    |
| · <b>Solubility</b>   |                                    |
| · <b>water:</b>   | Not miscible or difficult to mix.  |
| · <b>Partition coefficient n-octanol/water (log value)</b>        | Not determined.                    |
| · <b>Vapour pressure:</b>   | Not determined.                    |
| · <b>Density and/or relative density</b>                          |                                    |
| · <b>Density at 20 °C:</b>  | 0.868 g/cm <sup>3</sup>            |
| · <b>Relative density</b>   | Not determined.                    |
| · <b>Refractive Index</b>   |                                    |
| · <b>Vapour density</b>   | Not determined.                    |

· **9.2 Other information**

|  |   |
|--|---|
| · <b>Appearance:</b>   |   |
| · <b>Form:</b>   | Liquid  |
| · <b>Important information on protection of health and environment, and on safety.</b> |   |
| · <b>Auto-ignition temperature:</b>  | Not determined.   |
| · <b>Explosive properties:</b>   | Product is not explosive. However, formation of explosive air/vapour mixtures are possible. |
| · <b>Solvent content:</b>  |   |
| · <b>VOC (EC)</b>  | 0.00 %  |

(Contd. on page 5)

**Safety data sheet**  
 according to 1907/2006/EC, Article 31

Printing date 10.01.2023

Version number 1

Revision: 10.01.2023

**Trade name: Ethyl-2-Methyl Butyrate EU natural**

(Contd. of page 4)

- **Change in condition**
- **Evaporation rate** Not determined.

- **Information with regard to physical hazard classes**
- **Explosives** Void
- **Flammable gases** Void
- **Aerosols** Void
- **Oxidising gases** Void
- **Gases under pressure** Void
- **Flammable liquids** Flammable liquid and vapour.
- **Flammable solids** Void
- **Self-reactive substances and mixtures** Void
- **Pyrophoric liquids** Void
- **Pyrophoric solids** Void
- **Self-heating substances and mixtures** Void
- **Substances and mixtures, which emit flammable gases in contact with water** Void
- **Oxidising liquids** Void
- **Oxidising solids** Void
- **Organic peroxides** Void
- **Corrosive to metals** Void
- **Desensitised explosives** Void

**SECTION 10: Stability and reactivity**

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:**  
 No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** No dangerous decomposition products known.

**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.
- **Skin corrosion/irritation** Based on available data, the classification criteria are not met.
- **Serious eye damage/irritation** Based on available data, the classification criteria are not met.
- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- **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.

(Contd. on page 6)

**Safety data sheet**  
 according to 1907/2006/EC, Article 31

Printing date 10.01.2023

Version number 1

Revision: 10.01.2023

**Trade name: Ethyl-2-Methyl Butyrate EU natural**

(Contd. of page 5)

· **11.2 Information on other hazards**

· **Endocrine disrupting properties**

Substance is not listed.

**SECTION 12: Ecological information**

· **12.1 Toxicity**

· **Aquatic toxicity:** No further relevant information available.

· **12.2 Persistence and degradability** No further relevant information available.

· **12.3 Bioaccumulative potential** No further relevant information available.

· **12.4 Mobility in soil** No further relevant information available.

· **12.5 Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

· **12.6 Endocrine disrupting properties**

The product does not contain substances with endocrine disrupting properties.

· **12.7 Other adverse effects**

· **Additional ecological information:**

· **General notes:**

Water hazard class 1 (German Regulation) (Assessment by list): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

**SECTION 13: Disposal considerations**

· **13.1 Waste treatment methods**

· **Recommendation**

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

· **Uncleaned packaging:**

· **Recommendation:** Disposal must be made according to official regulations.

**SECTION 14: Transport information**

· **14.1 UN number or ID number**

· **ADR, IMDG, IATA**

UN3272

· **14.2 UN proper shipping name**

· **ADR**

3272 ESTERS, N.O.S. (Ethyl-2-Methyl Butyrate)

· **IMDG, IATA**

ESTERS, N.O.S. (Ethyl-2-Methyl Butyrate)

· **14.3 Transport hazard class(es)**

· **ADR**



· **Class**

3 (F1) Flammable liquids.

(Contd. on page 7)

**Safety data sheet**  
according to 1907/2006/EC, Article 31


Printing date 10.01.2023

Version number 1

Revision: 10.01.2023

Trade name: Ethyl-2-Methyl Butyrate EU natural

(Contd. of page 6)

|   |  |
|---|--|
| · Label   | 3  |
| · IMDG, IATA  |  |
|  |  |
| · Class   | 3 Flammable liquids.   |
| · Label   | 3  |
| · 14.4 Packing group  |  |
| · ADR, IMDG, IATA   | III  |
| · 14.5 Environmental hazards:   |  |
| · Marine pollutant:   | No   |
| · 14.6 Special precautions for user   |  |
| · Warning:  | Warning: Flammable liquids.  |
| · Hazard identification number (Kemler code):                                     | 30   |
| · EMS Number:   | F-E,S-D  |
| · Stowage Category  | A  |
| · 14.7 Maritime transport in bulk according to IMO instruments                    |  |
|   | Not applicable.  |
| · Transport/Additional information:   |  |
| · ADR   |  |
| · Limited quantities (LQ)   | 5L   |
| · Excepted quantities (EQ)  | Code: E1<br>Maximum net quantity per inner packaging: 30 ml<br>Maximum net quantity per outer packaging: 1000 ml |
| · Transport category  | 3  |
| · Tunnel restriction code   | D/E  |
| · IMDG  |  |
| · Limited quantities (LQ)   | 5L   |
| · Excepted quantities (EQ)  | Code: E1<br>Maximum net quantity per inner packaging: 30 ml<br>Maximum net quantity per outer packaging: 1000 ml |
| · UN "Model Regulation":  | UN 3272 ESTERS, N.O.S. (ETHYL-2-METHYL BUTYRATE), 3, III   |

**SECTION 15: Regulatory information**

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- Labelling according to Regulation (EC) No 1272/2008  
The substance is classified and labelled according to the GB CLP regulation.

(Contd. on page 8)

GB

**Safety data sheet**  
 according to 1907/2006/EC, Article 31

Printing date 10.01.2023

Version number 1

Revision: 10.01.2023

**Trade name: Ethyl-2-Methyl Butyrate EU natural**

(Contd. of page 7)

· **Hazard pictograms**



GHS02

· **Signal word** Warning

· **Hazard statements**

H226 Flammable liquid and vapour.

· **Precautionary statements**

- P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- P241 Use explosion-proof [electrical/ventilating/lighting] equipment.
- 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].
- P403+P235 Store in a well-ventilated place. Keep cool.
- P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Directive 2012/18/EU**

· **Named dangerous substances - ANNEX I** Substance is not listed.

· **Seveso category** P5c FLAMMABLE LIQUIDS

· **Qualifying quantity (tonnes) for the application of lower-tier requirements** 5,000 t

· **Qualifying quantity (tonnes) for the application of upper-tier requirements** 50,000 t

· **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3

· **DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II**

Substance is not listed.

· **REGULATION (EU) 2019/1148**

· **Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))**

Substance is not listed.

· **Annex II - REPORTABLE EXPLOSIVES PRECURSORS**

Substance is not listed.

· **Regulation (EC) No 273/2004 on drug precursors**

Substance is not listed.

· **Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors**

Substance is not listed.

· **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

**SECTION 16: Other information**

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Department issuing SDS:** Product safety department

(Contd. on page 9)



**Safety data sheet**  
 according to 1907/2006/EC, Article 31

Printing date 10.01.2023

Version number 1

Revision: 10.01.2023

**Trade name: Ethyl-2-Methyl Butyrate EU natural**

(Contd. of page 8)

· **Contact:**

Product Safety Department  
 productsafety@adv-bio.com

· **Date of previous version:** 12.01.2021

· **Abbreviations and acronyms:**

ADR: Accord relatif au transport international 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 Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

VOC: Volatile Organic Compounds (USA, EU)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Flam. Liq. 3: Flammable liquids – Category 3

GB

