

according to Regulation (EC) No 1907/2006, Article 31

Printing date 24.01.2025

Version number 1

Revision: 08.01.2025





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|------------------|--|
| P403+P235 | Store in a well-ventilated place. Keep cool. |
| P501 | Dispose of contents/container in accordance with local/regional/national/international |
| | regulations. |
| · 2 3 Other haza | rds |

· 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: 2050_01_3 Isoamyl isobut
- CAS: 2050-01-3 Isoamyl isobutyrate
- · Identification number(s)
- · EC number: 218-078-1

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:
- CO2, 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: Prevent seepage into sewage system, workpits and cellars.

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 section 13.

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- 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:
- 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 section 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.

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| Eye/face protection | |
| Tightly sealed goggles | |
| | |
| | |
| SECTION 9: Physical and chemical pro | perties |
| 9.1 Information on basic physical and chemical | properties |
| General Information | |
| Physical state | Liquid |
| Colour: | According to product specification |
| Odour: | According to product specification |
| Odour threshold: | Not determined. |
| | Undetermined. |
| Boiling point or initial boiling point and boiling | |
| range | 170 °C |
| Flammability | Flammable. |
| Lower and upper explosion limit | Taninable. |
| Lower: | Not determined. |
| Upper: | Not determined. |
| | 52 °C |
| Flash point: | |
| Decomposition temperature: | Not determined. |
| pH Marana Itan | Not determined. |
| Viscosity: | |
| Kinematic viscosity | Not determined. |
| Dynamic: | Not determined. |
| Solubility | |
| water: | Not miscible or difficult to mix. |
| Partition coefficient n-octanol/water (log value) | |
| Vapour pressure: | Not determined. |
| Density and/or relative density | |
| Density at 20 °C: | 0.865 g/cm ³ |
| Relative density | Not determined. |
| Refractive Index | |
| Vapour density | Not determined. |
| 9.2 Other information | |
| Appearance: | |
| | Liquid |
| Important information on protection of health | |
| and environment, and on safety. | |
| Ignition temperature: | Not determined. |
| Explosive properties: | Product is not explosive. However, formation of |
| | explosive air/vapour mixtures are possible. |
| Solvent content: | |
| | 0.00 % |
| · · · (= · / | |



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| Change in condition | (Contd. of page |
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| Evaporation rate | Not determined. |
| Information with regard to physical has | zard |
| 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.
- · Primary irritant effect:
- · 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.

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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: Not hazardous for water.

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 | UN2620 | |
|--|---|-----------------|
| · 14.2 UN proper shipping name · ADR · IMDG, IATA | 2620 AMYL BUTYRATES solution AMYL BUTYRATES solution | |
| · 14.3 Transport hazard class(es) | | |
| ADR | | |
| | | |
| Class | 3 (F1) Flammable liquids. | |
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| Label | 3 | |
| IMDG, IATA | | |
| | | |
| Class | 3 Flammable liquids. | |
| Label | 3 | |
| 14.4 Packing group ADR, IMDG, IATA | | |
| 14.5 Environmental hazards: Marine pollutant: | No | |
| 14.6 Special precautions for user Hazard identification number (Kemler code): 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) Excepted quantities (EQ) | 5L Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml | |
| Transport category Tunnel restriction code | 3 D/E | |
| IMDG Limited quantities (LQ) Excepted quantities (EQ) | 5L Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml | |
| UN "Model Regulation": | UN 2620 AMYL BUTYRATES SOLUTION, 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 CLP regulation.

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Trade name: Isoamyl Isobutyrate natural (Contd. of page 7) · Hazard pictograms GHS02 Signal word Warning · Hazard statements H226 Flammable liquid and vapour. Precautionary statements Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. P210 No smoking. P241 Use explosion-proof [electrical/ventilating/lighting] equipment. Wear protective gloves/protective clothing/eye protection/face protection/hearing P280 protection. P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower]. Store in a well-ventilated place. Keep cool. P403+P235 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. \cdot 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

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| · Contact: | |
| Product Safety Department | |
| productsafety@adv-bio.com | |
| Abbreviations and acronyms: | |
| | al Substances |
| | |
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