

Printing date 01/16/2024

Reviewed on 04/25/2023

1 Identification

- · Product identifier
- · Trade name: Isoamyl Isobutyrate natural
- · Product number: 1128
- · CAS Number:
- 2050-01-3
- · EC number:
- 218-078-1
- · Application of the substance / the mixture Flavoring Ingredients
- · Details of the supplier of the safety data sheet

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- Manufacturer/Supplier: Advanced Biotech 10 Taft Road Totowa, NJ 07512 USA
- Information department: Product Safety Department productsafety@adv-bio.com
- 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

2 Hazard(s) identification

· Classification of the substance or mixture



Flammable Liquids 3 H226 Flammable liquid and vapor.

GHS label elements

Pictograms on label shall be in the shape of a square set at a point and shall include a black hazard symbol on a white background with a red frame sufficiently wide to be clearly visible.

The substance is classified and labeled according to the Globally Harmonized System (GHS). **Hazard pictograms**



• **Signal word** Warning • **Hazard statements** H226 Flammable liquid and vapor.

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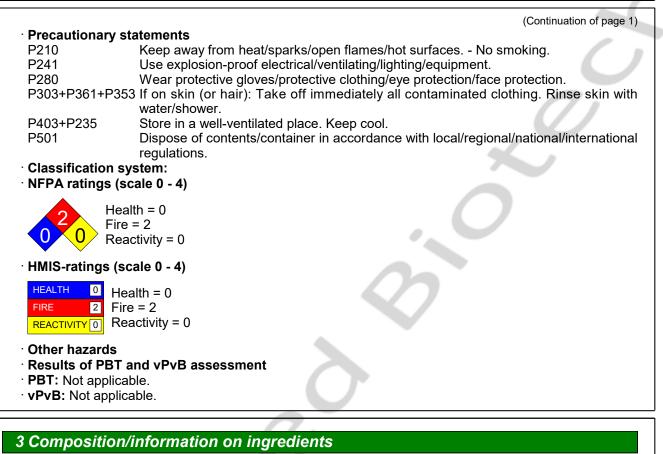


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· Chemical characterization: Substances

- · CAS No. Description
- CAS: 2050-01-3 Isoamyl isobutyrate
- Identification number(s)
- EC number: 218-078-1

4 First-aid measures

- · 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.
- Information for doctor:
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.
- Indication of any immediate medical attention and special treatment needed No further relevant information available.

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5 Fire-fighting measures

- · Extinguishing media
- Suitable extinguishing agents:

CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam. • For safety reasons unsuitable extinguishing agents: Water with full jet

- Special hazards arising from the substance or mixture No further relevant information available.
- 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.

6 Accidental release measures

• **Personal precautions, protective equipment and emergency procedures** Wear protective equipment. Keep unprotected persons away.

- Environmental precautions: Prevent seepage into sewage system, workpits and cellars.
- 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. Ensure adequate ventilation.

• 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.
- Protective Action Criteria for Chemicals
- · PAC-1:

Substance is not listed.

· PAC-2:

Substance is not listed.

· PAC-3:

Substance is not listed.

7 Handling and storage

- · Handling:
- · Precautions for safe handling No special precautions are necessary if used correctly.
- Information about protection against explosions and fires:

Keep ignition sources away - Do not smoke. Protect against electrostatic charges.

- · 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 receptacle tightly sealed.

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• Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

· Additional information about design of technical systems: No further data; see section 7.

- Control parameters
- · Components with limit values that require monitoring at the workplace: Not required.
- · Additional information: The lists that were valid during the creation were used as a basis.
- · Exposure controls
- · 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.
- Breathing equipment: Not required.
- Protection of hands:



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.
- · Eye protection:



Tightly sealed goggles

 Information on basic physic General Information 	cal and chemical properties	
· Appearance:		
Form:	Liquid	
Color:	According to product specification	
· Odor:	According to product specification	
· Odor threshold:	Not determined.	
· pH-value:	Not determined.	



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Change in condition Melting point/Melting range: Boiling point/Boiling range:	Undetermined. 170 °C (338 °F)
Flash point:	52 °C (125.6 °F)
Flammability (solid, gaseous):	Flammable.
Decomposition temperature:	Not determined.
Ignition temperature:	Not determined.
Danger of explosion:	Product is not explosive. However, formation of explosive air/ vapor mixtures are possible.
Explosion limits: Lower: Upper:	Not determined. Not determined.
Vapor pressure:	Not determined.
Density at 20 °C (68 °F): Relative density Vapor density Evaporation rate	0.865 g/cm³ (7.21843 lbs/gal) Not determined. Not determined. Not determined.
Solubility in / Miscibility with Water:	Not miscible or difficult to mix.
Partition coefficient (n-octanol/wa	ter): Not determined.
Viscosity: Dynamic: Kinematic: VOC content:	Not determined. Not determined. 0.00 % 0.0 g/l / 0.00 lb/gal
Other information	No further relevant information available.

10 Stability and reactivity

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

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11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity:
- Primary irritant effect:
- on the skin: No irritant effect.
- on the eye: No irritating effect.
- Sensitization: No sensitizing effects known.
- Additional toxicological information:
- · Carcinogenic categories
- · IARC (International Agency for Research on Cancer)
- Substance is not listed.

· NTP (National Toxicology Program)

Substance is not listed.

· OSHA-Ca (Occupational Safety & Health Administration)

Substance is not listed.

12 Ecological information

- · Toxicity
- · Aquatic toxicity: No further relevant information available.
- Persistence and degradability No further relevant information available.
- · Behavior in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- Mobility in soil No further relevant information available.
- Additional ecological information:
- · General notes: Not hazardous for water.
- · Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · vPvB: Not applicable.
- Other adverse effects No further relevant information available.

13 Disposal considerations

- · Waste treatment methods
- · Recommendation:

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

- · Uncleaned packagings:
- · Recommendation: Disposal must be made according to official regulations.

4 Transport information		
· UN-Number		
· DOT, IMDG, IATA	UN2620	



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UN proper shipping name DOT IMDG, IATA	Amyl butyrates solution AMYL BUTYRATES solution
Transport hazard class(es)	
DOT	\overline{O}
RAMAR FUDD	
Class	3 Flammable liquids
Label	3
IMDG, IATA	
Class	3 Flammable liquids
Label	3
Packing group	
DOT, IMDG, IATA	ar
Environmental hazards: Marine pollutant:	No
Special precautions for user Hazard identification number (Kemler code):	Warning: Flammable liquids : 30
EMS Number:	F-E,S-D
Stowage Category	Α
Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
	Not applicable.
Transport/Additional information:	
DOT Quantity limitations	On passenger aircraft/rail: 60 L
	On cargo aircraft only: 220 L
IMDG	
Limited quantities (LQ)	5L October 51
Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging: 30 ml
	Maximum net quantity per outer packaging: 00 ml
UN "Model Regulation":	UN 2620 AMYL BUTYRATES SOLUTION, 3, III
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15 Regulatory information · Safety, health and environmental regulations/legislation specific for the substance or mixture · Sara · Section 355 (extremely hazardous substances): Substance is not listed. Section 313 (Specific toxic chemical listings): Substance is not listed. • TSCA (Toxic Substances Control Act): ACTIVE · Hazardous Air Pollutants Substance is not listed. · Proposition 65 · Chemicals known to cause cancer: Substance is not listed. Chemicals known to cause reproductive toxicity for females: Substance is not listed. · Chemicals known to cause reproductive toxicity for males: Substance is not listed. Chemicals known to cause developmental toxicity: Substance is not listed. Carcinogenic categories · EPA (Environmental Protection Agency) Substance is not listed. TLV (Threshold Limit Value) Substance is not listed. · NIOSH-Ca (National Institute for Occupational Safety and Health) Substance is not listed. · GHS label elements Pictograms on label shall be in the shape of a square set at a point and shall include a black hazard symbol on a white background with a red frame sufficiently wide to be clearly visible. The substance is classified and labeled according to the Globally Harmonized System (GHS). · Hazard pictograms GHS02 Signal word Warning Hazard statements H226 Flammable liquid and vapor. · Precautionary statements P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking. P241 Use explosion-proof electrical/ventilating/lighting/equipment. (Continued on page 9)



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P280	Wear protective gloves/protective clothing/eye protection/face protection.
P303+P361+P353	If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with
	water/shower.
P403+P235	Store in a well-ventilated place. Keep cool.
P501	Dispose of contents/container in accordance with local/regional/national/international
	regulations.
Chamical asfature	A Chamical Cafety Assessment has not been somial out

• Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

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
- · Contact:
- Product Safety Department
- productsafety@adv-bio.com
- · Date of preparation / last revision 01/16/2024
- 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
- DOT: US Department of Transportation
- IATA: International Air Transport Association
- EINECS: European Inventory of Existing Commercial Chemical Substances
- CAS: Chemical Abstracts Service (division of the American Chemical Society)
- NFPA: National Fire Protection Association (USA)
- HMIS: Hazardous Materials Identification System (USA)
- VOC: Volatile Organic Compounds (USA, EU)
- PBT: Persistent, Bioaccumulative and Toxic
- vPvB: very Persistent and very Bioaccumulative NIOSH: National Institute for Occupational Safety
- OSHA: Occupational Safety & Health
- TLV: Threshold Limit Value
- PEL: Permissible Exposure Limit
- REL: Recommended Exposure Limit
- Flammable Liquids 3: Flammable liquids Category 3