

Printing date 01/16/2024 Reviewed on 01/16/2024

1 Identification

· Product identifier

· Trade name: Heptanoic Acid natural

· Product number: 1060

• CAS Number: 111-14-8 • EC number: 203-838-7 • Index number: 607-196-00-2

· 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

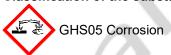
· Emergency telephone number:

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



Skin Corrosion 1B H314 Causes severe skin burns and eye damage.

Eye Damage 1 H318 Causes serious eye damage.



Acute Toxicity - Inhalation 4 H332 Harmful if inhaled.

Specific Target Organ Toxicity - Single Exposure 3 H335 May cause respiratory irritation.

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).

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Safety Data Sheet acc. to OSHA HCS (29 CFR § 1910.1200)

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Trade name: Heptanoic Acid natural

· Hazard pictograms



GHS07 GHS05

- · Signal word Danger
- · Hazard-determining components of labeling:

Heptanoic acid

· Hazard statements

H332 Harmful if inhaled.

H314 Causes severe skin burns and eye damage.

H335 May cause respiratory irritation.

· Precautionary statements

P260 Do not breathe/dust/fume/gas/mist/vapors/spray.

P303+P361+P353 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with

water/shower.

P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing.

P310 Immediately call a poison center/doctor. P321 Specific treatment (see on this label).

Store locked up. P405

P501 Dispose of contents/container in accordance with local/regional/national/international

regulations.

- · Classification system:
- NFPA ratings (scale 0 4)



Health = 3 Fire = 1 Reactivity = 0

· HMIS-ratings (scale 0 - 4)



Other hazards

Health = *3Fire = 1

- · Results of PBT and vPvB assessment
- · **PBT**: Not applicable. · vPvB: Not applicable.

3 Composition/information on ingredients

- **Chemical characterization: Substances**
- · CAS No. Description

CAS: 111-14-8 Heptanoic acid

- · Identification number(s)
- EC number: 203-838-7

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4 First-aid measures

- · Description of first aid measures
- General information:

Immediately remove any clothing soiled by the product.

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

· After inhalation:

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

In case of unconsciousness place patient stably in side position for transportation.

- · After skin contact: Immediately rinse with water.
- · After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.
- · 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.

5 Fire-fighting measures

- · Extinguishing media
- Suitable extinguishing agents:

CO2, powder or alcoholresistant foam.

CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam. Use fire fighting measures that suit the environment.

· Special hazards arising from the substance or mixture

During heating or in case of fire poisonous gases are produced.

- Advice for firefighters
- · Protective equipment: Mouth respiratory protective device.
- · 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

Mount respiratory protective device.

Wear protective equipment. Keep unprotected persons away.

- Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Use neutralizing agent.

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.

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See Section 13 for disposal information.
Protective Action Criteria for Chemicals

PAC-1:
3.9 ppm

PAC-2:
43 ppm

PAC-3:
260 ppm

7 Handling and storage

- · Handling:
- · Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

· Information about protection against explosions and fires:

Keep respiratory protective device available.

- · 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.
- · 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:

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes.

Avoid contact with the eyes and skin.

· Breathing equipment:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

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· Protection of hands:

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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

9 Physical and chemical properties

Information on basic physical and chemical properties					
General Information	Molecular Weight: 130.19 g/mol				
· Appearance:					
Form:	Liquid				
Color:	According to product specification				
· Odor: · Odor threshold:	According to product specification Not determined.				
· Odor threshold:	Not determined.				
· pH-value:	Not determined.				
· Change in condition					
Melting point/Melting range:	-7.5 °C (18.5 °F)				
Boiling point/Boiling range:	223 °C (433.4 °F)				
· Flash point:	117 °C (242.6 °F)				
· Flammability (solid, gaseous):	Not applicable.				
· Auto igniting:	380 °C (716 °F)				
Decomposition temperature:	Not determined.				
· Ignition temperature:	Not determined.				
Danger of explosion:	Product does not present an explosion hazard.				
· Explosion limits:					
Lower:	Not determined.				
Upper:	Not determined.				
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	(Continuation of page
Vapor pressure at 20 °C (68 °F):	1 hPa (0.8 mm Hg)	
Density at 20 °C (68 °F):	0.92 g/cm³ (7.6774 lbs/gal)	
Relative density	Not determined.	
Vapor density	Not determined.	
Evaporation rate	Not determined.	
Solubility in / Miscibility with		
Water at 20 °C (68 °F):	2.4 g/l	
Partition coefficient (n-octanol/wat	er): Not determined.	
Viscosity:		
Dynamic:	Not determined.	
Kinematic:	Not determined.	
VOC content:	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.

11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity:

· LD/LC50 values that are relevant for classification:					
	ATE (Acute Toxicity Estimate)				
Inhalative	Inhalative LC50/4 h 11 mg/l				
CAS: 111	CAS: 111-14-8 Heptanoic acid				
Oral	LD50	7,000 mg/kg (rat)			
Inhalative	LC50/4 h	11 mg/l (ATE)			

- · Primary irritant effect:
- · on the skin: No irritant effect.
- on the eye: Strong irritant with the danger of severe eye injury.
- · Sensitization: No sensitizing effects known.

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· Additional toxicological information:

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- 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:

Water hazard class 1 (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.

Must not reach bodies of water or drainage ditch undiluted or unneutralized.

- · 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					_	•					
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· UN-Number · DOT, IMDG, IATA	UN3265
· UN proper shipping name · DOT · IMDG, IATA	Corrosive liquid, acidic, organic, n.o.s. (Heptanoic acid) CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (Heptanoic acid)

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· Transport hazard class(es)

· DOT



· Class 8 Corrosive substances

· Label 8

· IMDG, IATA



· Class 8 Corrosive substances

· Label 8

· Packing group

· DOT, IMDG, IATA

· Environmental hazards:

· Marine pollutant: No

· Special precautions for user Warning: Corrosive substances

· Segregation groups (SGG1) Acids

· Stowage Category A

Stowage Code SW2 Clear of living quarters.

· Transport in bulk according to Annex II of

MARPOL73/78 and the IBC Code Not applicable.

· Transport/Additional information:

· DOT

• Quantity limitations On passenger aircraft/rail: 5 L

On cargo aircraft only: 60 L

· IMDG

· Limited quantities (LQ) 5L

· Excepted quantities (EQ) Code: E1

Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml

· UN "Model Regulation": UN 3265 CORROSIVE LIQUID, ACIDIC, ORGANIC,

N.O.S. (HEPTANOIC ACID), 8, III

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.

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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





GHS05 GHS07

· Signal word Danger

· Hazard-determining components of labeling:

Heptanoic acid

Hazard statements

H332 Harmful if inhaled.

H314 Causes severe skin burns and eye damage.

H335 May cause respiratory irritation.

Precautionary statements

P260 Do not breathe/dust/fume/gas/mist/vapors/spray.

P303+P361+P353 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

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P310 Immediately call a poison center/doctor. Specific treatment (see on this label). P321

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international

regulations.

· 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)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

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

Acute Toxicity - Inhalation 4: Acute toxicity - Category 4 Skin Corrosion 1B: Skin corrosion/irritation - Category 1B

Eye Damage 1: Serious eye damage/eye irritation - Category 1

Specific Target Organ Toxicity - Single Exposure 3: Specific target organ toxicity (single exposure) - Category 3