

Date of issue: 01/24/2025 Reviewed on 01/24/2025

1 Identification

· Product identifier

· Trade name: L-Rhamnose natural

• **CAS Number:** 3615-41-6

· Other means of identification

· Product number: 1607

· Application of the substance / the mixture Flavoring Ingredients

Details of the supplier of the safety data sheet

DISCLAIMER: The information in this Safety Data Sheet (SDS) is believed to be correct as of the date issued. Advanced Biotech makes NO WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR COURSE OF PERFORMANCE OR USAGE OF TRADE. User is responsible for determining whether the Advanced Biotech product is fit for a particular purpose and suitable for user's method of use or application. Given the variety of factors that can affect the use and application of an Advanced Biotech product, some of which are uniquely within the user's knowledge and control, it is essential that the user evaluate the Advanced Biotech product to determine whether it is fit for a particular purpose and suitable for user's method of use or application.

· 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

The substance is not classified, according to the Globally Harmonized System (GHS).

· 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.

- · Hazard pictograms Not Applicable
- · Signal word Not Applicable
- · Hazard statements Not Applicable
- · Information pertaining to particular dangers for man and environment:
- · Classification system:
- · NFPA ratings (scale 0 4)



Health = 0 Fire = 1 Reactivity = 0

· HMIS-ratings (scale 0 - 4)



Health = 0 Fire = 1 Reactivity = 0

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- · Other hazards
- · Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · **vPvB:** Not applicable.
- · Classification according to (d)(1)(ii) of § 1910.1200

The SDS issuer does not object to the classifications provided by importers or manufacturers of precursor products.

Hazards not otherwise classified

There are no adverse physical or health effects known that are not covered by the hazard classes of the Hazard Communications Standard.

3 Composition/information on ingredients

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

CAS: 3615-41-6 L-Rhamnose natural

4 First-aid measures

- · Description of first aid measures
- · General information: No special measures required.
- After inhalation: Supply fresh air; consult doctor in case of complaints.
- After skin contact: Generally the product does not irritate the skin.
- · After eye contact: Rinse opened eye for several minutes under running water.
- · After swallowing: If symptoms persist consult 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 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 Not required.
- · Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- · Methods and material for containment and cleaning up: Pick up mechanically.

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· Protective Action Criteria for Chemicals

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PAC-1:

Substance is not listed.

· PAC-2:

Substance is not listed.

· PAC-3:

Substance is not listed.

· 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.

7 Handling and storage

- · Precautions for safe handling No special measures required.
- Information about protection against explosions and fires: No special measures required.
- · 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: None.
- · Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

- · 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
- Appropriate engineering controls No further data; see section 7.
- · Personal protective equipment:
- General protective and hygienic measures:

The usual precautionary measures for handling chemicals should be followed.

- Breathing equipment: Not required.
- · Protection of hands:

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 protection: Not required.

9 Physical and chemical properties

· Information on basic physical and chemical properties

· General Information

· Physical state Solid

Color: According to product specificationOdor: According to product specification

Odor threshold:
Not determined.

Melting point/Melting range:
90-95 °C (194-203 °F)

· Boiling point/Boiling range: Undetermined.

• Flammability: Product is not flammable.

Explosion limits:

Lower: Not determined.
Upper: Not determined.
Flash point: >110 °C (>230 °F)
Decomposition temperature: Not determined.
pH-value: Not applicable.

· Viscosity:

Kinematic: Not applicable. Dynamic: Not applicable.

· Solubility in / Miscibility with

· Water: Soluble.

Partition coefficient (n-octanol/water):
 Vapor pressure:
 Not determined.
 Not applicable.

· Vapor pressure:

Density: Not determined.Relative density Not determined.

Refractive Index

Vapor density
 Particle characteristics
 Not applicable.
 Not determined.

· Other information

· Appearance:

· Form: Solid

· Important information on protection of health

and environment, and on safety.

· **Ignition temperature:** Not determined.

· **Danger of explosion:** Product does not present an explosion hazard.

· VOC content: 0.00 % · Solids content: 100.0 %

· Change in condition

• Evaporation rate Not applicable.

10 Stability and reactivity

· Reactivity No further relevant information available.

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- · 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:
- · Primary irritant effect:
- on the skin: No irritant effect.
- on the eye: No irritating effect.
- · Sensitization: No sensitizing effects known.
- Additional toxicological information:

When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

The substance is not subject to classification.

- Interactive effects No interactive effects between components are known.
- · 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.

· Alternative sources for toxicological information

No non-standard sources for toxicological information where used.

12 Ecological information

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

Water hazard class 1 (Self-assessment): slightly hazardous for water

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

13 Disposal considerations

- · Waste treatment methods
- Recommendation: Smaller quantities can be disposed of with household waste.
- · Uncleaned packagings:
- · Recommendation: Disposal must be made according to official regulations.
- Recommended cleansing agent: Water, if necessary with cleansing agents.

Transport information	
UN-Number DOT, ADN, IMDG, IATA	Not Regulated
UN proper shipping name DOT, ADN, IMDG, IATA	Not Regulated
Transport hazard class(es)	
DOT, ADN, IMDG, IATA Class	Not Regulated
Packing group DOT, IMDG, IATA	Not Regulated
Environmental hazards: Marine pollutant:	No
Transport in bulk according to Annex MARPOL73/78 and the IBC Code	II of Not applicable.
Transport/Additional information:	Not dangerous according to the above specifications.
Special precautions for user	Not applicable.
UN "Model Regulation":	Not Regulated

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.

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· 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

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- · Hazard pictograms Not Applicable
- Signal word Not Applicable
- · Hazard statements Not Applicable
- · 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 previous version 01/10/2023
- · Date of preparation 01/24/2025
- · 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

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