

Ampicillin, lyophilized

Revision date 24-Feb-2021

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. Other Information

NFPA	Health hazards 2	Flammability 0	Instability 0	Special hazards -
HMTS	Health hazards 2	Flammability 0	Physical hazards 0	Personal protection X
Chronic Hazard Star legend	- Chronic Health Hazard			
Key or legend to abbreviations and acronyms used in the safety data sheet	Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION			
TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)	
Ceiling	Maximum limit value		Skin designation	

Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR)
 U.S. Environmental Protection Agency ChemView Database
 European Food Safety Authority (EFSA)
 EPA (Environmental Protection Agency)
 Acute Exposure Guideline Levels (AELGLs)
 U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act
 U.S. Environmental Protection Agency High Production Volume Chemicals
 Food Research Journal
 Hazardous Substance Database
 International Uniform Chemical Information Database (IUCLID)
 National Institute of Technology and Evaluation (NITE)
 Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)
 NIOSH (National Institute for Occupational Safety and Health)
 National Library of Medicine's PubMed Plus (NLM CIP)
 National Library of Medicine's PubMed database (NLM PUBMED)
 National Toxicology Program (NTP)
 New Zealand's Chemical Classification and Information Database (CCID)
 Organization for Economic Co-operation and Development Environment, Health, and Safety Publications
 Organization for Economic Co-operation and Development High Production Volume Chemicals Program
 Organization for Economic Co-operation and Development Screening Information Data Set
 World Health Organization

Revision date 24-Feb-2021

Revision Note SDS sections updated 1 2

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet

SAFETY DATA SHEET

Revision date 19-Aug-2021

Revision Number 2

1. Identification

Product Identifier	Arabinose Lyophilized
Product Name	Arabinose Lyophilized
Other means of Identification	
Catalog Numbers	1660406, 1660406EDU, 9702997
Recommended use of the chemical and restrictions on use	
Recommended use	Laboratory chemicals

Details of the supplier of the safety data sheet

Corporate Headquarters Bio-Rad Laboratories Inc. 1000 Alfred Nobel Drive Hercules, CA 94547 USA	Manufacturer Address Bio-Rad Laboratories, Life Science Group 2000 Alfred Nobel Drive Hercules, California 94547 USA	Legal Entity / Contact Address Bio-Rad Laboratories Life Science 2000 Alfred Nobel Drive Hercules, California 94547
---	--	---

Technical Service 1-800-424-6723

Emergency telephone number support@bio-rad.com

24 Hour Emergency Phone Number CHEMTREC USA 1 (800) 424-9300

2. Hazard(s) identification

Classification

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Hazards not otherwise classified (HNOC) Not applicable

Label elements

Hazard statements This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)	
The product contains no substances which at their given concentration, are considered to be hazardous to health	
Appearance powder or cake, lyophilized	Physical state Solid
	Odor Odorless

Other information No information available



69-52-3

Delayed and immediate effects as well as chronic effects from short and long-term exposure

- Skin corrosion/irritation: No information available.
- Serious eye damage/eye irritation: No information available.
- Respiratory or skin sensitization: May cause sensitization by inhalation. May cause sensitization by skin contact.
- Germ cell mutagenicity: No information available.

Carcinogenicity

The table below indicates whether each ingredient is a carcinogen.

Chemical name	ACGIH	IARC	NTP	OSHA
Sodium [2S,12.alpha.,5.alpha.,6.b eta.]-6-(aminophenyl)acetamidoyl-3,3-dimethyl-7-oxo-4-thia-1-szabicyclo [3,2,0]heptane-2-carboxylate	-	Group 3	NTP	-

Legend

IARC (International Agency for Research on Cancer)
Group 3 - Not Classifiable as to Carcinogenicity in Humans

- Reproductive toxicity: No information available.
- STOT - single exposure: No information available.
- STOT - repeated exposure: No information available.
- Aspiration hazard: No information available.
- Other adverse effects: No information available.
- Interactive effects: No information available.

12. Ecological information

The environmental impact of this product has not been fully investigated.

- Persistence and degradability: No information available.
- Bioaccumulation: There is no data for this product.
- Other adverse effects: No information available.

13. Disposal considerations

- Waste treatment methods: Waste from residues/unused products. Dispose of in accordance with local regulations. Dispose of waste in accordance with local regulations. Dispose of waste in accordance with environmental legislation.
- Contaminated packaging: Do not reuse empty containers.

14. Transport information

- DOT: Not regulated
- TDG: Not regulated
- MEX: Not regulated
- IATA: Not regulated
- IMDG: Not regulated

15. Regulatory information

- International Inventories: Contact supplier for inventory compliance status.
- US Federal Regulations:
 - SARA 313: Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.
 - SARA 311/312 Hazard Categories: Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.
 - CWA (Clean Water Act): This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).
- CERCLA: This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.
- US State Regulations:
 - California Proposition 65: This product does not contain any Proposition 65 chemicals.
 - U.S. State Right-to-Know Regulations: This product does not contain any substances regulated under applicable state right-to-know regulations.

Arabinose Lyophilized

Revision date 19-Aug-2021

3. Composition/information on ingredients

Substance	Chemical name	CAS No	Weight-%	Trade secret
	L-Arabinose	5328-37-0	50 - 100	

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. First-aid measures

Description of first aid measures

Inhalation Remove to fresh air.

Eye contact Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.

Skin contact Wash skin with soap and water.

Ingestion Rinse mouth.

Most important symptoms and effects, both acute and delayed

Symptoms No information available

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically.

5. Fire-fighting measures

Suitable Extinguishing Media Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Specific hazards arising from the chemical No information available

Explosion risks

Sensitivity to mechanical Impact None.

Sensitivity to static discharge None.

Special protective equipment and precautions for fire-fighters Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions Ensure adequate ventilation.

Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Arabinose Lyophilized

Revision date 19-Aug-2021

Methods for cleaning up Pick up and transfer to properly labeled containers.

7. Handling and storage

Precautions for safe handling Handle in accordance with good industrial hygiene and safety practice.

Advice on safe handling

Conditions for safe storage, including any incompatibilities

Storage Conditions Store according to product and label instructions.

8. Exposure controls/personal protection

Control parameters

Exposure Limits The following ingredients are the only ingredients of the product above the cut-off level (or level that contributes to the hazard classification of the mixture) which have an exposure limit applicable in the region for which this safety data sheet is intended or other recommended limit. At this time, the other relevant constituents have no known exposure limits from the sources listed here.

Appropriate engineering controls

Engineering controls Showers
Eyewash stations
Ventilation systems

Individual protection measures, such as personal protective equipment

Eyeface protection No special protective equipment required.

Skin and body protection No special protective equipment required.

Respiratory protection No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

General hygiene considerations Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

Information on basic physical and chemical properties

Physical state Solid

Appearance powder or cake, lyophilized

Color white

Odor Odorless

Odor threshold No information available

Property **Values** **Remarks - Method**

pH 158 °C / 316.4 °F None known

Melting point / freezing point No data available

Boiling point / boiling range No data available None known

Flash point	No data available	None known
Evaporation rate	No data available	None known
Flammability (solid, gas)	No data available	None known
Flammability Limit in Air	No data available	None known
Upper flammability or explosive limits	No data available	
Lower flammability or explosive limits	No data available	
Vapor pressure	No data available	None known
Vapor density	No data available	None known
Relative density	No data available	None known
Water solubility	Soluble in water	
Solubility(ies)	No data available	None known
Partition coefficient	No data available	None known
Autoignition temperature	No data available	None known
Decomposition temperature	No data available	None known
Kinematic viscosity	No data available	None known
Dynamic viscosity	No data available	None known
Other information		
Explosive properties	No information available	
Oxidizing properties	No information available	
Softening point	No information available	
Molecular weight	No information available	
VOC Content (%)	No information available	
Liquid Density	No information available	
Bulk density	No information available	

10. Stability and reactivity

Reactivity	No information available
Chemical stability	Stable under normal conditions.
Possibility of hazardous reactions	None under normal processing.
Conditions to avoid	None known based on information supplied.
Incompatible materials	None known based on information supplied
Hazardous decomposition products	None known based on information supplied.

11. Toxicological information

Information on likely routes of exposure

Inhalation	Specific test data for the substance or mixture is not available.
Eye contact	Specific test data for the substance or mixture is not available.
Skin contact	Specific test data for the substance or mixture is not available.
Ingestion	Specific test data for the substance or mixture is not available.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms	No information available.
----------	---------------------------

Acute toxicity.

Numerical measures of toxicity	No information available
--------------------------------	--------------------------

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation	No information available
Serious eye damage/eye irritation	No information available
Respiratory or skin sensitization	No information available.
Germ cell mutagenicity	No information available
Carcinogenicity	No information available
Reproductive toxicity	No information available
STOT - single exposure	No information available
STOT - repeated exposure	No information available
Aspiration hazard	No information available
Other adverse effects	No information available
Interactive effects	No information available

12. Ecological information

Ecotoxicity	The environmental impact of this product has not been fully investigated.
-------------	---

Persistence and degradability	No information available.
Bioaccumulation	There is no data for this product.
Other adverse effects	No information available.

13. Disposal considerations

Waste treatment methods

Waste from residues/unused products

Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation. Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Contaminated packaging

Do not reuse empty containers.

Arabinose Lyophilized

Revision date 19-Aug-2021

14. Transport information

DOT Not regulated
TDG Not regulated
MEX Not regulated
IATA Not regulated
IMDG Not regulated

15. Regulatory information

International Inventories

Contact supplier for inventory compliance status

US Federal Regulations

SARA 313
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1996 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

This product does not contain any substances regulated under applicable state right-to-know regulations

U.S. EPA Label Information

EPA Pesticide Registration Number: Not applicable

16. Other information

NFPA Health hazards 0 Flammability 0 Instability 0 Special hazards -
HMS Health hazards 0 Flammability 0 Physical hazards 0 Personal protection X

Arabinose Lyophilized

Revision date 19-Aug-2021

Key or legend to abbreviations and acronyms used in the safety data sheet

Legend Section 8: EXPOSURE CONTROL/PERSONAL PROTECTION
TWA TWA (time-weighted average) STEL STEL (Short Term Exposure Limit)
Ceiling Maximum limit value Skin designation

Key literature references and sources for data used to compile the SDS

- Agency for Toxic Substances and Disease Registry (ATSDR)
- U.S. Environmental Protection Agency (EPA)
- European Food Safety Authority (EFSA)
- EPA (Environmental Protection Agency)
- Acute Exposure Guideline Level(s) (AELGL(s))
- U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act
- U.S. Environmental Protection Agency High Production Volume Chemicals Food Research Journal
- Hazardous Substance Database
- International Union Chemical Information Database (IUCLID)
- National Institute of Technology and Evaluation (NITE)
- Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)
- NIOSH (National Institute for Occupational Safety and Health)
- National Library of Medicine's ChemID Plus (NLM CIP)
- National Library of Medicine's Pubmed database (NLM PUBMED)
- National Toxicology Program (NTP)
- New Zealand's Chemical Classification and Information Database (CCID)
- Organization for Economic Co-operation and Development Environment, Health, and Safety Publications
- Organization for Economic Co-operation and Development High Production Volume Chemicals Program
- Organization for Economic Co-operation and Development Screening Information Data Set
- World Health Organization

Revision date 19-Aug-2021
 Revision Note SDS sections updated. 1 2

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet

SAFETY DATA SHEET

Revision date 06-Nov-2020

Revision Number 1



Revision date 06-Nov-2020

LB Broth

Substance

Not applicable

Mixture

1. Identification

Product Identifier

Product Name LB Broth

Other means of identification

Catalog Number(s) 1660421, 1660421EDU, 9702927

Recommended use of the chemical and restrictions on use

Recommended use Laboratory chemicals

Details of the supplier of the safety data sheet

Corporate Headquarters
Bio-Rad Laboratories, Inc.
1000 Alfred Nobel Drive
Hercules, CA 94547
USA

Manufacturer Address
Bio-Rad Laboratories, Life Science Group
2000 Alfred Nobel Drive
Hercules, California 94547
USA

Legal Entity / Contact Address
Bio-Rad Laboratories
Life Science
2000 Alfred Nobel Drive
Hercules, California 94547

Technical Service

1-800-424-6723

support@bio-rad.com

Emergency telephone number

24 Hour Emergency Phone Number CHEMTREC USA, 1 (800) 424-9300

2. Hazard(s) identification

Classification

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Hazards not otherwise classified (HNOC)

Not applicable

Label elements

Hazard statements

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Appearance Liquid

Physical state Liquid

Odor Odorless

Other information

No information available.

3. Composition/information on ingredients

Chemical name	CAS No	Weight-%	Trade secret
Water	7732-18-5	50 - 100	-
Yeast extract	8013-01-2	0.3 - 0.999	-
Sodium chloride	7647-14-5	0.3 - 0.999	-

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. First-aid measures

Description of first aid measures

Inhalation

Remove to fresh air.

Eye contact

Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.

Skin contact

Wash skin with soap and water.

Ingestion

Rinse mouth.

Most important symptoms and effects, both acute and delayed

No information available.

Symptoms

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically

5. Fire-fighting measures

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Specific hazards arising from the chemical

No information available

Explosion data

Sensitivity to mechanical impact None.

Sensitivity to static discharge

None.

Special protective equipment and precautions for fire-fighters

Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions Ensure adequate ventilation.