# KIT SAFETY DATA SHEET



Kit Product Name Out of the Blue CRISPR Kit

Kit Catalogue Number(s) 12012608, 12012608EDU

Revision date 20-Aug-2021

# **Kit Contents**

Catalogue Number(s)	Product Name
1660406, 1660406EDU, 9702997	Arabinose Lyophilized
1660412, 1660412EDU, 10011390	LB Broth, Capsules
9702925	Transformation Solution
12012638	OutBlue E. coli HB101-pBRKan, Lyo
12012649	Spectinomycin, 18mg
12012642, 12012646	pLZDonor Plasmid, pLZDonorGuide Plasmid
12012648	OutBlue KIX Mix
12012647	LB Agar Powder, 25g

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# SAFETY DATA SHEET

Revision date 19-Aug-2021 Revision Number 2

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

Product identifier

Product Name Arabinose Lyophilized

Catalogue Number(s) 1660406, 1660406EDU, 9702997

Other means of identification

**CAS No** 5328-37-0

Recommended use of the chemical and restrictions on use

Recommended use Laboratory chemicals

Uses advised against No information available

Details of the supplier of the safety data sheet

<u>Corporate Headquarters</u>
Bio-Rad Laboratories Inc.

Manufacturer
Bio-Rad Laboratories, Life Science Group
Bio-Rad Laboratories Pty Ltd

1000 Alfred Nobel Drive2000 Alfred Nobel Drive189 Bush RoadHercules, CA 94547Hercules, California 94547Albany AucklandUSAUSANew Zealand

**Technical Service** +64 9 415 2280 or 0508 805 500

sales.nz@bio-rad.com

Emergency telephone number

24 Hour Emergency Phone Number CHEMTREC New Zealand: 64-98010034

## **SECTION 2: Hazards identification**

GHS Classification

Not classified

Label elements

**Hazard statements** 

Other hazards which do not result in classification

## SECTION 3: Composition/information on ingredients

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

## **SECTION 4: First aid measures**

**Description of first aid measures** 

**General advice** No hazards which require special 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 doctor.

**Skin contact** Wash skin with soap and water.

**Ingestion** Rinse mouth thoroughly with water.

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 doctors Treat symptomatically.

## **SECTION 5: Firefighting measures**

**Suitable Extinguishing Media** 

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

surrounding environment.

Unsuitable extinguishing media No information available.

Specific hazards arising from the chemical

Specific hazards arising from the

chemical

None known.

Special protective actions for fire-fighters

Special protective equipment for

fire-fighters

Firefighters should wear self-contained breathing apparatus and full firefighting turnout

gear. Use personal protection equipment.

### SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

**Personal precautions** See section 8 for more information.

**Environmental precautions** 

**Environmental precautions** See Section 12 for additional Ecological Information.

Methods and material for containment and cleaning up

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

**Methods for cleaning up** Pick up and transfer to properly labelled containers.

Precautions to prevent secondary hazards

Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

## **SECTION 7: Handling and storage**

Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

**Storage Conditions** Store according to product and label instructions.

**Incompatible materials**None known based on information supplied.

## SECTION 8: Exposure controls/personal protection

**Control parameters** 

Exposure Limits This product, as supplied, does not contain any hazardous materials with occupational

exposure limits established by the region specific regulatory bodies.

Biological occupational exposure

limits

This product, as supplied, does not contain any hazardous materials with biological limits

established by the region specific regulatory bodies.

Appropriate engineering controls

Engineering controls Showers

Eyewash stations Ventilation systems.

Individual protection measures, such as personal protective equipment

**Eve/face protection** Wear safety glasses with side shields (or goggles).

Hand protection Wear suitable gloves.

**Skin and body protection** Wear suitable protective clothing.

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.

**Environmental exposure controls** No information available.

## SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Physical state Solid

**Appearance** powder or cake, lyophilised

ColourwhiteOdourOdourless.

None known

Odour threshold No information available

Property Values Remarks • Method

pH None known Melting point / freezing point 158 °C

Boiling point / boiling rangeNo data availableNone knownFlash pointNo data availableNone known

Evaporation rateNo data availableNone knownFlammability (solid, gas)No data availableNone knownFlammability Limit in AirNone known

Upper flammability or explosive No data available

limits

Lower flammability or explosive No data available limits

Vapour pressure No data available

Vapour densityNo data availableNone knownRelative densityNo data availableNone known

Water solubilitySoluble in waterSolubility(ies)No data availableNone knownPartition coefficientNo data availableNone known

Autoignition temperature

No data available

None known

No data available

None known

None known

No data available

None known

None known

None known

Dynamic viscosity

No data available

None known

Explosive properties

Not applicable.

**Explosive properties**Not applicable. **Oxidising properties**Not applicable.

Other information

Molecular weight
VOC Content (%)
Not applicable
Not applicable

## **SECTION 10: Stability and reactivity**

Reactivity

**Reactivity** No information available.

**Chemical stability** 

**Stability** Stable under normal conditions.

**Explosion data** 

Sensitivity to mechanical impact None.

Sensitivity to static discharge None.

Possibility of hazardous reactions

Possibility of hazardous reactions None under normal processing.

Conditions to avoid

Conditions to avoid None known based on information supplied.

Incompatible materials

Incompatible materials None known based on information supplied.

Hazardous decomposition products

Hazardous decomposition products None known based on information supplied.

## **SECTION 11: Toxicological information**

#### **Acute toxicity**

#### Information on likely routes of exposure

#### **Product Information**

**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** 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 Based on available data, the classification criteria are not met.

Serious eye damage/eye irritation 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 Respiratory irritation Narcotic effects Based on available data, the classification criteria are not met. Based on available data, the classification criteria are not met. 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.

# SECTION 12: Ecological information

**Ecotoxicity** 

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

**Aquatic ecotoxicity** 

**Terrestrial ecotoxicty** There is no data for this product.

Persistence and degradability No information available.

Bioaccumulative potential

**Bioaccumulation** 

No information available.

Mobility in soil

Other adverse effects

No information available.

## **SECTION 13: Disposal considerations**

#### Waste treatment methods

#### Contaminated packaging

For packages that have been in direct contact with hazardous substances, the person must ensure that the package is rendered incapable of containing any substance. It must be disposed of in a manner that is consistent with the requirements for disposal of the substance that it contained, taking into account the material the package is manufactured from

Packages may only be reused or recycled if the package has been treated to remove any residual contents of the hazardous substance (class 1, 2, 3, 4, or 5); or the contents of the residue in the package are below the threshold for the substance to be classified as hazardous (class 6, 8, or 9 substance)

## **SECTION 14: Transport information**

<u>IATA</u> Not regulated

<u>IMDG</u> Not regulated

Transport in bulk according to Annex II of MARPOL and the IBC Code

No information available

## **SECTION 15: Regulatory information**

Safety, health and environmental regulations/legislation specific for the substance or mixture

National regulations

**New Zealand** 

National regulations See Section 8 for any applicable tolerable exposure limits and environmental exposure

limits

Certified handlers, tracking and controlled substance license requirements

Certified handlers are required for some substances. This includes for substances requiring a controlled substance license, including Class 1 explosives, vertebrate toxic agents (9.3A, B, C), and certain fumigants. Class 6.1A and 6.1B substances such as pesticides also require Certified handlers. Please check the Health and Safety at Work Act 2015 for further information

Tracking is required for some highly hazardous substances. These substances need to be under the control of an appropriately trained person or appropriately secured. Please check the Health and Safety at Work Act 2015 for further information.

the Health and Safety at Work Act 2015 for further information

Controlled substance licenses are required to possess certain class 1 (explosive) and class 6 (vertebrate toxic agents or fumigants) substances. See Part 7 of the Health and Safety at Work Regulation 2017 for more information

EPA New Zealand HSNO approval code or group standard

Not applicable

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#### **International Inventories**

Contact supplier for inventory compliance status

Legend:

#### **International Regulations**

The Montreal Protocol on Substances that Deplete the Ozone Layer Not applicable

The Stockholm Convention on Persistent Organic Pollutants Not applicable

The Rotterdam Convention Not applicable

## **SECTION 16: Other information**

Prepared By Bio-Rad Laboratories, Environmental Health and Safety

Revision date 19-Aug-2021

**Revision Note** SDS sections updated. 1. 3. 5. 12.

#### 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

C Carcinogen

#### 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 Level(s) (AEGL(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 Uniform Chemical Information Database (IUCLID)

Japan GHS Classification

Australian 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)

Organisation for Economic Co-operation and Development Environment, Health, and Safety Publications Organisation for Economic Co-operation and Development High Production Volume Chemicals Programme

Organisation for Economic Co-operation and Development Screening Information Data Set

RTECS (Registry of Toxic Effects of Chemical Substances)

World Health Organization

#### **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 08-Mar-2021 Revision Number 1

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

Product identifier

Product Name LB Broth, Capsules

Catalogue Number(s) 1660412, 1660412EDU, 10011390

Other means of identification

Recommended use of the chemical and restrictions on use

Recommended use Laboratory chemicals

Uses advised against No information available

Details of the supplier of the safety data sheet

<u>Corporate Headquarters</u>
Bio-Rad Laboratories Inc.

Manufacturer

Bio-Rad Laboratories, Life Science Group
Bio-Rad Laboratories Pty Ltd

1000 Alfred Nobel Drive 2000 Alfred Nobel Drive 189 Bush Road
Hercules, CA 94547 Hercules, California 94547 Albany Auckland
USA New Zealand

**Technical Service** +64 9 415 2280 or 0508 805 500

sales.nz@bio-rad.com

**Emergency telephone number** 

24 Hour Emergency Phone Number CHEMTREC New Zealand: 64-98010034

## **SECTION 2: Hazards identification**

GHS Classification

Acute toxicity - Oral Category 5 (HSNO - 6.1E)

Label elements

Signal word

Warning

**Hazard statements** 

H303 - May be harmful if swallowed

#### Other hazards which do not result in classification

## SECTION 3: Composition/information on ingredients

Chemical name	CAS No	Weight-%
Non-hazardous ingredients	Proprietary	Balance

## **SECTION 4: First aid measures**

**Description of first aid measures** 

**General advice** No hazards which require special 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 doctor.

**Skin contact** Wash skin with soap and water.

**Ingestion** Rinse mouth thoroughly with water.

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 doctors Treat symptomatically.

## **SECTION 5: Firefighting measures**

**Suitable Extinguishing Media** 

surrounding environment.

Unsuitable extinguishing media No information available.

Specific hazards arising from the chemical

Specific hazards arising from the

chemical

None known.

Special protective actions for fire-fighters

Special protective equipment for

fire-fighters

Firefighters should wear self-contained breathing apparatus and full firefighting turnout

gear. Use personal protection equipment.

### SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

**Personal precautions** See section 8 for more information.

**Environmental precautions** 

**Environmental precautions** See Section 12 for additional Ecological Information.

Methods and material for containment and cleaning up

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

**Methods for cleaning up** Pick up and transfer to properly labelled containers.

#### Precautions to prevent secondary hazards

Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

## **SECTION 7: Handling and storage**

Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

**Storage Conditions** Store according to product and label instructions.

**Incompatible materials**None known based on information supplied.

## SECTION 8: Exposure controls/personal protection

**Control parameters** 

Exposure Limits This product, as supplied, does not contain any hazardous materials with occupational

exposure limits established by the region specific regulatory bodies.

Biological occupational exposure

limits

This product, as supplied, does not contain any hazardous materials with biological limits

established by the region specific regulatory bodies.

Appropriate engineering controls

Engineering controls Showers

Eyewash stations Ventilation systems.

Individual protection measures, such as personal protective equipment

**Eve/face protection** Wear safety glasses with side shields (or goggles).

Hand protection Wear suitable gloves.

**Skin and body protection** Wear suitable protective clothing.

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.

**Environmental exposure controls** No information available.

## SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Physical stateSolidAppearancetabletColourlight brownOdoursweet.

None known

None known

Odour threshold No information available

<u>Property</u> <u>Values</u> <u>Remarks • Method</u>

pН None known Melting point / freezing point No data available None known Boiling point / boiling range No data available None known Flash point No data available None known No data available None known **Evaporation rate** Flammability (solid, gas) No data available None known None known

Flammability Limit in Air
Upper flammability or explosive No data available

limits

Lower flammability or explosive No data available

limits

Vapour pressureNo data availableNone knownVapour densityNo data availableNone knownRelative densityNo data availableNone known

Relative density
Water solubility
Soluble in water
No data available
No data available
Partition coefficient
No data available

Partition coefficientNo data availableNone knownAutoignition temperatureNo data availableNone knownDecomposition temperatureNo data availableNone knownKinematic viscosityNo data availableNone known

Dynamic viscosityNo data availableExplosive propertiesNot applicable.Oxidising propertiesNot applicable.

Other information

Molecular weight
VOC Content (%)

Not applicable
Not applicable

## **SECTION 10: Stability and reactivity**

Reactivity

**Reactivity** No information available.

**Chemical stability** 

**Stability** Stable under normal conditions.

**Explosion data** 

Sensitivity to mechanical impact None.

Sensitivity to static discharge None.

Possibility of hazardous reactions

Possibility of hazardous reactions None under normal processing.

Conditions to avoid

Conditions to avoid None known based on information supplied.

**Incompatible materials** 

Incompatible materials None known based on information supplied.

Hazardous decomposition products

Hazardous decomposition products None known based on information supplied.

## **SECTION 11: Toxicological information**

#### **Acute toxicity**

#### Information on likely routes of exposure

#### **Product Information**

**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** May be harmful if swallowed.

**Symptoms** No information available.

Acute toxicity

Numerical measures of toxicity

The following values are calculated based on chapter 3.1 of the GHS document

**ATEmix (oral)** 3,000.00 mg/kg **ATEmix (dermal)** 10,010.00 mg/kg

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

Skin corrosion/irritation Based on available data, the classification criteria are not met.

Serious eye damage/eye irritation 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
Respiratory irritation
Narcotic effects

Based on available data, the classification criteria are not met.
Based on available data, the classification criteria are not met.
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.

# **SECTION 12: Ecological information**

**Ecotoxicity** 

**Ecotoxicity** 

**Aquatic ecotoxicity** 

**Unknown aquatic toxicity** 0 % of the mixture consists of component(s) of unknown hazards to the aquatic

environment.

**Terrestrial ecotoxicty**There is no data for this product.

Persistence and degradability No information available.

Bioaccumulative potential

**Bioaccumulation** No information available.

Mobility in soil

Other adverse effects

No information available.

## SECTION 13: Disposal considerations

Waste treatment methods

#### Contaminated packaging

For packages that have been in direct contact with hazardous substances, the person must ensure that the package is rendered incapable of containing any substance. It must be disposed of in a manner that is consistent with the requirements for disposal of the substance that it contained, taking into account the material the package is manufactured from

Packages may only be reused or recycled if the package has been treated to remove any residual contents of the hazardous substance (class 1, 2, 3, 4, or 5); or the contents of the residue in the package are below the threshold for the substance to be classified as hazardous (class 6, 8, or 9 substance)

## **SECTION 14: Transport information**

<u>IATA</u> Not regulated

IMDG Not regulated

Transport in bulk according to Annex II of MARPOL and the IBC Code

No information available

## **SECTION 15: Regulatory information**

Safety, health and environmental regulations/legislation specific for the substance or mixture

**National regulations** 

**New Zealand** 

National regulations See Section 8 for any applicable tolerable exposure limits and environmental exposure

limits

Certified handlers, tracking and controlled substance license requirements

Certified handlers are required for some substances. This includes for substances requiring a controlled substance license, including Class 1 explosives, vertebrate toxic agents (9.3A, B, C), and certain fumigants. Class 6.1A and 6.1B substances such as pesticides also require Certified handlers. Please check the Health and Safety at Work Act 2015 for further information

Tracking is required for some highly hazardous substances. These substances need to be under the control of an appropriately trained person or appropriately secured. Please check the Health and Safety at Work Act 2015 for further information

Controlled substance licenses are required to possess certain class 1 (explosive) and class

6 (vertebrate toxic agents or fumigants) substances. See Part 7 of the Health and Safety at Work Regulation 2017 for more information

**EPA New Zealand HSNO approval** code or group standard

Not applicable

#### **International Inventories**

Contact supplier for inventory compliance status

Legend:

#### International Regulations

The Montreal Protocol on Substances that Deplete the Ozone Layer Not applicable

The Stockholm Convention on Persistent Organic Pollutants Not applicable

The Rotterdam Convention Not applicable

### **SECTION 16: Other information**

**Prepared By** Bio-Rad Laboratories, Environmental Health and Safety

08-Mar-2021 Revision date

**Revision Note** Significant changes throughout SDS. Review all sections.

#### 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

Carcinogen

#### 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 Level(s) (AEGL(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 Uniform Chemical Information Database (IUCLID)

Japan GHS Classification

Australian 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)

Organisation for Economic Co-operation and Development Environment, Health, and Safety Publications Organisation for Economic Co-operation and Development High Production Volume Chemicals Programme

Organisation for Economic Co-operation and Development Screening Information Data Set

RTECS (Registry of Toxic Effects of Chemical Substances)

World Health Organization

#### 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 26-Feb-2021 Revision Number 1

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

Product identifier

Product Name Transformation Solution

Catalogue Number(s) 9702925

Other means of identification

Recommended use of the chemical and restrictions on use

Recommended use Laboratory chemicals

Uses advised against No information available

Details of the supplier of the safety data sheet

<u>Corporate Headquarters</u>
Bio-Rad Laboratories Inc.

Manufacturer

Bio-Rad Laboratories, Life Science Group

Bio-Rad Laboratories Pty Ltd

1000 Alfred Nobel Drive2000 Alfred Nobel Drive189 Bush RoadHercules, CA 94547Hercules, California 94547Albany AucklandUSAUSANew Zealand

**Technical Service** +64 9 415 2280 or 0508 805 500

sales.nz@bio-rad.com

**Emergency telephone number** 

24 Hour Emergency Phone Number CHEMTREC New Zealand: 64-98010034

## **SECTION 2: Hazards identification**

GHS Classification

Not classified

Label elements

**Hazard statements** 

Other hazards which do not result in classification

# SECTION 3: Composition/information on ingredients

Chemical name	CAS No	Weight-%
Water	7732-18-5	50 - 100
Calcium chloride, hexahydrate	7774-34-7	1 - 2.5

Non-hazardous ingredients	Proprietary	Balance

## **SECTION 4: First aid measures**

Description of first aid measures

**General advice** No hazards which require special 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 doctor.

**Skin contact** Wash skin with soap and water.

**Ingestion** Rinse mouth thoroughly with water.

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 doctors**Treat symptomatically.

## **SECTION 5: Firefighting measures**

Suitable Extinguishing Media

surrounding environment.

Unsuitable extinguishing media No information available.

Specific hazards arising from the chemical

Specific hazards arising from the

chemical

None known.

Special protective actions for fire-fighters

Special protective equipment for

fire-fighters

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

#### SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

**Personal precautions** See section 8 for more information.

**Environmental precautions** 

**Environmental precautions** See Section 12 for additional Ecological Information.

Methods and material for containment and cleaning up

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

**Methods for cleaning up** Pick up and transfer to properly labelled containers.

Precautions to prevent secondary hazards

**Prevention of secondary hazards** Clean contaminated objects and areas thoroughly observing environmental regulations.

## SECTION 7: Handling and storage

Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

**Storage Conditions** Store according to product and label instructions.

**Incompatible materials**None known based on information supplied.

## SECTION 8: Exposure controls/personal protection

**Control parameters** 

Exposure Limits This product, as supplied, does not contain any hazardous materials with occupational

exposure limits established by the region specific regulatory bodies.

**Biological occupational exposure** 

limits

This product, as supplied, does not contain any hazardous materials with biological limits

established by the region specific regulatory bodies.

Appropriate engineering controls

Engineering controls Showers

Eyewash stations Ventilation systems.

Individual protection measures, such as personal protective equipment

**Eye/face protection** Wear safety glasses with side shields (or goggles).

Hand protection Wear suitable gloves.

**Skin and body protection** Wear suitable protective clothing.

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.

**Environmental exposure controls** No information available.

## SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Physical state Liquid

Appearance aqueous solution colour colourless

None known

None known

Odour Odourless.

Odour threshold No information available

<u>Property</u> <u>Values</u> <u>Remarks • Method</u>

pH 6-7
Melting point / freezing point 0 °C
Boiling point / boiling range 100 °C

Flash point

Evaporation rate

No data available

None known
No data available

None known
No data available

None known
None known
None known
None known
None known

Upper flammability or explosive No data available

limits

Lower flammability or explosive No data available

limits

Vapour pressureNo data availableNone knownVapour densityNo data availableNone knownRelative densityNo data availableNone known

Water solubility
Solubility(ies)
Partition coefficient
Autoignition temperature

Miscible in water
No data available
No data available
No data available

Autoignition temperatureNo data availableNone knownDecomposition temperatureNo data availableNone knownKinematic viscosityNo data availableNone knownDynamic viscosityNo data availableNone known

Explosive properties Not applicable.

Oxidising properties Not applicable.

Other information

Molecular weight Not applicable VOC Content (%) Not applicable

## SECTION 10: Stability and reactivity

Reactivity

**Reactivity** No information available.

Chemical stability

**Stability** Stable under normal conditions.

**Explosion data** 

Sensitivity to mechanical impact None.

Sensitivity to static discharge None.

Possibility of hazardous reactions

Possibility of hazardous reactions 
None under normal processing.

Conditions to avoid

**Conditions to avoid**None known based on information supplied.

Incompatible materials

**Incompatible materials**None known based on information supplied.

**Hazardous decomposition products** 

Hazardous decomposition products None known based on information supplied.

## **SECTION 11: Toxicological information**

#### **Acute toxicity**

#### Information on likely routes of exposure

#### **Product Information**

**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** No information available.

**Acute toxicity** 

**Numerical measures of toxicity** 

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Water	> 90 mL/kg (Rat)	-	-

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

**Skin corrosion/irritation** Based on available data, the classification criteria are not met.

Serious eye damage/eye irritation 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 Respiratory irritation Narcotic effects Based on available data, the classification criteria are not met. Based on available data, the classification criteria are not met. 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.

# **SECTION 12: Ecological information**

**Ecotoxicity** 

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

**Aquatic ecotoxicity** 

**Unknown aquatic toxicity** 0 % of the mixture consists of component(s) of unknown hazards to the aquatic

environment.

**Terrestrial ecotoxicty** There is no data for this product.

Persistence and degradability No information available.

Bioaccumulative potential

**Bioaccumulation** No information available.

Mobility in soil

Other adverse effects

No information available.

## **SECTION 13: Disposal considerations**

Waste treatment methods

#### Contaminated packaging

For packages that have been in direct contact with hazardous substances, the person must ensure that the package is rendered incapable of containing any substance. It must be disposed of in a manner that is consistent with the requirements for disposal of the substance that it contained, taking into account the material the package is manufactured from

Packages may only be reused or recycled if the package has been treated to remove any residual contents of the hazardous substance (class 1, 2, 3, 4, or 5); or the contents of the residue in the package are below the threshold for the substance to be classified as hazardous (class 6, 8, or 9 substance)

## **SECTION 14: Transport information**

IMDG Not regulated

Not regulated

Transport in bulk according to Annex II of MARPOL and the IBC Code

No information available

## SECTION 15: Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture

#### National regulations

#### **New Zealand**

Chemical name	New Zealand HSNO Chemical Classification
Calcium chloride, hexahydrate - 7774-34-7	6.1D (AII),6.1D (D),6.1D (I),6.1D (O),6.3A,6.4A,9.3C

#### National regulations

See Section 8 for any applicable tolerable exposure limits and environmental exposure limits

# Certified handlers, tracking and controlled substance license requirements

Certified handlers are required for some substances. This includes for substances requiring a controlled substance license, including Class 1 explosives, vertebrate toxic agents (9.3A, B, C), and certain fumigants. Class 6.1A and 6.1B substances such as pesticides also require Certified handlers. Please check the Health and Safety at Work Act 2015 for further information

Tracking is required for some highly hazardous substances. These substances need to be under the control of an appropriately trained person or appropriately secured. Please check the Health and Safety at Work Act 2015 for further information

Controlled substance licenses are required to possess certain class 1 (explosive) and class 6 (vertebrate toxic agents or fumigants) substances. See Part 7 of the Health and Safety at Work Regulation 2017 for more information

**EPA New Zealand HSNO approval** code or group standard

Not applicable

#### **International Inventories**

Contact supplier for inventory compliance status

Legend:

#### **International Regulations**

The Montreal Protocol on Substances that Deplete the Ozone Layer Not applicable

The Stockholm Convention on Persistent Organic Pollutants Not applicable

The Rotterdam Convention Not applicable

## **SECTION 16: Other information**

Bio-Rad Laboratories. Environmental Health and Safety Prepared By

**Revision date** 26-Feb-2021

**Revision Note** Significant changes throughout SDS. Review all sections.

## 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

Carcinogen

#### 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 Level(s) (AEGL(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 Uniform Chemical Information Database (IUCLID)

Japan GHS Classification

Australian 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)

Organisation for Economic Co-operation and Development Environment, Health, and Safety Publications

Organisation for Economic Co-operation and Development High Production Volume Chemicals Programme

Organisation for Economic Co-operation and Development Screening Information Data Set

RTECS (Registry of Toxic Effects of Chemical Substances)

World Health Organization

#### 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 19-Aug-2021 Revision Number 1

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

Product identifier

Product Name OutBlue E. coli HB101-pBRKan, Lyo

Catalogue Number(s) 12012638

Other means of identification

Recommended use of the chemical and restrictions on use

Recommended use Laboratory chemicals

Uses advised against No information available

Details of the supplier of the safety data sheet

<u>Corporate Headquarters</u>
Bio-Rad Laboratories Inc.

Manufacturer

Bio-Rad Laboratories, Life Science Group

Bio-Rad Laboratories Pty Ltd

1000 Alfred Nobel Drive2000 Alfred Nobel Drive189 Bush RoadHercules, CA 94547Hercules, California 94547Albany AucklandUSAUSANew Zealand

**Technical Service** +64 9 415 2280 or 0508 805 500

sales.nz@bio-rad.com

**Emergency telephone number** 

24 Hour Emergency Phone Number CHEMTREC New Zealand: 64-98010034

## **SECTION 2: Hazards identification**

GHS Classification

Not classified

Label elements

**Hazard statements** 

#### Other hazards which do not result in classification

Biosafety Level 1 - Agents not known to consistently cause disease in healthy adults and that present minimal potential hazard to laboratory personnel and the environment, are present in this product Contains human source material and / or potentially infectious components

## SECTION 3: Composition/information on ingredients

Chemical name	CAS No	Weight-%
Sucrose	57-50-1	50 - 100
Sodium chloride	7647-14-5	1 - 2.5

Non-hazardous ingredients	Proprietary	Balance

## SECTION 4: First aid measures

**Description of first aid measures** 

**General advice** No hazards which require special first aid measures.

**Inhalation** Remove to fresh air.

Eye contact Contains human source material and / or potentially infectious components. Call a doctor if

irritation persists.

**Skin contact** Wash skin with soap and water.

**Ingestion** Call a doctor. Contains human source material and / or potentially infectious components.

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 doctors Contains human source material and / or potentially infectious components.

## **SECTION 5: Firefighting measures**

Suitable Extinguishing Media

surrounding environment.

**Unsuitable extinguishing media** No information available.

Specific hazards arising from the chemical

Specific hazards arising from the

chemical

None known.

Special protective actions for fire-fighters

Special protective equipment for

fire-fighters

Firefighters should wear self-contained breathing apparatus and full firefighting turnout

gear. Use personal protection equipment.

## SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

**Personal precautions** See section 8 for more information.

For emergency responders

Use personal protection recommended in Section 8.

**Environmental precautions** 

**Environmental precautions** See Section 12 for additional Ecological Information.

Methods and material for containment and cleaning up

Revision date 19-Aug-2021

**Methods for containment** Do not allow into any sewer, on the ground or into any body of water.

Methods for cleaning up Clean contaminated surface thoroughly. Use:. Disinfectant.

Precautions to prevent secondary hazards

Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

## **SECTION 7: Handling and storage**

Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice.

**General hygiene considerations** Follow universal and standard precautions for handling potentially infectious materials.

Conditions for safe storage, including any incompatibilities

**Storage Conditions** Store according to product and label instructions.

**Incompatible materials**None known based on information supplied.

## SECTION 8: Exposure controls/personal protection

#### **Control parameters**

#### **Exposure Limits**

Chemical name	New Zealand	ACGIH TLV	United Kingdom	Australia
Sucrose	TWA: 10 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup>	10 mg/m <sup>3</sup>
57-50-1	-	_	STEL: 20 mg/m <sup>3</sup>	-

**Biological occupational exposure** 

limits

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies.

#### Appropriate engineering controls

Engineering controls Showers

Eyewash stations Ventilation systems.

#### Individual protection measures, such as personal protective equipment

**Eye/face protection** Wear safety glasses with side shields (or goggles).

**Hand protection** Wear suitable gloves.

**Skin and body protection** Wear suitable protective clothing.

exceeded or irritation is experienced, ventilation and evacuation may be required.

**Environmental exposure controls** No information available.

## SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Physical state Solid
Appearance Powder
Colour white
Odour Odourless.

Odour threshold No information available

<u>Property</u> <u>Values</u> <u>Remarks • Method</u>

рΗ None known No data available Melting point / freezing point None known Boiling point / boiling range No data available None known Flash point No data available None known No data available **Evaporation rate** None known Flammability (solid, gas) No data available None known Flammability Limit in Air None known

Upper flammability or explosive No data available

limits

Lower flammability or explosive No data available

limits

Vapour pressureNo data availableNone knownVapour densityNo data availableNone knownRelative densityNo data availableNone known

Relative density
Water solubility
Soluble in water
No data available
Soluble in water

Solubility(ies)No data availableNone knownPartition coefficientNo data availableNone knownAutoignition temperatureNo data availableNone knownDecomposition temperatureNone known

Kinematic viscosityNo data availableNone knownDynamic viscosityNo data availableNone known

**Explosive properties**Oxidising properties
Not applicable.
Not applicable.

Other information

Molecular weight

VOC Content (%)

Not applicable

Not applicable

## SECTION 10: Stability and reactivity

Reactivity

**Reactivity** No information available.

**Chemical stability** 

**Stability** Stable under normal conditions.

**Explosion data** 

Sensitivity to mechanical impact None.

Sensitivity to static discharge None.

Possibility of hazardous reactions

**Possibility of hazardous reactions** None under normal processing.

Conditions to avoid

Conditions to avoid None known based on information supplied.

Incompatible materials

Revision date 19-Aug-2021

**Incompatible materials**None known based on information supplied.

**Hazardous decomposition products** 

Hazardous decomposition products None known based on information supplied.

## SECTION 11: Toxicological information

#### **Acute toxicity**

Information on likely routes of exposure

#### **Product Information**

**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** No information available.

**Acute toxicity** 

Numerical measures of toxicity

The following values are calculated based on chapter 3.1 of the GHS document

**ATEmix (oral)** 25,140.60 mg/kg

**Component Information** 

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Sucrose	= 29700 mg/kg (Rat)	-	-
Sodium chloride	= 3 g/kg (Rat)	> 10 g/kg(Rabbit)	> 42 g/m³(Rat)1 h

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

**Skin corrosion/irritation**Based on available data, the classification criteria are not met.

Serious eye damage/eye irritation 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
Respiratory irritation
Narcotic effects

Based on available data, the classification criteria are not met.
Based on available data, the classification criteria are not met.
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.

## **SECTION 12: Ecological information**

**Ecotoxicity** 

**Ecotoxicity** 

**Aquatic ecotoxicity** 

**Unknown aquatic toxicity** 0 % of the mixture consists of component(s) of unknown hazards to the aquatic

environment.

Chemical name	Algae/aquatic plants	Fish	Crustacea
Sodium chloride	-	LC50: 4747 - 7824mg/L (96h, Oncorhynchus mykiss) LC50: 5560 - 6080mg/L (96h, Lepomis macrochirus) LC50: 6020 - 7070mg/L (96h, Pimephales promelas) LC50: 6420 - 6700mg/L (96h, Pimephales promelas) LC50: =12946mg/L (96h, Lepomis macrochirus) LC50: =7050mg/L (96h, Pimephales promelas)	EC50: 340.7 - 469.2mg/L (48h, Daphnia magna) EC50: =1000mg/L (48h, Daphnia magna)

#### **Terrestrial ecotoxicty**

Chemical name	Earthworm	Avian	Honeybees
Sodium chloride	Acute Toxicity: LC50 0.1 - 1	-	-
mg/cm2 (Eisenia foetida, 48 h			
	filter paper)		

Persistence and degradability

No information available.

Bioaccumulative potential

**Bioaccumulation** No information available.

**Mobility in soil** 

Other adverse effects

No information available.

## **SECTION 13: Disposal considerations**

Waste treatment methods

Contaminated packaging

For packages that have been in direct contact with hazardous substances, the person must ensure that the package is rendered incapable of containing any substance. It must be disposed of in a manner that is consistent with the requirements for disposal of the substance that it contained, taking into account the material the package is manufactured from

Packages may only be reused or recycled if the package has been treated to remove any residual contents of the hazardous substance (class 1, 2, 3, 4, or 5); or the contents of the residue in the package are below the threshold for the substance to be classified as hazardous (class 6, 8, or 9 substance)

# **SECTION 14: Transport information**

IATA Not regulated

IMDG Not regulated

Transport in bulk according to Annex II of MARPOL and the IBC Code

No information available

## SECTION 15: Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture

#### **New Zealand**

Chemical name	New Zealand HSNO Chemical Classification
Sodium chloride - 7647-14-5	6.1E (All),6.1E (O),6.4A

**National regulations** 

See Section 8 for any applicable tolerable exposure limits and environmental exposure

limits

Certified handlers, tracking and controlled substance license requirements

Certified handlers are required for some substances. This includes for substances requiring a controlled substance license, including Class 1 explosives, vertebrate toxic agents (9.3A, B, C), and certain fumigants. Class 6.1A and 6.1B substances such as pesticides also require Certified handlers. Please check the Health and Safety at Work Act 2015 for further information

Tracking is required for some highly hazardous substances. These substances need to be under the control of an appropriately trained person or appropriately secured. Please check the Health and Safety at Work Act 2015 for further information

Controlled substance licenses are required to possess certain class 1 (explosive) and class 6 (vertebrate toxic agents or fumigants) substances. See Part 7 of the Health and Safety at Work Regulation 2017 for more information

EPA New Zealand HSNO approval code or group standard

Not applicable

#### **International Inventories**

Contact supplier for inventory compliance status

Legend:

**International Regulations** 

The Montreal Protocol on Substances that Deplete the Ozone Layer Not applicable

The Stockholm Convention on Persistent Organic Pollutants Not applicable

The Rotterdam Convention Not applicable

#### **SECTION 16: Other information**

Prepared By Bio-Rad Laboratories, Environmental Health and Safety

Revision date 19-Aug-2021

**Revision Note** Significant changes throughout SDS. Review all sections.

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

C Carcinogen

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

Agency for Toxic Substances and Disease Registry (ATSDR)

Revision date 19-Aug-2021

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U.S. Environmental Protection Agency ChemView Database

European Food Safety Authority (EFSA)

EPA (Environmental Protection Agency)

Acute Exposure Guideline Level(s) (AEGL(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 Uniform Chemical Information Database (IUCLID)

Japan GHS Classification

Australian 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)

Organisation for Economic Co-operation and Development Environment, Health, and Safety Publications

Organisation for Economic Co-operation and Development High Production Volume Chemicals Programme

Organisation for Economic Co-operation and Development Screening Information Data Set

RTECS (Registry of Toxic Effects of Chemical Substances)

World Health Organization

#### **Disclaimer**

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**End of Safety Data Sheet** 



# SAFETY DATA SHEET

Revision date 23-Mar-2021 Revision Number 1

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

Product identifier

Product Name Spectinomycin, 18mg

Catalogue Number(s) 12012649

Other means of identification

Recommended use of the chemical and restrictions on use

Recommended use Laboratory chemicals

Uses advised against No information available

Details of the supplier of the safety data sheet

<u>Corporate Headquarters</u>
Bio-Rad Laboratories Inc.

Manufacturer

Bio-Rad Laboratories, Life Science Group

Bio-Rad Laboratories Pty Ltd

1000 Alfred Nobel Drive2000 Alfred Nobel Drive189 Bush RoadHercules, CA 94547Hercules, California 94547Albany AucklandUSAUSANew Zealand

**Technical Service** +64 9 415 2280 or 0508 805 500

sales.nz@bio-rad.com

Emergency telephone number

24 Hour Emergency Phone Number CHEMTREC New Zealand: 64-98010034

# **SECTION 2: Hazards identification**

#### GHS Classification

Skin corrosion/irritation	Category 2 (HSNO - 6.3A)
Serious eye damage/eye irritation	Category 2A (HSNO - 6.4A)
Specific target organ toxicity — single exposure	Category 3 (HSNO - 6.1E)

#### Label elements



#### Signal word Warning

## Hazard statements

H315 - Causes skin irritation

H319 - Causes serious eye irritation H335 - May cause respiratory irritation Spectinomycin, 18mg Revision date 23-Mar-2021

#### **Precautionary Statements - Prevention**

Wash face, hands and any exposed skin thoroughly after handling Avoid breathing dust/fume/gas/mist/vapours/spray Use only outdoors or in a well-ventilated area Wear protective gloves/protective clothing/eye protection/face protection

#### **Eves**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing If eye irritation persists: Get medical advice/attention

#### Skin

IF ON SKIN: Wash with plenty of water and soap
If skin irritation occurs: Get medical advice/attention
Take off all contaminated clothing and wash it before reuse

#### Inhalation

IF INHALED: Remove person to fresh air and keep comfortable for breathing Call a POISON CENTRE or doctor if you feel unwell

#### **Precautionary Statements - Storage**

Store in a well-ventilated place. Keep container tightly closed

#### **Precautionary Statements - Disposal**

Dispose of contents/container in accordance with local, regional, national, and international regulations as applicable

#### Other hazards which do not result in classification

## SECTION 3: Composition/information on ingredients

Chemical name	CAS No	Weight-%
Non-hazardous ingredients	Proprietary	Balance

## **SECTION 4: First aid measures**

#### Description of first aid measures

**General advice** Show this safety data sheet to the doctor in attendance.

Inhalation IF exposed or concerned: Get medical advice/attention. Get medical attention immediately if

symptoms occur. Remove to fresh air.

**Eye contact** Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open while rinsing. Do not rub affected area. Get medical attention if irritation develops and

persists.

**Skin contact** Wash off immediately with soap and plenty of water for at least 15 minutes. Get medical

attention if irritation develops and persists.

**Ingestion** Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth

to an unconscious person. Do NOT induce vomiting. Call a doctor.

Self-protection of the first aider Avoid contact with skin, eyes or clothing. Wear personal protective clothing (see section 8).

#### Most important symptoms and effects, both acute and delayed

**Symptoms** May cause redness and tearing of the eyes. Burning sensation.

### Indication of any immediate medical attention and special treatment needed

Note to doctors Treat symptomatically.

Spectinomycin, 18mg Revision date 23-Mar-2021

## **SECTION 5: Firefighting measures**

Suitable Extinguishing Media

surrounding environment.

Unsuitable extinguishing media No information available.

Specific hazards arising from the chemical

Specific hazards arising from the

chemical

None known.

Special protective actions for fire-fighters

Special protective equipment for

fire-fighters

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

## **SECTION 6: Accidental release measures**

Personal precautions, protective equipment and emergency procedures

Personal precautions Evacuate personnel to safe areas. Ensure adequate ventilation. Avoid contact with skin,

eyes or clothing. Use personal protective equipment as required.

**Other information** Refer to protective measures listed in Sections 7 and 8.

For emergency responders Use personal protection recommended in Section 8.

Environmental precautions

**Environmental precautions** Prevent further leakage or spillage if safe to do so.

Methods and material for containment and cleaning up

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

**Methods for cleaning up** Pick up and transfer to properly labelled containers.

Precautions to prevent secondary hazards

Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

## SECTION 7: Handling and storage

Precautions for safe handling

Advice on safe handling Take off contaminated clothing and wash it before reuse. Avoid contact with skin, eyes or

clothing. Do not eat, drink or smoke when using this product. Handle in accordance with good industrial hygiene and safety practice. Ensure adequate ventilation. Avoid breathing vapours or mists. In case of insufficient ventilation, wear suitable respiratory equipment.

**General hygiene considerations** Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do

not eat, drink or smoke when using this product.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Store according to

Spectinomycin, 18mg Revision date 23-Mar-2021

product and label instructions.

Incompatible materials Strong acids. Strong bases. Strong oxidising agents.

## SECTION 8: Exposure controls/personal protection

#### Control parameters

Exposure Limits This product, as supplied, does not contain any hazardous materials with occupational

exposure limits established by the region specific regulatory bodies.

**Biological occupational exposure** 

limits

This product, as supplied, does not contain any hazardous materials with biological limits

established by the region specific regulatory bodies.

#### Appropriate engineering controls

Engineering controls Showers

Eyewash stations Ventilation systems.

#### Individual protection measures, such as personal protective equipment

**Eye/face protection** If splashes are likely to occur, wear safety glasses with side-shields.

**Hand protection** Impervious gloves. Wear suitable gloves.

**Skin and body protection** Long sleeved clothing. Wear suitable protective clothing.

exceeded or irritation is experienced, ventilation and evacuation may be required.

Environmental exposure controls No information available.

# **SECTION 9: Physical and chemical properties**

Information on basic physical and chemical properties

Physical state Solid
Appearance Powder
Colour yellow
Odour Negligible.

Odour threshold No information available

<u>Property</u> <u>Values</u> <u>Remarks • Method</u>

None known

Melting point / freezing point 210 °C Boiling point / boiling range 583 °C

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 None known

Upper flammability or explosive No data available

limits

Lower flammability or explosive No data available

limits

Vapour pressureNo data availableNone knownVapour densityNo data availableNone known

Relative density

No data available

Water solubility

Soluble in water

Water solubility
Soluble in water
No data available
Partition coefficient
Autoignition temperature
Decomposition temperature
Soluble in water
No data available
No data available

None known None known

None known

None known

None known

Kinematic viscosity

Dynamic viscosity

Explosive properties

No data available

No data available

No data available

Not applicable.

None known None known

**Explosive properties**Not applicable. **Oxidising properties**Not applicable.

Other information

Molecular weight Not applicable VOC Content (%) Not applicable

# **SECTION 10: Stability and reactivity**

Reactivity

**Reactivity** No information available.

**Chemical stability** 

**Stability** Stable under normal conditions.

**Explosion data** 

Sensitivity to mechanical impact None.

Sensitivity to static discharge None.

Possibility of hazardous reactions

Possibility of hazardous reactions None under normal processing.

Conditions to avoid

Conditions to avoid None known based on information supplied.

Incompatible materials

**Incompatible materials** Strong acids. Strong bases. Strong oxidising agents.

Hazardous decomposition products

Hazardous decomposition products None known based on information supplied.

# SECTION 11: Toxicological information

#### **Acute toxicity**

### Information on likely routes of exposure

#### **Product Information**

**Inhalation** Specific test data for the substance or mixture is not available. May cause irritation of

respiratory tract.

Eye contact Irritating to eyes. Specific test data for the substance or mixture is not available. Causes

serious eye irritation. (based on components).

Skin contact Causes skin irritation. (based on components). Specific test data for the substance or

mixture is not available.

**Ingestion** Specific test data for the substance or mixture is not available. Ingestion may cause

gastrointestinal irritation, nausea, vomiting and diarrhoea.

**Symptoms** Redness. May cause redness and tearing of the eyes.

**Acute toxicity** 

**Numerical measures of toxicity** 

#### **Component Information**

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

**Skin corrosion/irritation** Classification based on data available for ingredients. Irritating to skin.

Serious eye damage/eye irritation Classification based on data available for ingredients. Causes serious eye irritation.

**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 Respiratory irritation May cause respiratory irritation. Classification based on data available for ingredients.

Irritant.

Narcotic effects 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.

# **SECTION 12: Ecological information**

**Ecotoxicity** 

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

**Aquatic ecotoxicity** 

**Terrestrial ecotoxicty**There is no data for this product.

Persistence and degradability No information available.

Bioaccumulative potential

**Bioaccumulation** No information available.

Mobility in soil

#### Other adverse effects

No information available.

# **SECTION 13: Disposal considerations**

#### Waste treatment methods

#### Contaminated packaging

For packages that have been in direct contact with hazardous substances, the person must ensure that the package is rendered incapable of containing any substance. It must be disposed of in a manner that is consistent with the requirements for disposal of the substance that it contained, taking into account the material the package is manufactured from

Packages may only be reused or recycled if the package has been treated to remove any residual contents of the hazardous substance (class 1, 2, 3, 4, or 5); or the contents of the residue in the package are below the threshold for the substance to be classified as hazardous (class 6, 8, or 9 substance)

# **SECTION 14: Transport information**

<u>IATA</u> Not regulated

IMDG Not regulated

Transport in bulk according to Annex II of MARPOL and the IBC Code

No information available

# SECTION 15: Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture

National regulations

**New Zealand** 

**National regulations** 

See Section 8 for any applicable tolerable exposure limits and environmental exposure

Certified handlers, tracking and controlled substance license requirements

Certified handlers are required for some substances. This includes for substances requiring a controlled substance license, including Class 1 explosives, vertebrate toxic agents (9.3A, B, C), and certain fumigants. Class 6.1A and 6.1B substances such as pesticides also require Certified handlers. Please check the Health and Safety at Work Act 2015 for further information

Tracking is required for some highly hazardous substances. These substances need to be under the control of an appropriately trained person or appropriately secured. Please check the Health and Safety at Work Act 2015 for further information

Controlled substance licenses are required to possess certain class 1 (explosive) and class 6 (vertebrate toxic agents or fumigants) substances. See Part 7 of the Health and Safety at Work Regulation 2017 for more information

EPA New Zealand HSNO approval code or group standard

Not applicable

**International Inventories** 

Contact supplier for inventory compliance status

Legend:

**International Regulations** 

The Montreal Protocol on Substances that Deplete the Ozone Layer Not applicable

The Stockholm Convention on Persistent Organic Pollutants Not applicable

#### The Rotterdam Convention Not applicable

### **SECTION 16: Other information**

Prepared By Bio-Rad Laboratories, Environmental Health and Safety

Revision date 23-Mar-2021

**Revision Note** Significant changes throughout SDS. Review all sections.

### 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

C Carcinogen

### 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 Level(s) (AEGL(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 Uniform Chemical Information Database (IUCLID)

Japan GHS Classification

Australian 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)

Organisation for Economic Co-operation and Development Environment, Health, and Safety Publications Organisation for Economic Co-operation and Development High Production Volume Chemicals Programme

Organisation for Economic Co-operation and Development Screening Information Data Set

RTECS (Registry of Toxic Effects of Chemical Substances)

World Health Organization

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**End of Safety Data Sheet** 



# SAFETY DATA SHEET

Revision date 19-Aug-2021 Revision Number 1

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

Product identifier

Product Name pLZDonor Plasmid, pLZDonorGuide Plasmid

Catalogue Number(s) 12012642, 12012646

Other means of identification

Recommended use of the chemical and restrictions on use

Recommended use Laboratory chemicals

Uses advised against No information available

Details of the supplier of the safety data sheet

<u>Corporate Headquarters</u>
Bio-Rad Laboratories Inc.

Manufacturer

Bio-Rad Laboratories, Life Science Group

Bio-Rad Laboratories Pty Ltd

1000 Alfred Nobel Drive2000 Alfred Nobel Drive189 Bush RoadHercules, CA 94547Hercules, California 94547Albany AucklandUSAUSANew Zealand

**Technical Service** +64 9 415 2280 or 0508 805 500

sales.nz@bio-rad.com

Emergency telephone number

24 Hour Emergency Phone Number CHEMTREC New Zealand: 64-98010034

# **SECTION 2: Hazards identification**

GHS Classification

Not classified

Label elements

**Hazard statements** 

Other hazards which do not result in classification

# SECTION 3: Composition/information on ingredients

Chemical name	CAS No	Weight-%
Non-hazardous ingredients	Proprietary	Balance

### **SECTION 4: First aid measures**

**Description of first aid measures** 

General advice No hazards which require special 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 doctor.

Skin contact Wash skin with soap and water.

Rinse mouth thoroughly with water. Ingestion

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 doctors Treat symptomatically.

# **SECTION 5: Firefighting measures**

**Suitable Extinguishing Media** 

**Suitable Extinguishing Media** Use extinguishing measures that are appropriate to local circumstances and the

surrounding environment.

Unsuitable extinguishing media No information available.

Specific hazards arising from the chemical

Specific hazards arising from the

chemical

None known.

Special protective actions for fire-fighters

Special protective equipment for

fire-fighters

Firefighters should wear self-contained breathing apparatus and full firefighting turnout

gear. Use personal protection equipment.

### SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions See section 8 for more information.

Use personal protection recommended in Section 8. For emergency responders

**Environmental precautions** 

See Section 12 for additional Ecological Information. **Environmental precautions** 

Methods and material for containment and cleaning up

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

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

Precautions to prevent secondary hazards

\_\_\_\_\_

**Prevention of secondary hazards** Clean contaminated objects and areas thoroughly observing environmental regulations.

# SECTION 7: Handling and storage

Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

**Storage Conditions** Store according to product and label instructions.

Incompatible materials None known based on information supplied.

### SECTION 8: Exposure controls/personal protection

**Control parameters** 

Exposure Limits This product, as supplied, does not contain any hazardous materials with occupational

exposure limits established by the region specific regulatory bodies.

Biological occupational exposure

limits

This product, as supplied, does not contain any hazardous materials with biological limits

established by the region specific regulatory bodies.

Appropriate engineering controls

Engineering controls Showers

Eyewash stations Ventilation systems.

Individual protection measures, such as personal protective equipment

**Eye/face protection** Wear safety glasses with side shields (or goggles).

**Hand protection** Wear suitable gloves.

**Skin and body protection** Wear suitable protective clothing.

exceeded or irritation is experienced, ventilation and evacuation may be required.

Environmental exposure controls No information available.

### SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Physical state Liquid

Appearance aqueous solution colourless
Odour Odourless.

Odour threshold No information available

None known

None known

<u>Property</u> <u>Values</u> <u>Remarks • Method</u>

pH 7.5-8.5 Melting point / freezing point 0 °C Boiling point / boiling range 100 °C

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 None known

Upper flammability or explosive No data available

limits

Lower flammability or explosive No data available

limits

Vapour pressureNo data availableNone knownVapour densityNo data availableNone knownRelative densityNo data availableNone known

Water solubility
Solubility(ies)
Partition coefficient
Autoignition temperature
No data available
No data available
No data available

 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

**Explosive properties**Not applicable. **Oxidising properties**Not applicable.

Other information

Molecular weight Not applicable VOC Content (%) Not applicable

# **SECTION 10: Stability and reactivity**

Reactivity

**Reactivity** No information available.

Chemical stability

**Stability** Stable under normal conditions.

**Explosion data** 

Sensitivity to mechanical impact None.

Sensitivity to static discharge None.

Possibility of hazardous reactions

**Possibility of hazardous reactions** None under normal processing.

Conditions to avoid

**Conditions to avoid**None known based on information supplied.

Incompatible materials

**Incompatible materials**None known based on information supplied.

Hazardous decomposition products

Hazardous decomposition products None known based on information supplied.

### **SECTION 11: Toxicological information**

#### **Acute toxicity**

#### Information on likely routes of exposure

#### **Product Information**

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** No information available.

**Acute toxicity** 

**Numerical measures of toxicity** 

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

Skin corrosion/irritation Based on available data, the classification criteria are not met.

Serious eye damage/eye irritation 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 Respiratory irritation **Narcotic effects** 

Based on available data, the classification criteria are not met. Based on available data, the classification criteria are not met. Based on available data, the classification criteria are not met.

STOT - repeated exposure Based on available data, the classification criteria are not met.

Based on available data, the classification criteria are not met. **Aspiration hazard** 

# **SECTION 12: Ecological information**

**Ecotoxicity** 

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

Aquatic ecotoxicity

Unknown aquatic toxicity 0 % of the mixture consists of component(s) of unknown hazards to the aquatic

environment.

**Terrestrial ecotoxicty** There is no data for this product.

Persistence and degradability No information available.

Bioaccumulative potential

Bioaccumulation

No information available.

Mobility in soil

Other adverse effects

No information available.

### **SECTION 13: Disposal considerations**

#### Waste treatment methods

#### Contaminated packaging

For packages that have been in direct contact with hazardous substances, the person must ensure that the package is rendered incapable of containing any substance. It must be disposed of in a manner that is consistent with the requirements for disposal of the substance that it contained, taking into account the material the package is manufactured

Packages may only be reused or recycled if the package has been treated to remove any residual contents of the hazardous substance (class 1, 2, 3, 4, or 5); or the contents of the residue in the package are below the threshold for the substance to be classified as hazardous (class 6, 8, or 9 substance)

# **SECTION 14: Transport information**

IATA Not regulated

IMDG Not regulated

Transport in bulk according to Annex II of MARPOL and the IBC Code

No information available

# SECTION 15: Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture

National regulations

**New Zealand** 

See Section 8 for any applicable tolerable exposure limits and environmental exposure **National regulations** 

limits

Certified handlers, tracking and controlled substance license requirements

Certified handlers are required for some substances. This includes for substances requiring a controlled substance license, including Class 1 explosives, vertebrate toxic agents (9.3A, B, C), and certain fumigants. Class 6.1A and 6.1B substances such as pesticides also require Certified handlers. Please check the Health and Safety at Work Act 2015 for further information

Tracking is required for some highly hazardous substances. These substances need to be under the control of an appropriately trained person or appropriately secured. Please check the Health and Safety at Work Act 2015 for further information

Controlled substance licenses are required to possess certain class 1 (explosive) and class 6 (vertebrate toxic agents or fumigants) substances. See Part 7 of the Health and Safety at Work Regulation 2017 for more information

**EPA New Zealand HSNO approval** code or group standard

Not applicable

#### **International Inventories**

Contact supplier for inventory compliance status

Legend:

#### **International Regulations**

The Montreal Protocol on Substances that Deplete the Ozone Layer Not applicable

The Stockholm Convention on Persistent Organic Pollutants Not applicable

The Rotterdam Convention Not applicable

### **SECTION 16: Other information**

Prepared By Bio-Rad Laboratories, Environmental Health and Safety

Revision date 19-Aug-2021

**Revision Note** Significant changes throughout SDS. Review all sections.

### 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

C Carcinogen

#### 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 Level(s) (AEGL(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 Uniform Chemical Information Database (IUCLID)

Japan GHS Classification

Australian 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)

Organisation for Economic Co-operation and Development Environment, Health, and Safety Publications Organisation for Economic Co-operation and Development High Production Volume Chemicals Programme

Organisation for Economic Co-operation and Development Screening Information Data Set

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**End of Safety Data Sheet** 



# **SAFETY DATA SHEET**

Revision date 19-Aug-2021 Revision Number 2

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

Product identifier

Product Name OutBlue KIX Mix

Catalogue Number(s) 12012648

Other means of identification

Recommended use of the chemical and restrictions on use

Recommended use Laboratory chemicals

Uses advised against No information available

Details of the supplier of the safety data sheet

<u>Corporate Headquarters</u>
Bio-Rad Laboratories Inc.

Manufacturer

Bio-Rad Laboratories, Life Science Group

Bio-Rad Laboratories Pty Ltd

1000 Alfred Nobel Drive2000 Alfred Nobel Drive189 Bush RoadHercules, CA 94547Hercules, California 94547Albany AucklandUSAUSANew Zealand

**Technical Service** +64 9 415 2280 or 0508 805 500

sales.nz@bio-rad.com

**Emergency telephone number** 

24 Hour Emergency Phone Number CHEMTREC New Zealand: 64-98010034

# **SECTION 2: Hazards identification**

#### GHS Classification

Acute toxicity - Oral	Category 4 (HSNO - 6.1D)
Acute toxicity - Dermal	Category 4 (HSNO - 6.1D)
Acute toxicity - Inhalation (Dusts/Mists)	Category 4 (HSNO - 6.1D)
Reproductive toxicity	Category 1B (HSNO - 6.8A)

### Label elements



#### Signal word Danger

### **Hazard statements**

H302 - Harmful if swallowed

H312 - Harmful in contact with skin

H332 - Harmful if inhaled

H360 - May damage fertility or the unborn child

#### **Precautionary Statements - Prevention**

Wear protective gloves/protective clothing/eye protection/face protection Wash face, hands and any exposed skin thoroughly after handling Do not eat, drink or smoke when using this product Avoid breathing dust/fume/gas/mist/vapours/spray Use only outdoors or in a well-ventilated area

#### **Precautionary Statements - Response**

IF exposed or concerned: Get medical advice/attention

#### Skin

IF ON SKIN: Wash with plenty of water and soap Call a POISON CENTRE or doctor if you feel unwell Take off all contaminated clothing and wash it before reuse

#### Inhalation

IF INHALED: Remove person to fresh air and keep comfortable for breathing Call a POISON CENTRE or doctor if you feel unwell

#### Ingestion

IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell Rinse mouth

#### **Precautionary Statements - Disposal**

Dispose of contents/container in accordance with local, regional, national, and international regulations as applicable

Other hazards which do not result in classification

# SECTION 3: Composition/information on ingredients

Chemical name	CAS NO	vveignt-%
.betaD-Galactopyranoside, 1-methylethyl 1-thio-	367-93-1	50 - 100
Kanamycin sulphate	25389-94-0	5 - 10
Non-hazardous ingredients	Proprietary	Balance

### **SECTION 4: First aid measures**

#### Description of first aid measures

**General advice** Show this safety data sheet to the doctor in attendance.

**Inhalation** If breathing has stopped, give artificial respiration. Get medical attention immediately.

Remove to fresh air. If symptoms persist, call a doctor.

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

Consult a doctor.

Skin contact Wash off immediately with plenty of water for at least 15 minutes. If symptoms persist, call a

doctor.

**Ingestion** Do NOT induce vomiting. Clean mouth with water and drink afterwards plenty of water.

Never give anything by mouth to an unconscious person. Get medical attention.

Self-protection of the first aider Ensure that medical personnel are aware of the material(s) involved, take precautions to

protect themselves and prevent spread of contamination. Avoid breathing

dust/fume/gas/mist/vapours/spray. Use personal protective equipment as required. See

section 8 for more information.

Most important symptoms and effects, both acute and delayed

**Symptoms** Coughing and/ or wheezing. Difficulty in breathing.

Indication of any immediate medical attention and special treatment needed

Note to doctors Treat symptomatically.

# **SECTION 5: Firefighting measures**

Suitable Extinguishing Media

surrounding environment.

Unsuitable extinguishing media No information available.

Specific hazards arising from the chemical

Specific hazards arising from the

chemical

None known.

Special protective actions for fire-fighters

Special protective equipment for

fire-fighters

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

### SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal

protective equipment as required. Avoid generation of dust. Do not breathe dust.

**Other information** Refer to protective measures listed in Sections 7 and 8.

**Environmental precautions** 

**Environmental precautions** Prevent further leakage or spillage if safe to do so.

Methods and material for containment and cleaning up

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

**Methods for cleaning up** Pick up and transfer to properly labelled containers.

Precautions to prevent secondary hazards

**Prevention of secondary hazards** Clean contaminated objects and areas thoroughly observing environmental regulations.

## SECTION 7: Handling and storage

Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice. Avoid contact with

skin, eyes or clothing. Ensure adequate ventilation. Do not eat, drink or smoke when using

this product. Remove contaminated clothing and shoes. Avoid breathing

dust/fume/gas/mist/vapours/spray. Avoid generation of dust.

General hygiene considerations Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do

not eat, drink or smoke when using this product. Wash hands before breaks and

immediately after handling the product. Avoid breathing dust/fume/gas/mist/vapours/spray.

#### Conditions for safe storage, including any incompatibilities

**Storage Conditions** Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach

of children. Store locked up. Store according to product and label instructions.

None known based on information supplied. Incompatible materials

# SECTION 8: Exposure controls/personal protection

#### **Control parameters**

This product, as supplied, does not contain any hazardous materials with occupational **Exposure Limits** 

exposure limits established by the region specific regulatory bodies.

Biological occupational exposure

limits

This product, as supplied, does not contain any hazardous materials with biological limits

established by the region specific regulatory bodies.

#### Appropriate engineering controls

Showers **Engineering controls** 

> Eyewash stations Ventilation systems.

#### Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles).

Hand protection Wear suitable gloves.

Wear suitable protective clothing. Long sleeved clothing. Skin and body protection

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.

**Environmental exposure controls** No information available.

# **SECTION 9: Physical and chemical properties**

Information on basic physical and chemical properties

Physical state Solid solid **Appearance** Off-white Colour Odour Odourless

**Odour threshold** No information available

**Property** Values Remarks • Method

None known

Melting point / freezing point No data available None known Boiling point / boiling range No data available None known

Flash pointNo data availableNone knownEvaporation rateNo data availableNone knownFlammability (solid, gas)No data availableNone knownFlammability Limit in AirNone known

Upper flammability or explosive No data available

limits

Lower flammability or explosive No data available

limits

Vapour pressureNo data availableNone knownVapour densityNo data availableNone knownRelative densityNo data availableNone known

Water solubility
Solubility(ies)
Partition coefficient
No data available
No data available
No data available

Partition coefficient

Autoignition temperature

Decomposition temperature

Kinematic viscosity

No data available

No data available

No data available

Dynamic viscosity

Explosive properties

Oxidising properties

No data available
Not applicable.
Not applicable.

Other information

Molecular weight
VOC Content (%)

Not applicable
Not applicable

# **SECTION 10: Stability and reactivity**

Reactivity

**Reactivity** No information available.

**Chemical stability** 

**Stability** Stable under normal conditions.

**Explosion data** 

Sensitivity to mechanical impact None.

Sensitivity to static discharge None.

Possibility of hazardous reactions

Possibility of hazardous reactions 
None under normal processing.

**Conditions to avoid** 

Conditions to avoid Excessive heat.

Incompatible materials

**Incompatible materials**None known based on information supplied.

Hazardous decomposition products

Hazardous decomposition products None known based on information supplied.

# **SECTION 11: Toxicological information**

**Acute toxicity** 

Information on likely routes of exposure

#### **Product Information**

**Inhalation** Specific test data for the substance or mixture is not available. Harmful by inhalation.

(based on components).

**Eye contact** Specific test data for the substance or mixture is not available.

**Skin contact** May be absorbed through the skin in harmful amounts. Harmful in contact with skin. (based

on components).

Ingestion Specific test data for the substance or mixture is not available. Harmful if swallowed. (based

on components).

**Symptoms** Coughing and/ or wheezing.

Acute toxicity

Numerical measures of toxicity

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral) 545.30 mg/kg
ATEmix (dermal) 1,100.00 mg/kg
ATEmix (inhalation-dust/mist) 1.50 mg/l

**Component Information** 

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Kanamycin sulphate	> 4 g/kg (Rat)	-	-

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

**Skin corrosion/irritation**Based on available data, the classification criteria are not met.

**Serious eye damage/eye irritation** 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 Contains a known or suspected reproductive toxin. Classification based on data available

for ingredients. May damage fertility or the unborn child.

STOT - single exposure Respiratory irritation Narcotic effects Based on available data, the classification criteria are not met. Based on available data, the classification criteria are not met. 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.

### SECTION 12: Ecological information

**Ecotoxicity** 

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

**Aquatic ecotoxicity** 

**Unknown aquatic toxicity** 0.9182 % of the mixture consists of component(s) of unknown hazards to the aquatic

environment.

**Terrestrial ecotoxicty** There is no data for this product.

Persistence and degradability No information available.

**Bioaccumulative potential** 

**Bioaccumulation** No information available.

Mobility in soil

#### Other adverse effects

No information available.

## **SECTION 13: Disposal considerations**

#### Waste treatment methods

#### Contaminated packaging

For packages that have been in direct contact with hazardous substances, the person must ensure that the package is rendered incapable of containing any substance. It must be disposed of in a manner that is consistent with the requirements for disposal of the substance that it contained, taking into account the material the package is manufactured from

Packages may only be reused or recycled if the package has been treated to remove any residual contents of the hazardous substance (class 1, 2, 3, 4, or 5); or the contents of the residue in the package are below the threshold for the substance to be classified as hazardous (class 6, 8, or 9 substance)

### **SECTION 14: Transport information**

IMDG Not regulated

Not regulated

Transport in bulk according to Annex II of MARPOL and the IBC Code

No information available

# **SECTION 15: Regulatory information**

Safety, health and environmental regulations/legislation specific for the substance or mixture

#### **National regulations**

### **New Zealand**

Chemical name	New Zealand HSNO Chemical Classification
.betaD-Galactopyranoside, 1-methylethyl 1-thio 367-93-1	6.7B
Kanamycin sulphate - 25389-94-0	6.8A,6.9A (All),6.9A (O)

National regulations See Section 8 for any applicable tolerable exposure limits and environmental exposure

limits

Certified handlers, tracking and controlled substance license

Certified handlers are required for some substances. This includes for substances requiring a controlled substance license, including Class 1 explosives, vertebrate toxic agents (9.3A,

#### requirements

B, C), and certain fumigants. Class 6.1A and 6.1B substances such as pesticides also require Certified handlers. Please check the Health and Safety at Work Act 2015 for further information

Tracking is required for some highly hazardous substances. These substances need to be under the control of an appropriately trained person or appropriately secured. Please check the Health and Safety at Work Act 2015 for further information

Controlled substance licenses are required to possess certain class 1 (explosive) and class 6 (vertebrate toxic agents or fumigants) substances. See Part 7 of the Health and Safety at

Work Regulation 2017 for more information

#### **EPA New Zealand HSNO approval** code or group standard

Not applicable

#### **International Inventories**

Contact supplier for inventory compliance status

Legend:

#### International Regulations

The Montreal Protocol on Substances that Deplete the Ozone Layer Not applicable

The Stockholm Convention on Persistent Organic Pollutants Not applicable

The Rotterdam Convention Not applicable

### **SECTION 16: Other information**

Prepared By Bio-Rad Laboratories, Environmental Health and Safety

**Revision date** 19-Aug-2021

Significant changes throughout SDS. Review all sections. **Revision Note** 

### 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

C Carcinogen

#### 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 Level(s) (AEGL(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 Uniform Chemical Information Database (IUCLID)

Japan GHS Classification

Australian 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)

Organisation for Economic Co-operation and Development Environment, Health, and Safety Publications

Organisation for Economic Co-operation and Development High Production Volume Chemicals Programme

Organisation for Economic Co-operation and Development Screening Information Data Set

RTECS (Registry of Toxic Effects of Chemical Substances)

World Health Organization

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**End of Safety Data Sheet** 



# SAFETY DATA SHEET

Revision date 18-Mar-2021 Revision Number 1

# SECTION 1: Identification of the substance/mixture and of the company/undertaking

**Product identifier** 

Product Name LB Agar Powder, 25g

Catalogue Number(s) 12012647

Other means of identification

Recommended use of the chemical and restrictions on use

Recommended use Laboratory chemicals

Uses advised against No information available

Details of the supplier of the safety data sheet

Corporate HeadquartersManufacturerLegal Entity / Contact AddressBio-Rad Laboratories Inc.Bio-Rad Laboratories, Life Science GroupBio-Rad Laboratories Pty Ltd

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24 Hour Emergency Phone Number CHEMTREC New Zealand: 64-98010034

# **SECTION 2: Hazards identification**

GHS Classification

Not classified

Label elements

**Hazard statements** 

Other hazards which do not result in classification

# SECTION 3: Composition/information on ingredients

Chemical name	CAS No	Weight-%
Non-hazardous ingredients	Proprietary	Balance

# **SECTION 4: First aid measures**

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Description of first aid measures

General advice No hazards which require special 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 doctor.

**Skin contact** Wash skin with soap and water.

**Ingestion** Rinse mouth thoroughly with water.

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 doctors Treat symptomatically.

# **SECTION 5: Firefighting measures**

**Suitable Extinguishing Media** 

surrounding environment.

**Unsuitable extinguishing media** No information available.

Specific hazards arising from the chemical

Specific hazards arising from the

chemical

None known.

Special protective actions for fire-fighters

Special protective equipment for

fire-fighters

Firefighters should wear self-contained breathing apparatus and full firefighting turnout

gear. Use personal protection equipment.

### SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

**Personal precautions** See section 8 for more information.

**Environmental precautions** 

**Environmental precautions** See Section 12 for additional Ecological Information.

Methods and material for containment and cleaning up

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

**Methods for cleaning up** Pick up and transfer to properly labelled containers.

Precautions to prevent secondary hazards

**Prevention of secondary hazards** Clean contaminated objects and areas thoroughly observing environmental regulations.

# SECTION 7: Handling and storage

Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

**Storage Conditions** Store according to product and label instructions.

**Incompatible materials**None known based on information supplied.

### SECTION 8: Exposure controls/personal protection

Control parameters

Exposure Limits This product, as supplied, does not contain any hazardous materials with occupational

exposure limits established by the region specific regulatory bodies.

**Biological occupational exposure** 

limits

This product, as supplied, does not contain any hazardous materials with biological limits

established by the region specific regulatory bodies.

Appropriate engineering controls

Engineering controls Showers

Eyewash stations Ventilation systems.

Individual protection measures, such as personal protective equipment

**Eyelface protection** Wear safety glasses with side shields (or goggles).

**Hand protection** Wear suitable gloves.

**Skin and body protection**Wear suitable protective clothing.

**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.

**Environmental exposure controls** No information available.

# SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Physical stateSolidAppearancesolidColourlight yellowOdourOdourless.

Odour threshold No information available

<u>Property</u> <u>Values</u> <u>Remarks • Method</u>

pHMelting point / freezing pointNo data availableNone knownNone known

Boiling point / boiling range 1461 °C

Flash pointNo data availableNone knownEvaporation rateNo data availableNone knownFlammability (solid, gas)No data availableNone knownFlammability Limit in AirNone known

Upper flammability or explosive No data available

limits
Lower flammability or explosive No data available

limits

Vapour pressureNo data availableNone knownVapour densityNo data availableNone knownRelative densityNo data availableNone 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

 Peromposition temperature
 None known

Decomposition temperatureNo data availableNone knownKinematic viscosityNo data availableNone knownDynamic viscosityNo data availableNone known

Explosive properties

Oxidising properties

Not applicable.

Not applicable.

Other information

Molecular weight
VOC Content (%)

Not applicable
Not applicable

# **SECTION 10: Stability and reactivity**

Reactivity

**Reactivity** No information available.

Chemical stability

**Stability** Stable under normal conditions.

**Explosion data** 

Sensitivity to mechanical impact None.

Sensitivity to static discharge None.

Possibility of hazardous reactions

Possibility of hazardous reactions 
None under normal processing.

Conditions to avoid

**Conditions to avoid**None known based on information supplied.

Incompatible materials

**Incompatible materials**None known based on information supplied.

**Hazardous decomposition products** 

Hazardous decomposition products None known based on information supplied.

# **SECTION 11: Toxicological information**

#### **Acute toxicity**

#### Information on likely routes of exposure

#### **Product Information**

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** No information available.

**Acute toxicity** 

**Numerical measures of toxicity** 

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral) 6,599.90 mg/kg **ATEmix (dermal)** 10,010.00 mg/kg

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

Skin corrosion/irritation Based on available data, the classification criteria are not met.

Serious eye damage/eye irritation Based on available data, the classification criteria are not met.

Based on available data, the classification criteria are not met. Germ cell mutagenicity

Carcinogenicity Based on available data, the classification criteria are not met.

Reproductive toxicity Based on available data, the classification criteria are not met.

Based on available data, the classification criteria are not met. STOT - single exposure Respiratory irritation **Narcotic effects** 

Based on available data, the classification criteria are not met. Based on available data, the classification criteria are not met.

Based on available data, the classification criteria are not met. STOT - repeated exposure

**Aspiration hazard** Based on available data, the classification criteria are not met.

# SECTION 12: Ecological information

**Ecotoxicity** 

**Ecotoxicity** 

**Aquatic ecotoxicity** 

Unknown aquatic toxicity 0.001 % of the mixture consists of component(s) of unknown hazards to the aquatic

environment.

**Terrestrial ecotoxicty** There is no data for this product.

Persistence and degradability No information available.

Bioaccumulative potential

**Bioaccumulation** No information available.

Mobility in soil

Other adverse effects

No information available.

### SECTION 13: Disposal considerations

Waste treatment methods

#### Contaminated packaging

For packages that have been in direct contact with hazardous substances, the person must ensure that the package is rendered incapable of containing any substance. It must be disposed of in a manner that is consistent with the requirements for disposal of the substance that it contained, taking into account the material the package is manufactured from

Packages may only be reused or recycled if the package has been treated to remove any residual contents of the hazardous substance (class 1, 2, 3, 4, or 5); or the contents of the residue in the package are below the threshold for the substance to be classified as hazardous (class 6, 8, or 9 substance)

# **SECTION 14: Transport information**

IATA Not regulated

IMDG Not regulated

Transport in bulk according to Annex II of MARPOL and the IBC Code

No information available

## SECTION 15: Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture

**National regulations** 

**New Zealand** 

National regulations See Section 8 for any applicable tolerable exposure limits and environmental exposure

limits

Certified handlers, tracking and controlled substance license requirements

Certified handlers are required for some substances. This includes for substances requiring a controlled substance license, including Class 1 explosives, vertebrate toxic agents (9.3A, B, C), and certain fumigants. Class 6.1A and 6.1B substances such as pesticides also require Certified handlers. Please check the Health and Safety at Work Act 2015 for further information

Tracking is required for some highly hazardous substances. These substances need to be under the control of an appropriately trained person or appropriately secured. Please check the Health and Safety at Work Act 2015 for further information

Controlled substance licenses are required to possess certain class 1 (explosive) and class 6 (vertebrate toxic agents or fumigants) substances. See Part 7 of the Health and Safety at

Work Regulation 2017 for more information

# **EPA New Zealand HSNO approval** Not applicable **code or group standard**

#### **International Inventories**

Contact supplier for inventory compliance status

Legend:

#### International Regulations

The Montreal Protocol on Substances that Deplete the Ozone Layer Not applicable

The Stockholm Convention on Persistent Organic Pollutants Not applicable

The Rotterdam Convention Not applicable

### **SECTION 16: Other information**

Prepared By Bio-Rad Laboratories, Environmental Health and Safety

Revision date 18-Mar-2021

**Revision Note** Significant changes throughout SDS. Review all sections.

#### 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

C Carcinogen

### 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 Level(s) (AEGL(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 Uniform Chemical Information Database (IUCLID)

Japan GHS Classification

Australian 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)

Organisation for Economic Co-operation and Development Environment, Health, and Safety Publications Organisation for Economic Co-operation and Development High Production Volume Chemicals Programme

Organisation for Economic Co-operation and Development Screening Information Data Set

RTECS (Registry of Toxic Effects of Chemical Substances)

World Health Organization

#### Disclaimer

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