

# KIT SAFETY DATA SHEET



**Kit Product Name** Restriction Digest and Analysis Kit, Enzyme

**Kit Catalogue Number(s)** 1660012, 1660012EDU

**Revision date** 30-Aug-2022

## Kit Contents

| Catalogue Number(s)          | Product Name                        |
|------------------------------|-------------------------------------|
| 9702941                      | Hind III Lambda Digest DNA Standard |
| 9702950                      | EcoR I Enzyme                       |
| 9702948                      | Hind III Enzyme                     |
| 9702947                      | Lambda DNA                          |
| 9702949                      | Pst I Enzyme                        |
| 9702951                      | 2X Restriction Buffer               |
| 1660401, 1660401EDU, 9702945 | Sample Loading Dye                  |

# SAFETY DATA SHEET

Revision date 30-Aug-2022

Revision Number 2

## Section 1: Identification

### Product identifier

**Product Name** Hind III Lambda Digest DNA Standard

**Catalogue Number(s)** 9702941

### 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 Headquarters

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

#### Manufacturer

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

#### Legal Entity / Contact Address

Bio-Rad Laboratories Pty Ltd  
189 Bush Road  
Auckland  
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

### GHS Classification

Not classified Not a hazardous substance or mixture according to the Globally Harmonized System (GHS)

### Label elements

#### **Hazard statements**

Not classified Not a hazardous substance or mixture according to the Globally Harmonized System (GHS)

### Other hazards which do not result in classification

No information available.

## Section 3: Composition/information on ingredients

The product contains no substances which at their given concentration, are considered to be hazardous to health

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

## Section 4: First-aid measures

**Description of first aid measures**

|              |  |
|--------------|--|
| Inhalation   | Remove to fresh air.   |
| Eye contact  | Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician. |
| Skin contact | Wash skin with soap and water.   |
| Ingestion    | Rinse mouth.   |

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

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

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

|                    |                        |
|--------------------|------------------------|
| Note to physicians | Treat symptomatically. |
|--------------------|------------------------|

**Section 5: Fire-fighting measures****Suitable Extinguishing Media**

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

|            |  |
|------------|--|
| Large Fire | CAUTION: Use of water spray when fighting fire may be inefficient. |
|------------|--|

|                                |   |
|--------------------------------|---|
| Unsuitable extinguishing media | Do not scatter spilled material with high pressure water streams. |
|--------------------------------|---|

**Specific hazards arising from the chemical**

|  |                           |
|--|---------------------------|
| Specific hazards arising from the chemical | No information available. |
|--|---------------------------|

**Special protective actions for fire-fighters**

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

**Section 6: Accidental release measures****Personal precautions, protective equipment and emergency procedures**

|                      |                              |
|----------------------|------------------------------|
| Personal precautions | Ensure adequate ventilation. |
|----------------------|------------------------------|

|                          |   |
|--------------------------|---|
| 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**

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

|                         |  |
|-------------------------|--|
| Methods for cleaning up | Pick up and transfer to properly labeled 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** No special protective equipment required.

**Hand protection** No special protective equipment required.

**Skin and body protection** No special protective equipment required.

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

**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  
**Odour** Odourless.  
**Odour threshold** No information available

| <u>Property</u>                | <u>Values</u> | <u>Remarks • Method</u> |
|--------------------------------|---------------|-------------------------|
| pH                             | 8             |                         |
| 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 limits | No data available         |                   |
| Lower flammability or explosive limits | No data available         |                   |
| Vapour pressure                        | No data available         | None known        |
| Vapour density                         | No data available         | None known        |
| Relative density                       | No data available         | None known        |
| Water solubility                       | No data available         | Miscible in water |
| Solubility(ies)                        | No data available         | None known        |
| Partition coefficient                  | No data available         | None known        |
| Autoignition temperature               | No data available         | None known        |
| Decomposition temperature              |                           | None known        |
| Kinematic viscosity                    | No data available         | None known        |
| Dynamic viscosity                      | No data available         | None known        |
| Explosive properties                   | No information available. |                   |
| Oxidizing properties                   | No information available. |                   |
| <b><u>Other information</u></b>        |                           |                   |
| Softening point                        | No information available  |                   |
| Molecular weight                       | No information available  |                   |
| VOC content                            | No information available  |                   |
| Liquid Density                         | No information available  |                   |
| Bulk density                           | No information available  |                   |
| Particle characteristics               | No information available  |                   |

## 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** No information available.

**Serious eye damage/eye irritation** No information available.

**Respiratory or skin sensitization** No information available.

**Germ cell mutagenicity** No information available.

**Carcinogenicity** No information available.

**Reproductive toxicity** No information available.

**STOT - single exposure** No information available.

**STOT - repeated exposure** No information available.

**Aspiration hazard** No information available.

**Data used to identify the health effects** Refer to Section 16 for Key literature references and sources for data used to compile the SDS.

**Section 12: Ecological information****Ecotoxicity****Aquatic ecotoxicity**

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

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

**Persistence and degradability** No information available.

**Bioaccumulative potential**

**Bioaccumulation** There is no data for this product.

**Mobility in soil**

**Mobility** No information available.

**Other adverse effects**

No information available.

## Section 13: Disposal considerations

**Waste treatment methods**

**Waste from residues/unused products** Not applicable.  
Not Hazardous.  
Dispose of in accordance with local regulations.  
Dispose of waste in accordance with environmental legislation.

**Contaminated packaging** Not applicable.  
Not Hazardous.

## 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

**Special precautions for user**  
Please refer to the applicable dangerous goods regulations for additional information

## Section 15: Regulatory information

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

**National regulations**

**EPA New Zealand HSNO approval code or group standard** To be determined

**National regulations** There are no applicable tolerable exposure limits or environmental exposure limits according to the EPA Controls for Hazardous Substances

**Certified handlers, tracking and controlled substance license requirements** Certified handlers are required for some substances. This includes substances requiring a controlled substance license, and most explosives, vertebrates toxic agents, and certain fumigants. Acutely toxic substances which are a Category 1 or 2, 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 explosives, vertebrate toxic agents and fumigants. See Part 7 of the Health and Safety at Work Regulation 2017 for more information

### 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

### International Inventories

|                      |   |
|----------------------|---|
| <b>NZIoC</b>         | Contact supplier for inventory compliance status. |
| <b>TSCA</b>          | Contact supplier for inventory compliance status. |
| <b>DSL/NDL</b>       | Contact supplier for inventory compliance status. |
| <b>EINECS/ELINCS</b> | Contact supplier for inventory compliance status. |
| <b>ENCS</b>          | Contact supplier for inventory compliance status. |
| <b>IECSC</b>         | Contact supplier for inventory compliance status. |
| <b>KECL</b>          | Contact supplier for inventory compliance status. |
| <b>PICCS</b>         | Contact supplier for inventory compliance status. |
| <b>AICS</b>          | Contact supplier for inventory compliance status. |

#### **Legend:**

**NZIoC** - New Zealand Inventory of Chemicals

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory

**DSL/NDL** - Canadian Domestic Substances List/Non-Domestic Substances List

**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

**ENCS** - Japan Existing and New Chemical Substances

**IECSC** - China Inventory of Existing Chemical Substances

**KECL** - Korean Existing and Evaluated Chemical Substances

**PICCS** - Philippines Inventory of Chemicals and Chemical Substances

**AICS** - Australian Inventory of Chemical Substances

## Section 16: Other information

**Revision date** 30-Aug-2022

**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)

National Institute of Technology and Evaluation (NITE)

Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)

NIOSH (National Institute for Occupational Safety and Health)

National Library of Medicine's ChemID Plus (NLM CIP)

National Library of Medicine's PubMed database (NLM PUBMED)



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National Toxicology Program (NTP)  
New Zealand's Chemical Classification and Information Database (CCID)  
Organization for Economic Co-operation and Development Environment, Health, and Safety Publications  
Organization for Economic Co-operation and Development High Production Volume Chemicals Program  
Organization for Economic Co-operation and Development Screening Information Data Set  
World Health Organization

**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 30-Aug-2022

Revision Number 1

## Section 1: Identification

### Product identifier

**Product Name** EcoR I Enzyme

**Catalogue Number(s)** 9702950

### 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 Headquarters

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

#### Manufacturer

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

#### Legal Entity / Contact Address

Bio-Rad Laboratories Pty Ltd  
189 Bush Road  
Auckland  
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

### GHS Classification

Not classified Not a hazardous substance or mixture according to the Globally Harmonized System (GHS)

### Label elements

#### **Hazard statements**

Not classified Not a hazardous substance or mixture according to the Globally Harmonized System (GHS)

#### **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

Harmful to aquatic life. Contains animal source material. (Cattle).

## Section 3: Composition/information on ingredients

| Chemical name             | CAS No      | Weight-% |
|---------------------------|-------------|----------|
| 1,2,3-Propanetriol        | 56-81-5     | 50 - 100 |
| Non-hazardous ingredients | Proprietary | Balance  |

## Section 4: First-aid measures

### Description of first aid measures

|              |  |
|--------------|--|
| Inhalation   | Remove to fresh air.   |
| Eye contact  | Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician. |
| Skin contact | Wash skin with soap and water.   |
| Ingestion    | Rinse mouth.   |

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

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

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

|                    |                        |
|--------------------|------------------------|
| Note to physicians | Treat symptomatically. |
|--------------------|------------------------|

## Section 5: Fire-fighting measures

### Suitable Extinguishing Media

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

|            |  |
|------------|--|
| Large Fire | CAUTION: Use of water spray when fighting fire may be inefficient. |
|------------|--|

|                                |   |
|--------------------------------|---|
| Unsuitable extinguishing media | Do not scatter spilled material with high pressure water streams. |
|--------------------------------|---|

### Specific hazards arising from the chemical

|  |                           |
|--|---------------------------|
| Specific hazards arising from the chemical | No information available. |
|--|---------------------------|

### Special protective actions for fire-fighters

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

## Section 6: Accidental release measures

### Personal precautions, protective equipment and emergency procedures

|                      |                              |
|----------------------|------------------------------|
| Personal precautions | Ensure adequate ventilation. |
|----------------------|------------------------------|

|                          |   |
|--------------------------|---|
| 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

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

**Methods for cleaning up** Pick up and transfer to properly labeled 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**

| Chemical name                 | New Zealand               | Australia                 | ACGIH TLV | United Kingdom  |
|-------------------------------|---------------------------|---------------------------|-----------|---|
| 1,2,3-Propanetriol<br>56-81-5 | TWA: 10 mg/m <sup>3</sup> | TWA: 10 mg/m <sup>3</sup> | -         | TWA: 10 mg/m <sup>3</sup><br>STEL: 30 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** No special protective equipment required.

**Hand protection** No special protective equipment required.

**Skin and body protection** No special protective equipment required.

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

**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  
**Odour** Odourless.

|  |                           |                                |
|--|---------------------------|--------------------------------|
| <b>Odour threshold</b>                 | No information available  |                                |
| <b><u>Property</u></b>                 | <b><u>Values</u></b>      | <b><u>Remarks • Method</u></b> |
| pH                                     |                           | 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                     |
| 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 limits | No data available         |                                |
| Lower flammability or explosive limits | No data available         |                                |
| Vapour pressure                        | No data available         | None known                     |
| Vapour density                         | No data available         | None known                     |
| Relative density                       | No data available         | None known                     |
| Water solubility                       | No data available         | Miscible in water              |
| Solubility(ies)                        | No data available         | None known                     |
| Partition coefficient                  | No data available         | None known                     |
| Autoignition temperature               | No data available         | None known                     |
| Decomposition temperature              |                           | None known                     |
| Kinematic viscosity                    | No data available         | None known                     |
| Dynamic viscosity                      | No data available         | None known                     |
| Explosive properties                   | No information available. |                                |
| Oxidizing properties                   | No information available. |                                |
| <b><u>Other information</u></b>        |                           |                                |
| Softening point                        | No information available  |                                |
| Molecular weight                       | No information available  |                                |
| VOC content                            | No information available  |                                |
| Liquid Density                         | No information available  |                                |
| Bulk density                           | No information available  |                                |
| Particle characteristics               | No information available  |                                |

## 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

|                     |   |
|---------------------|---|
| <b>Inhalation</b>   | Specific test data for the substance or mixture is not available. |
| <b>Eye contact</b>  | Specific test data for the substance or mixture is not available. |
| <b>Skin contact</b> | Specific test data for the substance or mixture is not available. |
| <b>Ingestion</b>    | Specific test data for the substance or mixture is not available. |

**Symptoms** No information available.

### Acute toxicity

#### Numerical measures of toxicity

##### Component Information

| Chemical name      | Oral LD50             | Dermal LD50          | Inhalation LC50         |
|--------------------|-----------------------|----------------------|-------------------------|
| 1,2,3-Propanetriol | = 12600 mg/kg ( Rat ) | > 10 g/kg ( Rabbit ) | > 2.75 mg/L ( Rat ) 4 h |

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

**Skin corrosion/irritation** No information available.

**Serious eye damage/eye irritation** No information available.

**Respiratory or skin sensitization** No information available.

**Germ cell mutagenicity** No information available.

**Carcinogenicity** No information available.

**Reproductive toxicity** No information available.

**STOT - single exposure** No information available.

**STOT - repeated exposure** No information available.

**Aspiration hazard** No information available.

**Data used to identify the health effects** Refer to Section 16 for Key literature references and sources for data used to compile the SDS.

**Section 12: Ecological information****Ecotoxicity**

**Aquatic ecotoxicity** Harmful to aquatic life.

**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 |
|--------------------|----------------------|--|-----------|
| 1,2,3-Propanetriol | -                    | LC50: 51 - 57mL/L (96h, <i>Oncorhynchus mykiss</i> ) | -         |

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

**Persistence and degradability** No information available.

**Bioaccumulative potential****Bioaccumulation****Component Information**

| Chemical name      | Partition coefficient |
|--------------------|-----------------------|
| 1,2,3-Propanetriol | -1.75                 |

**Mobility in soil**

**Mobility** No information available.

**Other adverse effects**

No information available.

**Section 13: Disposal considerations****Waste treatment methods**

**Waste from residues/unused products** Not applicable.  
Not Hazardous.  
Dispose of in accordance with local regulations.  
Dispose of waste in accordance with environmental legislation.

**Contaminated packaging** Not applicable.  
Not Hazardous.

**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

**Special precautions for user**

Please refer to the applicable dangerous goods regulations for additional information

## Section 15: Regulatory information

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

#### National regulations

**EPA New Zealand HSNO approval code or group standard** To be determined

#### National regulations

There are no applicable tolerable exposure limits or environmental exposure limits according to the EPA Controls for Hazardous Substances

#### Certified handlers, tracking and controlled substance license requirements

Certified handlers are required for some substances. This includes substances requiring a controlled substance license, and most explosives, vertebrates toxic agents, and certain fumigants. Acutely toxic substances which are a Category 1 or 2, 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 explosives, vertebrate toxic agents and fumigants. See Part 7 of the Health and Safety at Work Regulation 2017 for more information

### 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

### International Inventories

|                      |   |
|----------------------|---|
| <b>NZIoC</b>         | Contact supplier for inventory compliance status. |
| <b>TSCA</b>          | Contact supplier for inventory compliance status. |
| <b>DSL/NDL</b>       | Contact supplier for inventory compliance status. |
| <b>EINECS/ELINCS</b> | Contact supplier for inventory compliance status. |
| <b>ENCS</b>          | Contact supplier for inventory compliance status. |
| <b>IECSC</b>         | Contact supplier for inventory compliance status. |
| <b>KECL</b>          | Contact supplier for inventory compliance status. |
| <b>PICCS</b>         | Contact supplier for inventory compliance status. |
| <b>AICS</b>          | Contact supplier for inventory compliance status. |

#### Legend:

**NZIoC** - New Zealand Inventory of Chemicals  
**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory  
**DSL/NDL** - Canadian Domestic Substances List/Non-Domestic Substances List  
**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances  
**ENCS** - Japan Existing and New Chemical Substances  
**IECSC** - China Inventory of Existing Chemical Substances  
**KECL** - Korean Existing and Evaluated Chemical Substances  
**PICCS** - Philippines Inventory of Chemicals and Chemical Substances  
**AICS** - Australian Inventory of Chemical Substances

## Section 16: Other information

**Revision date** 30-Aug-2022

**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)  
National Institute of Technology and Evaluation (NITE)  
Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)  
NIOSH (National Institute for Occupational Safety and Health)  
National Library of Medicine's ChemID Plus (NLM CIP)  
National Library of Medicine's PubMed database (NLM PUBMED)  
National Toxicology Program (NTP)  
New Zealand's Chemical Classification and Information Database (CCID)  
Organization for Economic Co-operation and Development Environment, Health, and Safety Publications  
Organization for Economic Co-operation and Development High Production Volume Chemicals Program  
Organization for Economic Co-operation and Development Screening Information Data Set  
World Health Organization

**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 30-Aug-2022

Revision Number 3

## Section 1: Identification

### Product identifier

**Product Name** Hind III Enzyme

**Catalogue Number(s)** 9702948

### 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 Headquarters

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

#### Manufacturer

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

#### Legal Entity / Contact Address

Bio-Rad Laboratories Pty Ltd  
189 Bush Road  
Auckland  
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

### GHS Classification

Not classified Not a hazardous substance or mixture according to the Globally Harmonized System (GHS)

### Label elements

#### **Hazard statements**

Not classified Not a hazardous substance or mixture according to the Globally Harmonized System (GHS)

#### **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

(Cattle). Contains animal source material. Harmful to aquatic life.

## Section 3: Composition/information on ingredients

| Chemical name             | CAS No      | Weight-% |
|---------------------------|-------------|----------|
| 1,2,3-Propanetriol        | 56-81-5     | 50 - 100 |
| Non-hazardous ingredients | Proprietary | Balance  |

## Section 4: First-aid measures

### Description of first aid measures

|              |  |
|--------------|--|
| Inhalation   | Remove to fresh air.   |
| Eye contact  | Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician. |
| Skin contact | Wash skin with soap and water.   |
| Ingestion    | Rinse mouth.   |

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

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

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

|                    |                        |
|--------------------|------------------------|
| Note to physicians | Treat symptomatically. |
|--------------------|------------------------|

## Section 5: Fire-fighting measures

### Suitable Extinguishing Media

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

|            |  |
|------------|--|
| Large Fire | CAUTION: Use of water spray when fighting fire may be inefficient. |
|------------|--|

|                                |   |
|--------------------------------|---|
| Unsuitable extinguishing media | Do not scatter spilled material with high pressure water streams. |
|--------------------------------|---|

### Specific hazards arising from the chemical

|  |                           |
|--|---------------------------|
| Specific hazards arising from the chemical | No information available. |
|--|---------------------------|

### Special protective actions for fire-fighters

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

## Section 6: Accidental release measures

### Personal precautions, protective equipment and emergency procedures

|                      |                              |
|----------------------|------------------------------|
| Personal precautions | Ensure adequate ventilation. |
|----------------------|------------------------------|

|                          |   |
|--------------------------|---|
| 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

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

**Methods for cleaning up** Pick up and transfer to properly labeled 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**

| Chemical name                 | New Zealand               | Australia                 | ACGIH TLV | United Kingdom  |
|-------------------------------|---------------------------|---------------------------|-----------|---|
| 1,2,3-Propanetriol<br>56-81-5 | TWA: 10 mg/m <sup>3</sup> | TWA: 10 mg/m <sup>3</sup> | -         | TWA: 10 mg/m <sup>3</sup><br>STEL: 30 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** No special protective equipment required.

**Hand protection** No special protective equipment required.

**Skin and body protection** No special protective equipment required.

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

**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  
**Odour** Odourless.

|  |                           |                                |
|--|---------------------------|--------------------------------|
| <b>Odour threshold</b>                 | No information available  |                                |
| <b><u>Property</u></b>                 | <b><u>Values</u></b>      | <b><u>Remarks • Method</u></b> |
| pH                                     |                           | None known                     |
| Melting point / freezing point         | No data available         | None known                     |
| Boiling point / boiling range          | > 100 °C                  |                                |
| Flash point                            | > 160 °C                  | 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 limits | No data available         |                                |
| Lower flammability or explosive limits | No data available         |                                |
| Vapour pressure                        | No data available         | None known                     |
| Vapour density                         | No data available         | None known                     |
| Relative density                       | No data available         | None known                     |
| Water solubility                       | No data available         | Miscible in water              |
| Solubility(ies)                        | No data available         | None known                     |
| Partition coefficient                  | No data available         | None known                     |
| Autoignition temperature               | No data available         | None known                     |
| Decomposition temperature              |                           | None known                     |
| Kinematic viscosity                    | No data available         | None known                     |
| Dynamic viscosity                      | No data available         | None known                     |
| Explosive properties                   | No information available. |                                |
| Oxidizing properties                   | No information available. |                                |
| <b><u>Other information</u></b>        |                           |                                |
| Softening point                        | No information available  |                                |
| Molecular weight                       | No information available  |                                |
| VOC content                            | No information available  |                                |
| Liquid Density                         | No information available  |                                |
| Bulk density                           | No information available  |                                |
| Particle characteristics               | No information available  |                                |

## 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

|                     |   |
|---------------------|---|
| <b>Inhalation</b>   | Specific test data for the substance or mixture is not available. |
| <b>Eye contact</b>  | Specific test data for the substance or mixture is not available. |
| <b>Skin contact</b> | Specific test data for the substance or mixture is not available. |
| <b>Ingestion</b>    | Specific test data for the substance or mixture is not available. |

**Symptoms** No information available.

### Acute toxicity

#### Numerical measures of toxicity

#### Component Information

| Chemical name      | Oral LD50             | Dermal LD50          | Inhalation LC50         |
|--------------------|-----------------------|----------------------|-------------------------|
| 1,2,3-Propanetriol | = 12600 mg/kg ( Rat ) | > 10 g/kg ( Rabbit ) | > 2.75 mg/L ( Rat ) 4 h |

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

**Skin corrosion/irritation** No information available.

**Serious eye damage/eye irritation** No information available.

**Respiratory or skin sensitization** No information available.

**Germ cell mutagenicity** No information available.

**Carcinogenicity** No information available.

**Reproductive toxicity** No information available.

**STOT - single exposure** No information available.

**STOT - repeated exposure** No information available.

**Aspiration hazard** No information available.

**Data used to identify the health effects** Refer to Section 16 for Key literature references and sources for data used to compile the SDS.

## Section 12: Ecological information

### Ecotoxicity

**Aquatic ecotoxicity** Harmful to aquatic life.

**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 |
|--------------------|----------------------|--|-----------|
| 1,2,3-Propanetriol | -                    | LC50: 51 - 57mL/L (96h, <i>Oncorhynchus mykiss</i> ) | -         |

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

**Persistence and degradability** No information available.

### Bioaccumulative potential

#### Bioaccumulation

#### Component Information

| Chemical name      | Partition coefficient |
|--------------------|-----------------------|
| 1,2,3-Propanetriol | -1.75                 |

### Mobility in soil

**Mobility** No information available.

### Other adverse effects

No information available.

## Section 13: Disposal considerations

### Waste treatment methods

**Waste from residues/unused products** Not applicable.  
Not Hazardous.  
Dispose of in accordance with local regulations.  
Dispose of waste in accordance with environmental legislation.

**Contaminated packaging** Not applicable.  
Not Hazardous.

## 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

### **Special precautions for user**

Please refer to the applicable dangerous goods regulations for additional information

## Section 15: Regulatory information

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

#### **National regulations**

**EPA New Zealand HSNO approval code or group standard** To be determined

#### **National regulations**

There are no applicable tolerable exposure limits or environmental exposure limits according to the EPA Controls for Hazardous Substances

#### **Certified handlers, tracking and controlled substance license requirements**

Certified handlers are required for some substances. This includes substances requiring a controlled substance license, and most explosives, vertebrates toxic agents, and certain fumigants. Acutely toxic substances which are a Category 1 or 2, 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 explosives, vertebrate toxic agents and fumigants. See Part 7 of the Health and Safety at Work Regulation 2017 for more information

### 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

### International Inventories

|                      |   |
|----------------------|---|
| <b>NZIoC</b>         | Contact supplier for inventory compliance status. |
| <b>TSCA</b>          | Contact supplier for inventory compliance status. |
| <b>DSL/NDL</b>       | Contact supplier for inventory compliance status. |
| <b>EINECS/ELINCS</b> | Contact supplier for inventory compliance status. |
| <b>ENCS</b>          | Contact supplier for inventory compliance status. |
| <b>IECSC</b>         | Contact supplier for inventory compliance status. |
| <b>KECL</b>          | Contact supplier for inventory compliance status. |
| <b>PICCS</b>         | Contact supplier for inventory compliance status. |
| <b>AICS</b>          | Contact supplier for inventory compliance status. |

#### **Legend:**

**NZIoC** - New Zealand Inventory of Chemicals  
**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory  
**DSL/NDL** - Canadian Domestic Substances List/Non-Domestic Substances List  
**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances  
**ENCS** - Japan Existing and New Chemical Substances  
**IECSC** - China Inventory of Existing Chemical Substances  
**KECL** - Korean Existing and Evaluated Chemical Substances  
**PICCS** - Philippines Inventory of Chemicals and Chemical Substances  
**AICS** - Australian Inventory of Chemical Substances

## Section 16: Other information

**Revision date** 30-Aug-2022

**Revision Note** Reformatted and updated existing information.

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

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**End of Safety Data Sheet**

# SAFETY DATA SHEET

Revision date 30-Aug-2022

Revision Number 1

## Section 1: Identification

### Product identifier

**Product Name** Lambda DNA

**Catalogue Number(s)** 9702947

### 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 Headquarters

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

#### Manufacturer

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

#### Legal Entity / Contact Address

Bio-Rad Laboratories Pty Ltd  
189 Bush Road  
Albany Auckland  
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

### GHS Classification

Not classified Not a hazardous substance or mixture according to the Globally Harmonized System (GHS)

### Label elements

#### **Hazard statements**

Not classified Not a hazardous substance or mixture according to the Globally Harmonized System (GHS)

### Other hazards which do not result in classification

No information available.

## Section 3: Composition/information on ingredients

The product contains no substances which at their given concentration, are considered to be hazardous to health

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

## Section 4: First-aid measures

**Description of first aid measures**

|              |  |
|--------------|--|
| Inhalation   | Remove to fresh air.   |
| Eye contact  | Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician. |
| Skin contact | Wash skin with soap and water.   |
| Ingestion    | Rinse mouth.   |

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

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

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

|                    |                        |
|--------------------|------------------------|
| Note to physicians | Treat symptomatically. |
|--------------------|------------------------|

**Section 5: Fire-fighting measures****Suitable Extinguishing Media**

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

|            |  |
|------------|--|
| Large Fire | CAUTION: Use of water spray when fighting fire may be inefficient. |
|------------|--|

|                                |   |
|--------------------------------|---|
| Unsuitable extinguishing media | Do not scatter spilled material with high pressure water streams. |
|--------------------------------|---|

**Specific hazards arising from the chemical**

|  |                           |
|--|---------------------------|
| Specific hazards arising from the chemical | No information available. |
|--|---------------------------|

**Special protective actions for fire-fighters**

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

**Section 6: Accidental release measures****Personal precautions, protective equipment and emergency procedures**

|                      |                              |
|----------------------|------------------------------|
| Personal precautions | Ensure adequate ventilation. |
|----------------------|------------------------------|

|                          |   |
|--------------------------|---|
| 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**

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

|                         |  |
|-------------------------|--|
| Methods for cleaning up | Pick up and transfer to properly labeled 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** Keep containers tightly closed in a dry, cool and well-ventilated place.

**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** No special protective equipment required.

**Hand protection** No special protective equipment required.

**Skin and body protection** No special protective equipment required.

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

**Environmental exposure controls** No information available.

## Section 9: Physical and chemical properties

### Information on basic physical and chemical properties

|                        |                          |
|------------------------|--------------------------|
| <b>Physical state</b>  | Liquid                   |
| <b>Appearance</b>      | aqueous solution         |
| <b>Colour</b>          | colourless               |
| <b>Odour</b>           | Odourless.               |
| <b>Odour threshold</b> | No information available |

| <u>Property</u>                       | <u>Values</u> | <u>Remarks • Method</u> |
|---------------------------------------|---------------|-------------------------|
| <b>pH</b>                             |               | None known              |
| <b>Melting point / freezing point</b> | 0 °C          |                         |

|   |                           |                   |
|---|---------------------------|-------------------|
| <b>Boiling point / boiling range</b>          | 100 °C                    |                   |
| <b>Flash point</b>                            | No data available         | None known        |
| <b>Evaporation rate</b>                       | No data available         | None known        |
| <b>Flammability (solid, gas)</b>              | No data available         | None known        |
| <b>Flammability Limit in Air</b>              |                           | None known        |
| <b>Upper flammability or explosive limits</b> | No data available         |                   |
| <b>Lower flammability or explosive limits</b> | No data available         |                   |
| <b>Vapour pressure</b>                        | No data available         | None known        |
| <b>Vapour density</b>                         | No data available         | None known        |
| <b>Relative density</b>                       | No data available         | None known        |
| <b>Water solubility</b>                       | No data available         | Miscible in water |
| <b>Solubility(ies)</b>                        | No data available         | None known        |
| <b>Partition coefficient</b>                  | No data available         | None known        |
| <b>Autoignition temperature</b>               | No data available         | None known        |
| <b>Decomposition temperature</b>              |                           | None known        |
| <b>Kinematic viscosity</b>                    | No data available         | None known        |
| <b>Dynamic viscosity</b>                      | No data available         | None known        |
| <b>Explosive properties</b>                   | No information available. |                   |
| <b>Oxidizing properties</b>                   | No information available. |                   |
| <b><u>Other information</u></b>               |                           |                   |
| <b>Softening point</b>                        | No information available  |                   |
| <b>Molecular weight</b>                       | No information available  |                   |
| <b>VOC content</b>                            | No information available  |                   |
| <b>Liquid Density</b>                         | No information available  |                   |
| <b>Bulk density</b>                           | No information available  |                   |
| <b>Particle characteristics</b>               | No information available  |                   |

## 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** No information available.

**Serious eye damage/eye irritation** No information available.

**Respiratory or skin sensitization** No information available.

**Germ cell mutagenicity** No information available.

**Carcinogenicity** No information available.

**Reproductive toxicity** No information available.

**STOT - single exposure** No information available.

**STOT - repeated exposure** No information available.

**Aspiration hazard** No information available.

**Data used to identify the health effects** Refer to Section 16 for Key literature references and sources for data used to compile the SDS.

**Section 12: Ecological information****Ecotoxicity****Aquatic ecotoxicity**

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

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

**Persistence and degradability** No information available.

**Bioaccumulative potential**

**Bioaccumulation** There is no data for this product.

**Mobility in soil**

**Mobility** No information available.

**Other adverse effects**

No information available.

### Section 13: Disposal considerations

**Waste treatment methods**

**Waste from residues/unused products** Not applicable.  
Not Hazardous.

**Contaminated packaging** Not applicable.  
Not Hazardous.

### 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

**Special precautions for user**

Please refer to the applicable dangerous goods regulations for additional information

### Section 15: Regulatory information

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

**EPA New Zealand HSNO approval code or group standard** To be determined

**National regulations** There are no applicable tolerable exposure limits or environmental exposure limits according to the EPA Controls for Hazardous Substances

**Certified handlers, tracking and controlled substance license requirements** Certified handlers are required for some substances. This includes substances requiring a controlled substance license, and most explosives, vertebrates toxic agents, and certain fumigants. Acutely toxic substances which are a Category 1 or 2, 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 explosives, vertebrate toxic agents and fumigants. See Part 7 of the Health and Safety at Work Regulation 2017 for more information

### 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

### International Inventories

|                      |   |
|----------------------|---|
| <b>NZIoC</b>         | Contact supplier for inventory compliance status. |
| <b>TSCA</b>          | Contact supplier for inventory compliance status. |
| <b>DSL/NDL</b>       | Contact supplier for inventory compliance status. |
| <b>EINECS/ELINCS</b> | Contact supplier for inventory compliance status. |
| <b>ENCS</b>          | Contact supplier for inventory compliance status. |
| <b>IECSC</b>         | Contact supplier for inventory compliance status. |
| <b>KECL</b>          | Contact supplier for inventory compliance status. |
| <b>PICCS</b>         | Contact supplier for inventory compliance status. |
| <b>AICS</b>          | Contact supplier for inventory compliance status. |

#### **Legend:**

**NZIoC** - New Zealand Inventory of Chemicals  
**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory  
**DSL/NDL** - Canadian Domestic Substances List/Non-Domestic Substances List  
**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances  
**ENCS** - Japan Existing and New Chemical Substances  
**IECSC** - China Inventory of Existing Chemical Substances  
**KECL** - Korean Existing and Evaluated Chemical Substances  
**PICCS** - Philippines Inventory of Chemicals and Chemical Substances  
**AICS** - Australian Inventory of Chemical Substances

## Section 16: Other information

**Revision date** 30-Aug-2022

**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) (AELG(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)  
 National Institute of Technology and Evaluation (NITE)  
 Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)  
 NIOSH (National Institute for Occupational Safety and Health)  
 National Library of Medicine's ChemID Plus (NLM CIP)  
 National Library of Medicine's PubMed database (NLM PUBMED)  
 National Toxicology Program (NTP)  
 New Zealand's Chemical Classification and Information Database (CCID)  
 Organization for Economic Co-operation and Development Environment, Health, and Safety Publications



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Organization for Economic Co-operation and Development High Production Volume Chemicals Program  
Organization for Economic Co-operation and Development Screening Information Data Set  
World Health Organization

**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 30-Aug-2022

Revision Number 1

## Section 1: Identification

### Product identifier

**Product Name** Pst I Enzyme

**Catalogue Number(s)** 9702949

### 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 Headquarters

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

#### Manufacturer

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

#### Legal Entity / Contact Address

Bio-Rad Laboratories Pty Ltd  
189 Bush Road  
Auckland  
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

### GHS Classification

Not classified Not a hazardous substance or mixture according to the Globally Harmonized System (GHS)

### Label elements

#### **Hazard statements**

Not classified Not a hazardous substance or mixture according to the Globally Harmonized System (GHS)

#### **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

Harmful to aquatic life. Contains animal source material. (Cattle).

## Section 3: Composition/information on ingredients

| Chemical name             | CAS No      | Weight-% |
|---------------------------|-------------|----------|
| 1,2,3-Propanetriol        | 56-81-5     | 50 - 100 |
| Non-hazardous ingredients | Proprietary | Balance  |

## Section 4: First-aid measures

### Description of first aid measures

|              |  |
|--------------|--|
| Inhalation   | Remove to fresh air.   |
| Eye contact  | Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician. |
| Skin contact | Wash skin with soap and water.   |
| Ingestion    | Rinse mouth.   |

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

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

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

|                    |                        |
|--------------------|------------------------|
| Note to physicians | Treat symptomatically. |
|--------------------|------------------------|

## Section 5: Fire-fighting measures

### Suitable Extinguishing Media

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

|            |  |
|------------|--|
| Large Fire | CAUTION: Use of water spray when fighting fire may be inefficient. |
|------------|--|

|                                |   |
|--------------------------------|---|
| Unsuitable extinguishing media | Do not scatter spilled material with high pressure water streams. |
|--------------------------------|---|

### Specific hazards arising from the chemical

|  |                           |
|--|---------------------------|
| Specific hazards arising from the chemical | No information available. |
|--|---------------------------|

### Special protective actions for fire-fighters

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

## Section 6: Accidental release measures

### Personal precautions, protective equipment and emergency procedures

|                      |                              |
|----------------------|------------------------------|
| Personal precautions | Ensure adequate ventilation. |
|----------------------|------------------------------|

|                          |   |
|--------------------------|---|
| 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

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

**Methods for cleaning up** Pick up and transfer to properly labeled 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**

| Chemical name                 | New Zealand               | Australia                 | ACGIH TLV | United Kingdom  |
|-------------------------------|---------------------------|---------------------------|-----------|---|
| 1,2,3-Propanetriol<br>56-81-5 | TWA: 10 mg/m <sup>3</sup> | TWA: 10 mg/m <sup>3</sup> | -         | TWA: 10 mg/m <sup>3</sup><br>STEL: 30 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** No special protective equipment required.

**Hand protection** No special protective equipment required.

**Skin and body protection** No special protective equipment required.

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

**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  
**Odour** Odourless.

|  |                           |                                |
|--|---------------------------|--------------------------------|
| <b>Odour threshold</b>                 | No information available  |                                |
| <b><u>Property</u></b>                 | <b><u>Values</u></b>      | <b><u>Remarks • Method</u></b> |
| pH                                     |                           | None known                     |
| Melting point / freezing point         | No data available         | None known                     |
| Boiling point / boiling range          | > 100 °C                  |                                |
| Flash point                            | > 160 °C                  |                                |
| 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 limits | No data available         |                                |
| Lower flammability or explosive limits | No data available         |                                |
| Vapour pressure                        | No data available         | None known                     |
| Vapour density                         | No data available         | None known                     |
| Relative density                       | No data available         | None known                     |
| Water solubility                       | No data available         | Miscible in water              |
| Solubility(ies)                        | No data available         | None known                     |
| Partition coefficient                  | No data available         | None known                     |
| Autoignition temperature               | No data available         | None known                     |
| Decomposition temperature              |                           | None known                     |
| Kinematic viscosity                    | No data available         | None known                     |
| Dynamic viscosity                      | No data available         | None known                     |
| Explosive properties                   | No information available. |                                |
| Oxidizing properties                   | No information available. |                                |
| <b><u>Other information</u></b>        |                           |                                |
| Softening point                        | No information available  |                                |
| Molecular weight                       | No information available  |                                |
| VOC content                            | No information available  |                                |
| Liquid Density                         | No information available  |                                |
| Bulk density                           | No information available  |                                |
| Particle characteristics               | No information available  |                                |

## 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

|                     |   |
|---------------------|---|
| <b>Inhalation</b>   | Specific test data for the substance or mixture is not available. |
| <b>Eye contact</b>  | Specific test data for the substance or mixture is not available. |
| <b>Skin contact</b> | Specific test data for the substance or mixture is not available. |
| <b>Ingestion</b>    | Specific test data for the substance or mixture is not available. |

**Symptoms** No information available.

### Acute toxicity

#### Numerical measures of toxicity

##### Component Information

| Chemical name      | Oral LD50             | Dermal LD50          | Inhalation LC50         |
|--------------------|-----------------------|----------------------|-------------------------|
| 1,2,3-Propanetriol | = 12600 mg/kg ( Rat ) | > 10 g/kg ( Rabbit ) | > 2.75 mg/L ( Rat ) 4 h |

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

**Skin corrosion/irritation** No information available.

**Serious eye damage/eye irritation** No information available.

**Respiratory or skin sensitization** No information available.

**Germ cell mutagenicity** No information available.

**Carcinogenicity** No information available.

**Reproductive toxicity** No information available.

**STOT - single exposure** No information available.

**STOT - repeated exposure** No information available.

**Aspiration hazard** No information available.

**Data used to identify the health effects** Refer to Section 16 for Key literature references and sources for data used to compile the SDS.

## Section 12: Ecological information

### Ecotoxicity

**Aquatic ecotoxicity** Harmful to aquatic life.

**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 |
|--------------------|----------------------|--|-----------|
| 1,2,3-Propanetriol | -                    | LC50: 51 - 57mL/L (96h, <i>Oncorhynchus mykiss</i> ) | -         |

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

**Persistence and degradability** No information available.

### Bioaccumulative potential

#### Bioaccumulation

#### Component Information

| Chemical name      | Partition coefficient |
|--------------------|-----------------------|
| 1,2,3-Propanetriol | -1.75                 |

### Mobility in soil

**Mobility** No information available.

### Other adverse effects

No information available.

## Section 13: Disposal considerations

### Waste treatment methods

**Waste from residues/unused products** Not applicable.  
Not Hazardous.  
Dispose of in accordance with local regulations.  
Dispose of waste in accordance with environmental legislation.

**Contaminated packaging** Not applicable.  
Not Hazardous.

## 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

### Special precautions for user

Please refer to the applicable dangerous goods regulations for additional information

## Section 15: Regulatory information

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

#### **National regulations**

**EPA New Zealand HSNO approval code or group standard** To be determined

#### **National regulations**

There are no applicable tolerable exposure limits or environmental exposure limits according to the EPA Controls for Hazardous Substances

#### **Certified handlers, tracking and controlled substance license requirements**

Certified handlers are required for some substances. This includes substances requiring a controlled substance license, and most explosives, vertebrates toxic agents, and certain fumigants. Acutely toxic substances which are a Category 1 or 2, 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 explosives, vertebrate toxic agents and fumigants. See Part 7 of the Health and Safety at Work Regulation 2017 for more information

### 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

### International Inventories

|                      |   |
|----------------------|---|
| <b>NZIoC</b>         | Contact supplier for inventory compliance status. |
| <b>TSCA</b>          | Contact supplier for inventory compliance status. |
| <b>DSL/NDL</b>       | Contact supplier for inventory compliance status. |
| <b>EINECS/ELINCS</b> | Contact supplier for inventory compliance status. |
| <b>ENCS</b>          | Contact supplier for inventory compliance status. |
| <b>IECSC</b>         | Contact supplier for inventory compliance status. |
| <b>KECL</b>          | Contact supplier for inventory compliance status. |
| <b>PICCS</b>         | Contact supplier for inventory compliance status. |
| <b>AICS</b>          | Contact supplier for inventory compliance status. |

#### **Legend:**

**NZIoC** - New Zealand Inventory of Chemicals

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory

**DSL/NDL** - Canadian Domestic Substances List/Non-Domestic Substances List

**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

**ENCS** - Japan Existing and New Chemical Substances

**IECSC** - China Inventory of Existing Chemical Substances

**KECL** - Korean Existing and Evaluated Chemical Substances

**PICCS** - Philippines Inventory of Chemicals and Chemical Substances

**AICS** - Australian Inventory of Chemical Substances

## Section 16: Other information

**Revision date** 30-Aug-2022

**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)  
National Institute of Technology and Evaluation (NITE)  
Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)  
NIOSH (National Institute for Occupational Safety and Health)  
National Library of Medicine's ChemID Plus (NLM CIP)  
National Library of Medicine's PubMed database (NLM PUBMED)  
National Toxicology Program (NTP)  
New Zealand's Chemical Classification and Information Database (CCID)  
Organization for Economic Co-operation and Development Environment, Health, and Safety Publications  
Organization for Economic Co-operation and Development High Production Volume Chemicals Program  
Organization for Economic Co-operation and Development Screening Information Data Set  
World Health Organization

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**End of Safety Data Sheet**

# SAFETY DATA SHEET

Revision date 30-Aug-2022

Revision Number 1

## Section 1: Identification

### Product identifier

**Product Name** 2X Restriction Buffer

**Catalogue Number(s)** 9702951

### 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 Headquarters

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

#### Manufacturer

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

#### Legal Entity / Contact Address

Bio-Rad Laboratories Pty Ltd  
189 Bush Road  
Albany Auckland  
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

### GHS Classification

Not classified Not a hazardous substance or mixture according to the Globally Harmonized System (GHS)

### Label elements

#### **Hazard statements**

Not classified Not a hazardous substance or mixture according to the Globally Harmonized System (GHS)

### Other hazards which do not result in classification

No information available.

## Section 3: Composition/information on ingredients

The product contains no substances which at their given concentration, are considered to be hazardous to health

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

## Section 4: First-aid measures

**Description of first aid measures**

|              |  |
|--------------|--|
| Inhalation   | Remove to fresh air.   |
| Eye contact  | Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician. |
| Skin contact | Wash skin with soap and water.   |
| Ingestion    | Rinse mouth.   |

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

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

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

|                    |                        |
|--------------------|------------------------|
| Note to physicians | Treat symptomatically. |
|--------------------|------------------------|

**Section 5: Fire-fighting measures****Suitable Extinguishing Media**

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

|            |  |
|------------|--|
| Large Fire | CAUTION: Use of water spray when fighting fire may be inefficient. |
|------------|--|

|                                |   |
|--------------------------------|---|
| Unsuitable extinguishing media | Do not scatter spilled material with high pressure water streams. |
|--------------------------------|---|

**Specific hazards arising from the chemical**

|  |                           |
|--|---------------------------|
| Specific hazards arising from the chemical | No information available. |
|--|---------------------------|

**Special protective actions for fire-fighters**

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

**Section 6: Accidental release measures****Personal precautions, protective equipment and emergency procedures**

|                      |                              |
|----------------------|------------------------------|
| Personal precautions | Ensure adequate ventilation. |
|----------------------|------------------------------|

|                          |   |
|--------------------------|---|
| 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**

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

|                         |  |
|-------------------------|--|
| Methods for cleaning up | Pick up and transfer to properly labeled 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** No special protective equipment required.

**Hand protection** No special protective equipment required.

**Skin and body protection** No special protective equipment required.

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

**Environmental exposure controls** No information available.

## Section 9: Physical and chemical properties

### Information on basic physical and chemical properties

|                        |                          |
|------------------------|--------------------------|
| <b>Physical state</b>  | Liquid                   |
| <b>Appearance</b>      | aqueous solution         |
| <b>Colour</b>          | colourless               |
| <b>Odour</b>           | Odourless.               |
| <b>Odour threshold</b> | No information available |

| <u>Property</u>                       | <u>Values</u> | <u>Remarks • Method</u> |
|---------------------------------------|---------------|-------------------------|
| <b>pH</b>                             |               | None known              |
| <b>Melting point / freezing point</b> | 0 °C          |                         |

|   |                           |                   |
|---|---------------------------|-------------------|
| <b>Boiling point / boiling range</b>          | 100 °C                    |                   |
| <b>Flash point</b>                            | No data available         | None known        |
| <b>Evaporation rate</b>                       | No data available         | None known        |
| <b>Flammability (solid, gas)</b>              | No data available         | None known        |
| <b>Flammability Limit in Air</b>              |                           | None known        |
| <b>Upper flammability or explosive limits</b> | No data available         |                   |
| <b>Lower flammability or explosive limits</b> | No data available         |                   |
| <b>Vapour pressure</b>                        | No data available         | None known        |
| <b>Vapour density</b>                         | No data available         | None known        |
| <b>Relative density</b>                       | No data available         | None known        |
| <b>Water solubility</b>                       | No data available         | Miscible in water |
| <b>Solubility(ies)</b>                        | No data available         | None known        |
| <b>Partition coefficient</b>                  | No data available         | None known        |
| <b>Autoignition temperature</b>               | No data available         | None known        |
| <b>Decomposition temperature</b>              |                           | None known        |
| <b>Kinematic viscosity</b>                    | No data available         | None known        |
| <b>Dynamic viscosity</b>                      | No data available         | None known        |
| <b>Explosive properties</b>                   | No information available. |                   |
| <b>Oxidizing properties</b>                   | No information available. |                   |

**Other information**

|                                 |                          |
|---------------------------------|--------------------------|
| <b>Softening point</b>          | No information available |
| <b>Molecular weight</b>         | No information available |
| <b>VOC content</b>              | No information available |
| <b>Liquid Density</b>           | No information available |
| <b>Bulk density</b>             | No information available |
| <b>Particle characteristics</b> | No information available |

## Section 10: Stability and reactivity

**Reactivity**

|                   |                           |
|-------------------|---------------------------|
| <b>Reactivity</b> | No information available. |
|-------------------|---------------------------|

**Chemical stability**

|                  |                                 |
|------------------|---------------------------------|
| <b>Stability</b> | Stable under normal conditions. |
|------------------|---------------------------------|

**Explosion data**

|   |       |
|---|-------|
| <b>Sensitivity to mechanical impact</b> | None. |
|---|-------|

|  |       |
|--|-------|
| <b>Sensitivity to static discharge</b> | None. |
|--|-------|

**Possibility of hazardous reactions**

|   |                               |
|---|-------------------------------|
| <b>Possibility of hazardous reactions</b> | None under normal processing. |
|---|-------------------------------|

**Conditions to avoid**

|                            |   |
|----------------------------|---|
| <b>Conditions to avoid</b> | None known based on information supplied. |
|----------------------------|---|

**Incompatible materials**

|                               |   |
|-------------------------------|---|
| <b>Incompatible materials</b> | None known based on information supplied. |
|-------------------------------|---|

**Hazardous decomposition products**

|   |   |
|---|---|
| <b>Hazardous decomposition products</b> | 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** No information available.

**Serious eye damage/eye irritation** No information available.

**Respiratory or skin sensitization** No information available.

**Germ cell mutagenicity** No information available.

**Carcinogenicity** No information available.

**Reproductive toxicity** No information available.

**STOT - single exposure** No information available.

**STOT - repeated exposure** No information available.

**Aspiration hazard** No information available.

**Data used to identify the health effects** Refer to Section 16 for Key literature references and sources for data used to compile the SDS.

**Section 12: Ecological information****Ecotoxicity****Aquatic ecotoxicity**

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

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

**Persistence and degradability** No information available.

**Bioaccumulative potential**

**Bioaccumulation** There is no data for this product.

**Mobility in soil**

**Mobility** No information available.

**Other adverse effects**

No information available.

## Section 13: Disposal considerations

**Waste treatment methods**

**Waste from residues/unused products** Not applicable.  
Not Hazardous.  
Dispose of in accordance with local regulations.  
Dispose of waste in accordance with environmental legislation.

**Contaminated packaging** Not applicable.  
Not Hazardous.

## 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

**Special precautions for user**  
Please refer to the applicable dangerous goods regulations for additional information

## Section 15: Regulatory information

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

**National regulations**

**EPA New Zealand HSNO approval code or group standard** To be determined

**National regulations** There are no applicable tolerable exposure limits or environmental exposure limits according to the EPA Controls for Hazardous Substances

**Certified handlers, tracking and controlled substance license requirements** Certified handlers are required for some substances. This includes substances requiring a controlled substance license, and most explosives, vertebrates toxic agents, and certain fumigants. Acutely toxic substances which are a Category 1 or 2, 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 explosives, vertebrate toxic agents and fumigants. See Part 7 of the Health and Safety at Work Regulation 2017 for more information

### 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

### International Inventories

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|----------------------|---|
| <b>NZIoC</b>         | Contact supplier for inventory compliance status. |
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#### **Legend:**

**NZIoC** - New Zealand Inventory of Chemicals

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**PICCS** - Philippines Inventory of Chemicals and Chemical Substances

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## **Section 16: Other information**

**Revision date** 30-Aug-2022

**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)

National Institute of Technology and Evaluation (NITE)

Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)

NIOSH (National Institute for Occupational Safety and Health)

National Library of Medicine's ChemID Plus (NLM CIP)

National Library of Medicine's PubMed database (NLM PUBMED)



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National Toxicology Program (NTP)  
New Zealand's Chemical Classification and Information Database (CCID)  
Organization for Economic Co-operation and Development Environment, Health, and Safety Publications  
Organization for Economic Co-operation and Development High Production Volume Chemicals Program  
Organization for Economic Co-operation and Development Screening Information Data Set  
World Health Organization

**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 30-Aug-2022

Revision Number 2.1

## Section 1: Identification

### Product identifier

**Product Name** Sample Loading Dye  
**Catalogue Number(s)** 1660401, 1660401EDU, 9702945

### 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 Headquarters

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

#### Manufacturer

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

#### Legal Entity / Contact Address

Bio-Rad Laboratories Pty Ltd  
189 Bush Road  
Auckland  
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

### GHS Classification

Not classified Not a hazardous substance or mixture according to the Globally Harmonized System (GHS)

### Label elements

#### **Hazard statements**

Not classified Not a hazardous substance or mixture according to the Globally Harmonized System (GHS)

### Other hazards which do not result in classification

No information available.

## Section 3: Composition/information on ingredients

| Chemical name             | CAS No      | Weight-% |
|---------------------------|-------------|----------|
| 1,2,3-Propanetriol        | 56-81-5     | 20 - 35  |
| Non-hazardous ingredients | Proprietary | Balance  |

## Section 4: First-aid measures

### Description of first aid measures

|              |  |
|--------------|--|
| Inhalation   | Remove to fresh air.   |
| Eye contact  | Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician. |
| Skin contact | Wash skin with soap and water.   |
| Ingestion    | Rinse mouth.   |

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

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

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

|                    |                        |
|--------------------|------------------------|
| Note to physicians | Treat symptomatically. |
|--------------------|------------------------|

## Section 5: Fire-fighting measures

### Suitable Extinguishing Media

|                                |   |
|--------------------------------|---|
| Suitable Extinguishing Media   | Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. |
| Large Fire                     | CAUTION: Use of water spray when fighting fire may be inefficient.                                      |
| Unsuitable extinguishing media | Do not scatter spilled material with high pressure water streams.                                       |

### Specific hazards arising from the chemical

|  |                           |
|--|---------------------------|
| Specific hazards arising from the chemical | No information available. |
|--|---------------------------|

### Special protective actions for fire-fighters

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

## Section 6: Accidental release measures

### Personal precautions, protective equipment and emergency procedures

|                          |   |
|--------------------------|---|
| Personal precautions     | Ensure adequate ventilation.                      |
| 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

|                         |   |
|-------------------------|---|
| Methods for containment | Prevent further leakage or spillage if safe to do so. |
| Methods for cleaning up | Pick up and transfer to properly labeled 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**

| Chemical name                 | New Zealand               | Australia                 | ACGIH TLV | United Kingdom  |
|-------------------------------|---------------------------|---------------------------|-----------|---|
| 1,2,3-Propanetriol<br>56-81-5 | TWA: 10 mg/m <sup>3</sup> | TWA: 10 mg/m <sup>3</sup> | -         | TWA: 10 mg/m <sup>3</sup><br>STEL: 30 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** No special protective equipment required.

**Hand protection** No special protective equipment required.

**Skin and body protection** No special protective equipment required.

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

**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** blue  
**Odour** Odourless.  
**Odour threshold** No information available

| <u>Property</u>                        | <u>Values</u>             | <u>Remarks • Method</u> |
|--|---------------------------|-------------------------|
| pH                                     |                           | None known              |
| Melting point / freezing point         | No data available         | None known              |
| 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 limits | No data available         |                         |
| Lower flammability or explosive limits | No data available         |                         |
| Vapour pressure                        | No data available         | None known              |
| Vapour density                         | No data available         | None known              |
| Relative density                       | No data available         | None known              |
| Water solubility                       | No data available         | Miscible in water       |
| Solubility(ies)                        | No data available         | None known              |
| Partition coefficient                  | No data available         | None known              |
| Autoignition temperature               | No data available         | None known              |
| Decomposition temperature              |                           | None known              |
| Kinematic viscosity                    | No data available         | None known              |
| Dynamic viscosity                      | No data available         | None known              |
| Explosive properties                   | No information available. |                         |
| Oxidizing properties                   | No information available. |                         |
| <u>Other information</u>               |                           |                         |
| Softening point                        | No information available  |                         |
| Molecular weight                       | No information available  |                         |
| VOC content                            | No information available  |                         |
| Liquid Density                         | No information available  |                         |
| Bulk density                           | No information available  |                         |
| Particle characteristics               | No information available  |                         |

## 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

#### Component Information

| Chemical name      | Oral LD50             | Dermal LD50          | Inhalation LC50         |
|--------------------|-----------------------|----------------------|-------------------------|
| 1,2,3-Propanetriol | = 12600 mg/kg ( Rat ) | > 10 g/kg ( Rabbit ) | > 2.75 mg/L ( Rat ) 4 h |

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

**Skin corrosion/irritation** No information available.

**Serious eye damage/eye irritation** No information available.

**Respiratory or skin sensitization** No information available.

**Germ cell mutagenicity** No information available.

**Carcinogenicity** No information available.

**Reproductive toxicity** No information available.

**STOT - single exposure** No information available.

**STOT - repeated exposure** No information available.

**Aspiration hazard** No information available.

**Data used to identify the health effects** Refer to Section 16 for Key literature references and sources for data used to compile the SDS.

## Section 12: Ecological information

### 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 |
|--------------------|----------------------|--|-----------|
| 1,2,3-Propanetriol | -                    | LC50: 51 - 57mL/L (96h, <i>Oncorhynchus mykiss</i> ) | -         |

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

**Persistence and degradability** No information available.

### Bioaccumulative potential

#### Bioaccumulation

#### Component Information

| Chemical name      | Partition coefficient |
|--------------------|-----------------------|
| 1,2,3-Propanetriol | -1.75                 |

### Mobility in soil

**Mobility** No information available.

### Other adverse effects

No information available.

## Section 13: Disposal considerations

### Waste treatment methods

**Waste from residues/unused products** Not applicable.  
Not Hazardous.  
Dispose of in accordance with local regulations.  
Dispose of waste in accordance with environmental legislation.

**Contaminated packaging** Not applicable.  
Not Hazardous.

## 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

### Special precautions for user

Please refer to the applicable dangerous goods regulations for additional information

## Section 15: Regulatory information

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

**EPA New Zealand HSNO approval code or group standard** To be determined

**National regulations** There are no applicable tolerable exposure limits or environmental exposure limits according to the EPA Controls for Hazardous Substances

**Certified handlers, tracking and controlled substance license requirements** Certified handlers are required for some substances. This includes substances requiring a controlled substance license, and most explosives, vertebrates toxic agents, and certain fumigants. Acutely toxic substances which are a Category 1 or 2, such as pesticides also require Certified handlers. Please check the Health and Safety at Work Act 2015 for further information  
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**The Montreal Protocol on Substances that Deplete the Ozone Layer** Not applicable

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|                      |   |
|----------------------|---|
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## Section 16: Other information

**Revision date** 30-Aug-2022

**Revision Note** Reformatted and updated existing information.

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**Legend** Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

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