SAFETY DATA SHEET

Revision date 15-Apr-2024 Revision Number 1.2

Section 1: Identification

Product identifier

Product Name SEQuoia Complete Reagent B End Repair Enzyme

Catalogue Number(s) 12011303, 12011945

Other means of identification

Recommended use of the chemical and restrictions on use

Recommended use Laboratory chemicals

Uses advised against No information available

Details of the supplier of the safety data sheet

<u>Supplier</u> <u>Manufacturer</u> <u>Importer</u>

Bio-Rad Laboratories Inc.

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

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

Technical Service +64 9 415 2280 or 0508 805 500

sales.nz@bio-rad.com

Emergency telephone number

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

Section 2: Hazard identification

GHS Classification

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

Label elements

Hazard statements

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

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.

Section 3: Composition/information on ingredients

| | Chemical name | CAS No | Weight-% |
|--|---------------|--------|----------|
|--|---------------|--------|----------|

ZGHS / BE Page 1/9

Enzyme

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

Revision date 15-Apr-2024

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 doctor.

Skin contact Wash skin with soap and water.

Ingestion Rinse mouth.

Most important symptoms and effects, both acute and delayed

Symptoms No information available.

Effects of Exposure No information available.

Indication of any immediate medical attention and special treatment needed

Note to doctors Treat symptomatically.

Section 5: Fire-fighting measures

Suitable Extinguishing Media

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.

ZGHS / BE Page 2/9

Enzyme

Environmental precautions

Environmental precautions See Section 12 for additional Ecological Information.

Methods and material for containment and cleaning up

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

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

Precautions to prevent secondary hazards

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

Section 7: Handling and storage

Precautions for safe handling

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

Conditions for safe storage, including any incompatibilities

Storage Conditions Store according to product and label instructions.

Incompatible materials None known based on information supplied.

Section 8: Exposure controls/personal protection

Control parameters

Exposure Limits

| Chemical name | New Zealand | Australia | ACGIH TLV | United Kingdom |
|--------------------|---------------------------|---------------------------|-----------|----------------------------|
| 1,2,3-Propanetriol | TWA: 10 mg/m ³ | TWA: 10 mg/m ³ | - | TWA: 10 mg/m ³ |
| 56-81-5 | | | | STEL: 30 mg/m ³ |

Biological occupational exposure

limits

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

Revision date 15-Apr-2024

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 protectionNo special protective equipment required.

ZGHS / BE Page 3/9

No protective equipment is needed under normal use conditions. If exposure limits are Respiratory protection

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

Revision date 15-Apr-2024

Environmental exposure controls No information available.

Section 9: Physical and chemical properties

Information on basic physical and chemical properties

Liquid Physical state

Appearance aqueous solution Colour colourless Odour Sulphurous.

Odour threshold No information available

Values_ **Property** Remarks • Method

Ha

Melting point / freezing point No data available None known

Initial boiling point and boiling range> 100 °C 160 °C Flash point

Evaporation rate No data available None known Flammability No data available None known Flammability Limit in Air None known

Upper flammability or explosive No data available

limits

No data available Lower flammability or explosive

limits

Vapour pressure No data available None known Relative vapour density No data available None known No data available Relative density None known

Water solubility 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. **Oxidising properties** No information available.

Other information

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

Stable under normal conditions. Stability

ZGHS / BE Page 4/9

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 materialsNone known based on information supplied.

Hazardous decomposition products

Hazardous decomposition products None known based on information supplied.

Section 11: Toxicological information

Acute toxicity

Information on likely routes of exposure

Product Information

Inhalation Specific test data for the substance or mixture is not available.

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

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

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

Symptoms No information available.

Acute toxicity .

Numerical measures of toxicity

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

 ATEmix (oral)
 99,999.00 mg/kg

 ATEmix (dermal)
 99,999.00 mg/kg

 ATEmix (inhalation-gas)
 99,999.00 ppm

 ATEmix (inhalation-vapour)
 99,999.00 mg/l

 ATEmix (inhalation-dust/mist)
 99,999.00 mg/l

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

ZGHS / BE Page 5/9

Skin corrosion/irritationNo information available.

Serious eye damage/eye irritation No information available.

Respiratory or skin sensitisation 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, | - |
| | | Oncorhynchus mykiss) | |

Terrestrial ecotoxicity There is no data for this product.

Persistence and degradability No information available.

Bioaccumulative potential

Bioaccumulation

Component Information

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

ZGHS / BE Page 6/9

Mobility in soil

No information available. **Mobility**

Other adverse effects

No information available.

Section 13: Disposal considerations

Disposal 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

Not regulated IATA **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

ZGHS / BE Page 7/9

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

NZIoC Contact supplier for inventory compliance status. **TSCA** Contact supplier for inventory compliance status. DSL/NDSL Contact supplier for inventory compliance status. Contact supplier for inventory compliance status. **EINECS/ELINCS** Contact supplier for inventory compliance status. **ENCS** Contact supplier for inventory compliance status. **IECSC** Contact supplier for inventory compliance status. **KECL PICCS** Contact supplier for inventory compliance status. Contact supplier for inventory compliance status. AIIC

Legend:

NZIoC - New Zealand Inventory of Chemicals

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

DSL/NDSL - 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

15-Apr-2024 Revision date

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 (Short Term Exposure Limit)

Ceiling Maximum limit value Skin designation

Carcinogen

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

Agency for Toxic Substances and Disease Registry (ATSDR)

U.S. Environmental Protection Agency ChemView Database

European Food Safety Authority (EFSA) EPA (Environmental Protection Agency)

Acute Exposure Guideline Level(s) (AEGL(s))

U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act

U.S. Environmental Protection Agency High Production Volume Chemicals

Food Research Journal

Hazardous Substance Database

International Uniform Chemical Information Database (IUCLID)

National Institute of Technology and Evaluation (NITE)

Australian National Industrial Chemicals Notification and Assessment Scheme (NICNAS)

NIOSH (National Institute for Occupational Safety and Health)

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

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

National Toxicology Program (NTP)

New Zealand's Chemical Classification and Information Database (CCID)

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

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

World Health Organization

Page 8/9

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

ZGHS / BE Page 9/9