

# SAFETY DATA SHEET

Revision date 12-Dec-2023

Revision Number 1.1

## Section 1: Identification

### Product identifier

**Product Name** Transformation Buffer  
**Catalogue Number(s)** 1660409, 1660409EDU

### 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

<b>Supplier</b> Bio-Rad Laboratories Inc. 1000 Alfred Nobel Drive Hercules, CA 94547 USA	<b>Manufacturer</b> Bio-Rad Laboratories, Life Science Group 2000 Alfred Nobel Drive Hercules, California 94547 USA	<b>Importer</b> Bio-Rad Laboratories Pty Ltd 189 Bush Road Albany Auckland New Zealand
<b>Technical Service</b>	+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

### 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 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.
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## 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.
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### 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.
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## 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.
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### Methods and material for containment and cleaning up

<b>Methods for containment</b>	Prevent further leakage or spillage if safe to do so.
<b>Methods for cleaning up</b>	Pick up and transfer to properly labelled containers.
<b><u>Precautions to prevent secondary hazards</u></b>	
<b>Prevention of secondary hazards</b>	Clean contaminated objects and areas thoroughly observing environmental regulations.

## Section 7: Handling and storage

### **Precautions for safe handling**

<b>Advice on safe handling</b>	Handle in accordance with good industrial hygiene and safety practice.
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### **Conditions for safe storage, including any incompatibilities**

<b>Storage Conditions</b>	Store according to product and label instructions.
<b>Incompatible materials</b>	None known based on information supplied.

## Section 8: Exposure controls/personal protection

### **Control parameters**

<b>Exposure Limits</b>	This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.
<b>Biological occupational exposure limits</b>	This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies.

### **Appropriate engineering controls**

<b>Engineering controls</b>	Showers Eyewash stations Ventilation systems.
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### **Individual protection measures, such as personal protective equipment**

<b>Eye/face protection</b>	No special protective equipment required.
<b>Hand protection</b>	No special protective equipment required.
<b>Skin and body protection</b>	No special protective equipment required.
<b>Respiratory protection</b>	No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.
<b>Environmental exposure controls</b>	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

Odour	Odourless.	
Odour threshold	No information available	
<b><u>Property</u></b>	<b><u>Values</u></b>	<b><u>Remarks • Method</u></b>
pH	6	
Melting point / freezing point	0 °C	
Initial boiling point and boiling range	100 °C	
Flash point	No data available	None known
Evaporation rate	No data available	None known
Flammability	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
Relative vapour density	No data available	None known
Relative density	No data available	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.	
<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****Delayed and immediate effects as well as chronic effects from short and long-term exposure**

<b>Skin corrosion/irritation</b>	No information available.
<b>Serious eye damage/eye irritation</b>	No information available.
<b>Respiratory or skin sensitisation</b>	No information available.
<b>Germ cell mutagenicity</b>	No information available.
<b>Carcinogenicity</b>	No information available.
<b>Reproductive toxicity</b>	No information available.
<b>STOT - single exposure</b>	No information available.
<b>STOT - repeated exposure</b>	No information available.
<b>Aspiration hazard</b>	No information available.
<b>Data used to identify the health effects</b>	Refer to Section 16 for Key literature references and sources for data used to compile the SDS.

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

<b>Aquatic ecotoxicity</b>	The environmental impact of this product has not been fully investigated.
<b>Unknown aquatic toxicity</b>	0 % of the mixture consists of component(s) of unknown hazards to the aquatic environment.
<b>Terrestrial ecotoxicity</b>	There is no data for this product.
<b>Persistence and degradability</b>	No information available.

**Bioaccumulative potential**

<b>Bioaccumulation</b>	There is no data for this product.
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**Mobility in soil**

<b>Mobility</b>	No information available.
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**Other adverse effects**

No information available.

**Section 13: Disposal considerations****Disposal methods**

<b>Waste from residues/unused products</b>	Not applicable. Not Hazardous. Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.
<b>Contaminated packaging</b>	Not applicable. Not Hazardous.

**Section 14: Transport information**

<b><u>IATA</u></b>	Not regulated
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<b><u>IMDG</u></b>	Not regulated
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**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/NDSL</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>AIIC</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/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**

**Revision date** 12-Dec-2023

**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)

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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

**Disclaimer**

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**End of Safety Data Sheet**