# KIT SAFETY DATA SHEET



**Kit Product Name** Bio-Plex Pro Mouse Diabetes 8-Plex Assay

171F7001M, 171F7002M, 171F7010M Kit Catalogue Number(s)

**Revision date** 13-Feb-2024

# **Kit Contents**

Catalogue Number(s)	Product Name
9723892, 9703892, 9704415, 10014822, 10014823	Bio-Plex Assay Buffer
12002108, 12002109, 12005854	Mouse HP DAD
171170001, 10014625	Bio-Plex Pro Mouse Diabetes Standard
10010399	Bio-Plex Mouse Diabetes 8-Plex Detection
171304040, 10027955, 12006121, 12005850	Bio-Plex Pro Assays 10X Wash Buffer
10010394	Bio-Plex Pro Mouse Diabetes 8-Plex Beads
10014641, 9704423, 9703895, 171305043, 10022628, 10041561,	Bio-Plex Sample Diluent
12005851	
9703888, 9704424, 171305042, 171304080M, 10022368, 12005853	Bio-Plex Standard Diluent
171304501, 9704418, 9703887, 9703897	Streptavidin-PE

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# SAFETY DATA SHEET

**Legal Entity / Contact Address** 

u1A, 62 Ferndell Street,

Australia

South Granville NSW 2142

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

According to WHS Regulations

Revision date 18-Oct-2022 Revision Number 1.1

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

**Product identifier** 

**Product Name** Bio-Plex Assay Buffer

Catalogue Number(s) 9723892, 9703892, 9704415, 10014822, 10014823

Manufacturer

2000 Alfred Nobel Drive

Hercules, California 94547

Other means of identification

Pure substance/mixture Mixture

Recommended use of the chemical and restrictions on use

Recommended use Laboratory chemicals

Uses advised against No information available

Details of manufacturer or importer

**Corporate Headquarters** Bio-Rad Laboratories Inc. 1000 Alfred Nobel Drive

Hercules, CA 94547 USA

For further information, please contact

+61 2 9914 2800 or 1800 224 354 **Technical Service** sales.australia@bio-rad.com

USA

Emergency telephone number

24 Hour Emergency Phone Number CHEMTREC Australia: 61-290372994

Emergency telephone number No information available

### **SECTION 2: Hazards identification**

GHS Classification

Not classified

Label elements

**Hazard statements** 

Not classified

Other hazards which do not result in classification

# SECTION 3: Composition/information on ingredients

Substance

#### Not applicable

#### Mixture

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

Chemical name	CAS No	Weight-%
Water	7732-18-5	50 - 100
Trade secret	-	1 - 2.5
Trade secret	-	0.3 - 0.99
Trade secret	-	0.1 - 0.299
Trade secret	-	0.01 - 0.099
Chemical name	CAS No	Weight-%
Non-hazardous ingredients	Proprietary	Balance

# **SECTION 4: First aid measures**

### **Description of first aid measures**

General advice No hazards which require special first aid measures.

**Emergency telephone number** Poisons Information Centre, Australia: 13 11 26

Poisons Information Centre, New Zealand: 0800 764 766

**Inhalation** Remove to fresh air.

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

Consult a doctor.

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

**Ingestion** Rinse mouth thoroughly with water.

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

**Symptoms** No information available.

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

Note to doctors Treat symptomatically.

# **SECTION 5: Firefighting measures**

### Suitable Extinguishing Media

surrounding environment.

Unsuitable extinguishing media No information available.

Specific hazards arising from the chemical

Specific hazards arising from the None known.

chemical

#### Special protective actions for fire-fighters

**Special protective equipment for** Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear.

**fire-fighters** Use personal protection equipment.

### SECTION 6: Accidental release measures

### Personal precautions, protective equipment and emergency procedures

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

**Environmental precautions** 

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

Methods and material for containment and cleaning up

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

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

Precautions to prevent secondary hazards

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

### SECTION 7: Handling and storage

Precautions for safe handling

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

Conditions for safe storage, including any incompatibilities

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

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

### SECTION 8: Exposure controls/personal protection

#### **Control parameters**

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

exposure limits established by the region specific regulatory bodies.

Chemical name	Australia	ACGIH TLV
Trade secret	Peak: 0.11 ppm	Ceiling: 0.29 mg/m <sup>3</sup> Sodium azide
	Peak: 0.3 mg/m <sup>3</sup>	Ceiling: 0.11 ppm Hydrazoic acid vapor

### Biological occupational exposure limits

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

### Appropriate engineering controls

Engineering controls Showers

Eyewash stations Ventilation systems.

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

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

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

Hand protection Wear suitable gloves.

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

Appearanceaqueous solutionColourcolourlessOdourOdourless.

Odour threshold No information available

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

pH 7.4
Melting point / freezing point 0 °C
Initial boiling point and boiling range100 °C

Flash pointNo data availableNone knownEvaporation rateNo data availableNone knownFlammabilityNo data availableNone knownFlammability Limit in AirNone known

Upper flammability or explosive No data available

limits

Lower flammability or explosive No data available

limits

Vapour pressureNo data availableNone knownRelative vapour densityNo data availableNone knownRelative densityNo data availableNone 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
None known
None known

Kinematic viscosity

No data available

None known

No data available

None known

Explosive properties Not applicable Oxidising properties Not applicable

Other information

Molecular weightNot applicableVOC contentNot applicable

# SECTION 10: Stability and reactivity

Reactivity

**Reactivity** No information available.

**Chemical stability** 

Stability Stable under normal conditions.

**Explosion data** 

Sensitivity to mechanical impact None.

Sensitivity to static discharge None.

Possibility of hazardous reactions

Possibility of hazardous reactions None under normal processing.

Conditions to avoid

Conditions to avoid None known based on information supplied.

**Incompatible materials** 

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

**Hazardous decomposition products** 

Hazardous decomposition products None known based on information supplied.

# SECTION 11: Toxicological information

#### **Acute toxicity**

### Information on likely routes of exposure

Product Information

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

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

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

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

**Symptoms** No information available.

### Numerical measures of toxicity - Product Information

No information available

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Water	> 90 mL/kg (Rat)	-	-
Trade secret	= 3 g/kg (Rat)	> 10000 mg/kg (Rabbit)	> 42 mg/L (Rat)1 h
Trade secret	= 8290 mg/kg (Rat)	> 7940 mg/kg (Rabbit)	> 0.83 mg/L (Rat) 4 h
Trade secret	= 27 mg/kg (Rat)	= 20 mg/kg(Rabbit)	0.054 - 0.52 mg/L (Rat) 4 h

See section 16 for terms and abbreviations

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

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

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

Respiratory or skin sensitisation Based on available data, the classification criteria are not met.

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

CarcinogenicityBased on available data, the classification criteria are not met.Reproductive toxicityBased on available data, the classification criteria are not met.STOT - single exposureBased on available data, the classification criteria are not met.STOT - repeated exposureBased on available data, the classification criteria are not met.Aspiration hazardBased on available data, the classification criteria are not met.

# **SECTION 12: Ecological information**

**Ecotoxicity** 

**Ecotoxicity** 

Unknown aquatic toxicity 0.095 % of the mixture consists of component(s) of unknown hazards to the aquatic

environment.

Chemical name	Algae/aquatic plants	Fish	Toxicity to	Crustacea
			microorganisms	
Trade secret	-	LC50: 5560 - 6080mg/L	-	EC50: =1000mg/L (48h,
		(96h, Lepomis		Daphnia magna)
		macrochirus)		EC50: 340.7 - 469.2mg/L
		LC50: =12946mg/L (96h,		(48h, Daphnia magna)
		Lepomis macrochirus)		
		LC50: 6020 - 7070mg/L		
		(96h, Pimephales		
		promelas)		
		LC50: =7050mg/L (96h,		
		Pimephales promelas)		
		LC50: 6420 - 6700mg/L		
		(96h, Pimephales		
		promelas)		
		LC50: 4747 - 7824mg/L		
		(96h, Oncorhynchus		
		mykiss)		
Trade secret	-	LC50: =0.8mg/L (96h,	-	-
		Oncorhynchus mykiss)		
		LC50: =0.7mg/L (96h,		
		Lepomis macrochirus)		
		LC50: =5.46mg/L (96h,		
		Pimephales promelas)		

Persistence and degradability

Persistence and degradability No information available.

Bioaccumulative potential

**Bioaccumulation** No information available.

**Mobility** 

Mobility in soilNo information available.MobilityNo information available.

Other adverse effects

Other adverse effects No information available.

### SECTION 13: Disposal considerations

### **Disposal methods**

Waste from residues/unused

products

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

environmental legislation.

**Contaminated packaging** Do not reuse empty containers.

# **SECTION 14: Transport information**

ADG Not regulated

IATA Not regulatedIMDG Not regulated

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

No information available

# **SECTION 15: Regulatory information**

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

#### **National regulations**

#### <u>Australia</u>

See section 8 for national exposure control parameters

### Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP)

No poisons schedule number allocated

### **International Inventories**

Contact supplier for inventory compliance status

### **International Regulations**

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

The Stockholm Convention on Persistent Organic Pollutants Not applicable

The Rotterdam Convention Not applicable

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

Prepared By Bio-Rad Laboratories, Environmental Health and Safety

Revision date 18-Oct-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) (AEGL(s))

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

U.S. Environmental Protection Agency High Production Volume Chemicals

Food Research Journal

Hazardous Substance Database

International Uniform Chemical Information Database (IUCLID)

Japan GHS Classification

Australian National Industrial Chemicals Notification and Assessment Scheme (NICNAS)

NIOSH (National Institute for Occupational Safety and Health)

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

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

National Toxicology Program (NTP)

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

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

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

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

RTECS (Registry of Toxic Effects of Chemical Substances)

World Health Organization

#### **Disclaimer**

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

**End of Safety Data Sheet** 



# SAFETY DATA SHEET

According to WHS Regulations

Revision date 02-Aug-2023 Revision Number 1.1

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

**Product identifier** 

**Product Name** Mouse HP DAD

Catalogue Number(s) 12002108, 12002109, 12005854

Other means of identification

Pure substance/mixture Mixture

Recommended use of the chemical and restrictions on use

Recommended use Laboratory chemicals

Uses advised against No information available

Details of manufacturer or importer

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

USA

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

USA

**Legal Entity / Contact Address** u1A, 62 Ferndell Street, South Granville NSW 2142

Australia

For further information, please contact

**Technical Service** +61 2 9914 2800 or 1800 224 354

sales.australia@bio-rad.com

Emergency telephone number

24 Hour Emergency Phone Number CHEMTREC Australia: 61-290372994

Emergency telephone number No information available

### **SECTION 2: Hazards identification**

GHS Classification

Not classified

Label elements

**Hazard statements** 

Not classified

Other hazards which do not result in classification

Contains animal source material (Cattle)

# SECTION 3: Composition/information on ingredients

\_\_\_\_\_

#### Substance

Not applicable

### Mixture

Chemical name	CAS No	Weight-%
Sodium phosphate dibasic	7558-79-4	0.1 - 0.299
Non-hazardous ingredients	Proprietary	Balance

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

**Description of first aid measures** 

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

Emergency telephone number Poisons Information Centre, Australia: 13 11 26

Poisons Information Centre, New Zealand: 0800 764 766

**Inhalation** Remove to fresh air.

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

Consult a doctor.

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

**Ingestion** Rinse mouth thoroughly with water.

Most important symptoms and effects, both acute and delayed

**Symptoms** No information available.

Indication of any immediate medical attention and special treatment needed

Note to doctors Treat symptomatically.

### **SECTION 5: Firefighting measures**

**Suitable Extinguishing Media** 

surrounding environment.

**Unsuitable extinguishing media** No information available.

Specific hazards arising from the chemical

Specific hazards arising from the

None known.

chemical

Special protective actions for fire-fighters

Special protective equipment for

fire-fighters

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

Use personal protection equipment.

### SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

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

**Environmental precautions** 

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

Methods and material for containment and cleaning up

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

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

Precautions to prevent secondary hazards

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

### SECTION 7: Handling and storage

### Precautions for safe handling

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

### Conditions for safe storage, including any incompatibilities

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

Incompatible materials Metals.

### SECTION 8: Exposure controls/personal protection

#### **Control parameters**

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

exposure limits established by the region specific regulatory bodies.

#### **Biological occupational exposure limits**

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

### Appropriate engineering controls

Engineering controls Showers

Eyewash stations Ventilation systems.

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

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

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

**Hand protection** Wear suitable gloves.

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

ColouramberOdourOdourless.

Odour threshold No information available

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

pH 7.2

Melting point / freezing point No data available None known

Initial boiling point and boiling range> 100 °C

Flash pointNo data availableNone knownEvaporation rateNo data availableNone knownFlammabilityNo data availableNone knownFlammability Limit in AirNone known

Upper flammability or explosive No data available

limits

Lower flammability or explosive No data available

limits

Vapour pressureNo data availableNone knownRelative vapour densityNo data availableNone knownRelative densityNo data availableNone known

Water solubility Miscible in water

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

Kinematic viscosity

No data available

No data available

None known

None known

None known

None known

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

Other information

Molecular weightNot applicableVOC contentNot applicable

### SECTION 10: Stability and reactivity

Reactivity

**Reactivity** No information available.

**Chemical stability** 

**Stability** Stable under normal conditions.

**Explosion data** 

Sensitivity to mechanical impact None.

Sensitivity to static discharge None.

Possibility of hazardous reactions

Possibility of hazardous reactions 
Avoid contact with metals. This product contains Sodium azide. Sodium azide can react with

Copper, Brass, Lead, and solder in piping systems to form explosive compounds and toxic

gases.

#### **Conditions to avoid**

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

Incompatible materials

Incompatible materials Metals.

### **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.

Numerical measures of toxicity - Product Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Sodium phosphate dibasic	= 17 g/kg (Rat)	-	-

See section 16 for terms and abbreviations

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

Skin corrosion/irritation Based on available data, the classification criteria are not met. Serious eye damage/eye irritation Based on available data, the classification criteria are not met. Respiratory or skin sensitisation Based on available data, the classification criteria are not met. Germ cell mutagenicity Based on available data, the classification criteria are not met. Carcinogenicity Based on available data, the classification criteria are not met. Reproductive toxicity Based on available data, the classification criteria are not met. STOT - single exposure Based on available data, the classification criteria are not met. STOT - repeated exposure Based on available data, the classification criteria are not met. **Aspiration hazard** Based on available data, the classification criteria are not met.

# **SECTION 12: Ecological information**

**Ecotoxicity** 

**Ecotoxicity** 

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

environment.

Persistence and degradability

Persistence and degradability No information available.

Bioaccumulative potential

**Bioaccumulation** No information available.

**Mobility** 

**Mobility in soil** No information available.

**Mobility** No information available.

Other adverse effects

Other adverse effects No information available.

## **SECTION 13: Disposal considerations**

**Disposal methods** 

Waste from residues/unused

products

Flush pipes with water frequently if discarding solutions containing Sodium azide into metal piping systems. Dispose of in accordance with local regulations. Dispose of waste in

accordance with environmental legislation.

**Contaminated packaging** Do not reuse empty containers.

# **SECTION 14: Transport information**

ADG Not regulated

IATA Not regulatedIMDG Not regulated

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

No information available

# **SECTION 15: Regulatory information**

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

### **National regulations**

#### Australia

See section 8 for national exposure control parameters

### Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP)

Classified as a scheduled poison according to the Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP)

Poison Schedule Number

#### International Inventories

Contact supplier for inventory compliance status

### **International Regulations**

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

The Stockholm Convention on Persistent Organic Pollutants Not applicable

The Rotterdam Convention Not applicable

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

Prepared By Bio-Rad Laboratories, Environmental Health and Safety

Revision date 02-Aug-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)

EPA (Environmental Protection Agency)

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

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

U.S. Environmental Protection Agency High Production Volume Chemicals

Food Research Journal

Hazardous Substance Database

International Uniform Chemical Information Database (IUCLID)

Japan GHS Classification

Australian National Industrial Chemicals Notification and Assessment Scheme (NICNAS)

NIOSH (National Institute for Occupational Safety and Health)

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

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

National Toxicology Program (NTP)

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

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

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

RTECS (Registry of Toxic Effects of Chemical Substances)

World Health Organization

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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

According to WHS Regulations

Revision date 23-Aug-2023 Revision Number 1.1

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

**Product identifier** 

**Product Name** Bio-Plex Pro Mouse Diabetes Standard

Catalogue Number(s) 171170001, 10014625

Other means of identification

Pure substance/mixture Mixture

Recommended use of the chemical and restrictions on use

Recommended use Laboratory chemicals

Uses advised against No information available

Details of manufacturer or importer

**Corporate Headquarters** Bio-Rad Laboratories Inc. 1000 Alfred Nobel Drive

Hercules, CA 94547 USA

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

USA

**Legal Entity / Contact Address** u1A, 62 Ferndell Street, South Granville NSW 2142

Australia

For further information, please contact

**Technical Service** +61 2 9914 2800 or 1800 224 354

sales.australia@bio-rad.com

Emergency telephone number

24 Hour Emergency Phone Number CHEMTREC Australia: 61-290372994

Emergency telephone number No information available

### **SECTION 2: Hazards identification**

GHS Classification

Not classified

Label elements

**Hazard statements** 

Not classified

Other hazards which do not result in classification

Contains animal source material (Cattle)

# SECTION 3: Composition/information on ingredients

### Substance

Not applicable

### Mixture

Chemical name	CAS No	Weight-%
Trade secret	-	5 - 10
Sodium phosphate dibasic	7558-79-4	1 - 2.5
Sodium hydroxide	1310-73-2	0.1 - 0.299
Hydrochloric acid	7647-01-0	0.1 - 0.299
Non-hazardous ingredients	Proprietary	Balance

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

**Description of first aid measures** 

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

Emergency telephone number Poisons Information Centre, Australia: 13 11 26

Poisons Information Centre, New Zealand: 0800 764 766

**Inhalation** Remove to fresh air.

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

Consult a doctor.

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

**Ingestion** Rinse mouth thoroughly with water.

Most important symptoms and effects, both acute and delayed

**Symptoms** No information available.

Indication of any immediate medical attention and special treatment needed

**Note to doctors** Treat symptomatically.

### **SECTION 5: Firefighting measures**

**Suitable Extinguishing Media** 

surrounding environment.

Unsuitable extinguishing media No information available.

Specific hazards arising from the chemical

Specific hazards arising from the

chemical

None known.

Special protective actions for fire-fighters

Special protective equipment for

fire-fighters

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

Use personal protection equipment.

Revision date 23-Aug-2023

### SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

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

**Environmental precautions** 

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

Methods and material for containment and cleaning up

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

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

Precautions to prevent secondary hazards

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

### SECTION 7: Handling and storage

Precautions for safe handling

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

Conditions for safe storage, including any incompatibilities

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

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

# SECTION 8: Exposure controls/personal protection

### **Control parameters**

#### **Exposure Limits**

Chemical name	Australia	ACGIH TLV
Sodium hydroxide 1310-73-2	Peak: 2 mg/m <sup>3</sup>	Ceiling: 2 mg/m <sup>3</sup>
Hydrochloric acid 7647-01-0	Peak: 5 ppm Peak: 7.5 mg/m³	Ceiling: 2 ppm

### Biological occupational exposure limits

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

### **Appropriate engineering controls**

Engineering controls Showers

Eyewash stations Ventilation systems.

Individual protection measures, such as personal protective equipment

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

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

**Hand protection** Wear suitable gloves.

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

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

**Environmental exposure controls** No information available.

### SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Physical state Solid
Appearance solid
Colour white
Odour Odourless.

Odour threshold No information available

Property Values Remarks • Method

**pH** None known

Melting point / freezing point No data available None known

Initial boiling point and boiling range1461 °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 No data available

limits

Lower flammability or explosive No data available

limits

Vapour pressureNo data availableNone knownRelative vapour densityNo data availableNone knownRelative densityNo data availableNone known

Water solubility Soluble in water

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

Kinematic viscosity

No data available

None known

None known

None known

None known

Explosive properties

Oxidising properties

Not applicable
Not applicable

Other information

Molecular weightNot applicableVOC contentNot applicable

# SECTION 10: Stability and reactivity

Reactivity

**Reactivity** No information available.

**Chemical stability** 

**Stability** Stable under normal conditions.

**Explosion data** 

Sensitivity to mechanical impact None.

Sensitivity to static discharge None.

Possibility of hazardous reactions

Possibility of hazardous reactions None under normal processing.

Conditions to avoid

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

**Incompatible materials** 

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

Hazardous decomposition products

Hazardous decomposition products None known based on information supplied.

# SECTION 11: Toxicological information

### **Acute toxicity**

### Information on likely routes of exposure

Product Information

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

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

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

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

**Symptoms** No information available.

Numerical measures of toxicity - Product Information

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

**ATEmix (oral)** 33,333.30 mg/kg

**Component Information** 

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Trade secret	= 3 g/kg (Rat)	> 10000 mg/kg(Rabbit)	> 42 mg/L (Rat)1 h
Sodium phosphate dibasic	= 17 g/kg (Rat)	-	-
Sodium hydroxide	= 325 mg/kg (Rat)	= 1350 mg/kg ( Rabbit )	-
Hydrochloric acid	238 - 277 mg/kg (Rat)	> 5010 mg/kg (Rabbit)	= 1.68 mg/L (Rat) 1 h

See section 16 for terms and abbreviations

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

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

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

Respiratory or skin sensitisation Based on available data, the classification criteria are not met.

Germ cell mutagenicity

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

Carcinogenicity

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

Reproductive toxicity

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

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

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

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

# **SECTION 12: Ecological information**

**Ecotoxicity** 

Ecotoxicity

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

environment.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Trade secret	-	LC50: 5560 - 6080mg/L	-	EC50: =1000mg/L (48h,
		(96h, Lepomis		Daphnia magna)
		macrochirus)		EC50: 340.7 - 469.2mg/L
		LC50: =12946mg/L (96h,		(48h, Daphnia magna)
		Lepomis macrochirus)		
		LC50: 6020 - 7070mg/L		
		(96h, Pimephales		
		promelas)		
		LC50: =7050mg/L (96h,		
		Pimephales promelas)		
		LC50: 6420 - 6700mg/L		
		(96h, Pimephales		
		promelas)		
		LC50: 4747 - 7824mg/L		
		(96h, Oncorhynchus		
		mykiss)		
Sodium hydroxide	-	LC50: =45.4mg/L (96h,	-	-
		Oncorhynchus mykiss)		

Persistence and degradability

Persistence and degradability No information available.

Bioaccumulative potential

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

**Mobility** 

Mobility in soilNo information available.MobilityNo information available.

Other adverse effects

Other adverse effects No information available.

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

**Disposal methods** 

Waste from residues/unused

products

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

environmental legislation.

**Contaminated packaging** Do not reuse empty containers.

# **SECTION 14: Transport information**

ADG Not regulated

IMDG Not regulated

Not regulated

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

No information available

# **SECTION 15: Regulatory information**

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

### **National regulations**

#### <u>Australia</u>

See section 8 for national exposure control parameters

### Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP)

Classified as a scheduled poison according to the Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP)

Poison Schedule Number

#### Major hazard (accident/incident planning) regulation

Verify that licence requirements are met

#### Named hazardous chemicals

Chemical name	Threshold quantity (T)
Hydrochloric acid - 7647-01-0	250 tonne TQ anhydrous
	250 tonne TQ refrigerated liquid

### National pollutant inventory

Subject to reporting requirement

Guarjost to reporting requirement		
Chemical name	National pollutant inventory	
Hydrochloric acid - 7647-01-0	10 tonne/yr Threshold category 1	
	400 tonne/yr Threshold category 2a	
	1 tonne/h Threshold category 2a	
	2000 tonne/yr Threshold category 2b	
	60000 MWH Threshold category 2b	
	20 MW Threshold category 2b	

### **International Inventories**

Contact supplier for inventory compliance status

### International Regulations

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

The Stockholm Convention on Persistent Organic Pollutants Not applicable

The Rotterdam Convention Not applicable

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

Bio-Rad Laboratories, Environmental Health and Safety Prepared By

**Revision date** 23-Aug-2023

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

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

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA (time-weighted average) STEL (Short Term Exposure Limit) TWA STEL

Ceiling Maximum limit value Skin designation

С Carcinogen

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

Agency for Toxic Substances and Disease Registry (ATSDR)

U.S. Environmental Protection Agency ChemView Database

European Food Safety Authority (EFSA)

EPA (Environmental Protection Agency)

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

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

U.S. Environmental Protection Agency High Production Volume Chemicals

Food Research Journal

Hazardous Substance Database

International Uniform Chemical Information Database (IUCLID)

Japan GHS Classification

Australian National Industrial Chemicals Notification and Assessment Scheme (NICNAS)

NIOSH (National Institute for Occupational Safety and Health)

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

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

National Toxicology Program (NTP)

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

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

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

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

RTECS (Registry of Toxic Effects of Chemical Substances)

World Health Organization

### **Disclaimer**

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

**End of Safety Data Sheet** 



# **SAFETY DATA SHEET**

According to WHS Regulations

Revision date 23-Aug-2023 Revision Number 1.1

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

**Product identifier** 

Bio-Plex Mouse Diabetes 8-Plex Detection **Product Name** 

Catalogue Number(s) 10010399

Other means of identification

Pure substance/mixture Mixture

Recommended use of the chemical and restrictions on use

Recommended use Laboratory chemicals

Uses advised against No information available

Details of manufacturer or importer

**Corporate Headquarters** Bio-Rad Laboratories Inc. 1000 Alfred Nobel Drive

Hercules, CA 94547 USA

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

USA

**Legal Entity / Contact Address** u1A, 62 Ferndell Street, South Granville NSW 2142

Australia

For further information, please contact

+61 2 9914 2800 or 1800 224 354 **Technical Service** 

sales.australia@bio-rad.com

Emergency telephone number

24 Hour Emergency Phone Number CHEMTREC Australia: 61-290372994

Emergency telephone number No information available

### **SECTION 2: Hazards identification**

GHS Classification

Skin sensitisation Category 1A - (H317)

#### Label elements

**Exclamation mark** 



Signal word Warning

#### **Hazard statements**

H317 - May cause an allergic skin reaction

### **Precautionary Statements - Prevention**

Avoid breathing dust/fume/gas/mist/vapours/spray

Contaminated work clothing should not be allowed out of the workplace Wear protective gloves/protective clothing/eye protection/face protection

IF ON SKIN: Wash with plenty of water and soap

If skin irritation or rash occurs: Get medical advice/attention Take off all contaminated clothing and wash it before reuse

#### **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 with long lasting effects Harmful to aquatic life Contains animal source material (Cattle)

## SECTION 3: Composition/information on ingredients

#### Substance

Not applicable

#### Mixture

Chemical name	CAS No	Weight-%
Water	7732-18-5	50 - 100
Antibodies	NO-CAS-81	10 - 20
Trade secret	-	0.3 - 0.99
Sodium phosphate dibasic	7558-79-4	0.1 - 0.299
Trade secret	-	0.1 - 0.299
Trade secret	-	0.1 - 0.299
Trade secret	-	0.01 - 0.099
Trade secret	-	0.01 - 0.099
Trade secret	-	0.001 - 0.01
Trade secret	-	0.001 - 0.01
Trade secret	-	0.001 - 0.01
Trade secret	-	0.001 - 0.01
Non-hazardous ingredients	Proprietary	Balance

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

### **Description of first aid measures**

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

**Emergency telephone number** Poisons Information Centre, Australia: 13 11 26

Poisons Information Centre, New Zealand: 0800 764 766

**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 with soap and water. May cause an allergic skin reaction. In the case of skin irritation

or allergic reactions see a doctor.

**Ingestion** Rinse mouth thoroughly with water.

Most important symptoms and effects, both acute and delayed

Revision date 23-Aug-2023

**Symptoms** Itching. Rashes. Hives.

Indication of any immediate medical attention and special treatment needed

Note to doctors May cause sensitisation in susceptible persons. Treat symptomatically.

### SECTION 5: Firefighting measures

**Suitable Extinguishing Media** 

surrounding environment.

Unsuitable extinguishing media No information available.

Specific hazards arising from the chemical

Specific hazards arising from the

chemical

Product is or contains a sensitiser. May cause sensitisation by skin contact.

Special protective actions for fire-fighters

Special protective equipment for

fire-fighters

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

Use personal protection equipment.

### SECTION 6: Accidental release measures

#### Personal precautions, protective equipment and emergency procedures

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

protective equipment as required. Evacuate personnel to safe areas. Keep people away

from and upwind of spill/leak.

**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. Avoid contact with

skin, eyes or clothing. Ensure adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. Do not eat, drink or smoke when using this product. Take off

contaminated clothing and wash it before reuse.

Revision date 23-Aug-2023

### Conditions for safe storage, including any incompatibilities

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

Keep out of the reach of children. 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.

Chemical name	Australia	ACGIH TLV
Trade secret	Peak: 0.11 ppm	Ceiling: 0.29 mg/m <sup>3</sup> Sodium azide
	Peak: 0.3 mg/m <sup>3</sup>	Ceiling: 0.11 ppm Hydrazoic acid vapor

#### **Biological occupational exposure limits**

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

### **Appropriate engineering controls**

Engineering controls Showers

Eyewash stations Ventilation systems.

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

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

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

**Hand protection** Wear suitable gloves.

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

Appearanceaqueous solutionColourcolourlessOdourOdourless.

Odour threshold No information available

Property Values Remarks • Method

<del>pH</del> 7.4

Melting point / freezing point No data available None known

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 No data available

None known

limits

Lower flammability or explosive No data available

limits

No data available None known Vapour pressure 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 None known

No data available Kinematic viscosity **Dynamic viscosity** No data available Not applicable **Explosive properties** 

Not applicable **Oxidising properties** 

Other information

Molecular weight Not applicable Not applicable **VOC** content

# 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

None known based on information supplied. Conditions to avoid

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.

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

Revision date 23-Aug-2023

**Skin contact** May cause sensitisation by skin contact. Specific test data for the substance or mixture is

not available. Repeated or prolonged skin contact may cause allergic reactions with

susceptible persons (based on components).

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

Symptoms Itching. Rashes. Hives.

Numerical measures of toxicity - Product Information

**Component Information** 

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Water	> 90 mL/kg (Rat)	-	-
Trade secret	= 3 g/kg (Rat)	> 10000 mg/kg ( Rabbit )	> 42 mg/L (Rat) 1 h
Sodium phosphate dibasic	= 17 g/kg (Rat)	-	-
Trade secret	= 8290 mg/kg (Rat)	> 7940 mg/kg (Rabbit)	> 0.83 mg/L (Rat) 4 h
Trade secret	= 27 mg/kg (Rat)	= 20 mg/kg (Rabbit)	0.054 - 0.52 mg/L (Rat) 4 h
Trade secret	= 2600 mg/kg (Rat)	-	-
Trade secret	= 3200 mg/kg (Rat)	-	> 0.83 mg/L (Rat) 4 h
Trade secret	= 53 mg/kg (Rat)	= 87.12 mg/kg ( Rabbit )	-

See section 16 for terms and abbreviations

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

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

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

**Respiratory or skin sensitisation** May cause sensitisation by skin contact.

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

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

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

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

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

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

## SECTION 12: Ecological information

**Ecotoxicity** 

**Ecotoxicity** Harmful to aquatic life with long lasting effects.

**Unknown aquatic toxicity** 3.12079 % of the mixture consists of component(s) of unknown hazards to the aquatic

environment.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Trade secret	-	LC50: 5560 - 6080mg/L (96h, Lepomis macrochirus) LC50: =12946mg/L (96h, Lepomis macrochirus) LC50: 6020 - 7070mg/L (96h, Pimephales promelas) LC50: =7050mg/L (96h, Pimephales promelas) LC50: 6420 - 6700mg/L (96h, Pimephales promelas) LC50: 4747 - 7824mg/L (96h, Oncorhynchus mykiss)	<u>-</u>	EC50: =1000mg/L (48h, Daphnia magna) EC50: 340.7 - 469.2mg/L (48h, Daphnia magna)
Trade secret	-	LC50: =0.8mg/L (96h, Oncorhynchus mykiss) LC50: =0.7mg/L (96h, Lepomis macrochirus) LC50: =5.46mg/L (96h, Pimephales promelas)	-	-
Trade secret	EC50: =2500mg/L (72h, Desmodesmus subspicatus)	LC50: =1060mg/L (96h, Lepomis macrochirus) LC50: 750 - 1020mg/L (96h, Pimephales promelas)	-	EC50: =825mg/L (48h, Daphnia magna) EC50: =83mg/L (48h, Daphnia magna)

Persistence and degradability

Persistence and degradability No information available.

Bioaccumulative potential

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

**Component Information** 

Chemical name	Partition coefficient	
Trade secret	0.7	

Mobility

Mobility in soilNo information available.MobilityNo information available.

Other adverse effects

Other adverse effects No information available.

# **SECTION 13: Disposal considerations**

**Disposal methods** 

Waste from residues/unused Dispose of

products

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

environmental legislation.

**Contaminated packaging** Do not reuse empty containers.

Revision date 23-Aug-2023

# **SECTION 14: Transport information**

ADG Not regulated

IATA Not regulated

<u>IMDG</u> Not regulated

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

No information available

### **SECTION 15: Regulatory information**

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

#### **National regulations**

#### Australia

See section 8 for national exposure control parameters

#### Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP)

Classified as a scheduled poison according to the Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP)

Poison Schedule Number

#### **International Inventories**

Contact supplier for inventory compliance status

### **International Regulations**

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

The Stockholm Convention on Persistent Organic Pollutants Not applicable

The Rotterdam Convention Not applicable

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

Prepared By Bio-Rad Laboratories, Environmental Health and Safety

Revision date 23-Aug-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) EPA (Environmental Protection Agency) Acute Exposure Guideline Level(s) (AEGL(s))

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

U.S. Environmental Protection Agency High Production Volume Chemicals

Food Research Journal

Hazardous Substance Database

International Uniform Chemical Information Database (IUCLID)

Japan GHS Classification

Australian National Industrial Chemicals Notification and Assessment Scheme (NICNAS)

NIOSH (National Institute for Occupational Safety and Health)

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

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

National Toxicology Program (NTP)

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

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

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

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

RTECS (Registry of Toxic Effects of Chemical Substances)

World Health Organization

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**End of Safety Data Sheet** 



# SAFETY DATA SHEET

According to WHS Regulations

Revision date 07-Feb-2024 Revision Number 2

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

**Product identifier** 

**Product Name** Bio-Plex Pro Assays 10X Wash Buffer

Catalogue Number(s) 171304040, 10027955, 12006121, 12005850

Other means of identification

Pure substance/mixture Mixture

Recommended use of the chemical and restrictions on use

Recommended use Laboratory chemicals

Uses advised against No information available

Details of manufacturer or importer

**Corporate Headquarters** Bio-Rad Laboratories Inc. 1000 Alfred Nobel Drive

Hercules, CA 94547 USA

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

USA

**Legal Entity / Contact Address** u1A, 62 Ferndell Street, South Granville NSW 2142

Australia

For further information, please contact

**Technical Service** +61 2 9914 2800 or 1800 224 354

sales.australia@bio-rad.com

Emergency telephone number

24 Hour Emergency Phone Number CHEMTREC Australia: 61-290372994

Emergency telephone number No information available

### **SECTION 2: Hazards identification**

GHS Classification

Not classified

Label elements

**Hazard statements** 

Not classified

Other hazards which do not result in classification

# SECTION 3: Composition/information on ingredients

Substance

Revision date 07-Feb-2024

Not applicable

#### Mixture

Chemical name	CAS No	Weight-%
Trade secret	-	5 - 10
Non-hazardous ingredients	Proprietary	Balance

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

**Description of first aid measures** 

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

Emergency telephone number Poisons Information Centre, Australia: 13 11 26

Poisons Information Centre, New Zealand: 0800 764 766

**Inhalation** Remove to fresh air.

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

Consult a doctor.

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

**Ingestion** Rinse mouth thoroughly with water.

Most important symptoms and effects, both acute and delayed

**Symptoms** No information available.

Indication of any immediate medical attention and special treatment needed

**Note to doctors**Treat symptomatically.

# **SECTION 5: Firefighting measures**

Suitable Extinguishing Media

surrounding environment.

**Unsuitable extinguishing media** No information available.

Specific hazards arising from the chemical

Specific hazards arising from the

None known.

chemical

Special protective actions for fire-fighters

Special protective equipment for

fire-fighters

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

Use personal protection equipment.

### SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

#### **Bio-Plex Pro Assays 10X Wash Buffer**

Revision date 07-Feb-2024

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

For emergency responders

Use personal protection recommended in Section 8.

**Environmental precautions** 

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

Methods and material for containment and cleaning up

**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 Metals.

#### SECTION 8: Exposure controls/personal protection

**Control parameters** 

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

exposure limits established by the region specific regulatory bodies.

**Biological occupational exposure limits** 

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

### **Appropriate engineering controls**

Engineering controls Showers

Eyewash stations Ventilation systems.

Individual protection measures, such as personal protective equipment

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

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

**Hand protection** Wear suitable gloves.

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

**Environmental exposure controls** No information available.

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

Information on basic physical and chemical properties

Physical state Liquid

Appearance aqueous solution colourless
Odour Odourless.

Odour threshold No information available

Property Values Remarks • Method

**pH** 7.4

Melting point / freezing point No data available None known

Initial boiling point and boiling range100 °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 No data available

limits

Lower flammability or explosive No data available

limits

Vapour pressureNo data availableNone knownRelative vapour densityNo data availableNone knownRelative densityNo data availableNone known

Water solubility Miscible in water

Solubility(ies)
No data available
None known
Autoignition temperature
No data available
None known
No data available
None known
None known
None known
None known
None known

Kinematic viscosityNo data availableNone knownDynamic viscosityNo data availableNone known

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

Other information

Molecular weightNot applicableVOC contentNot applicable

# SECTION 10: Stability and reactivity

Reactivity

**Reactivity** No information available.

**Chemical stability** 

**Stability** Stable under normal conditions.

**Explosion data** 

Sensitivity to mechanical impact None.

Sensitivity to static discharge None.

Possibility of hazardous reactions

Possibility of hazardous reactions Avoid contact with metals. This product contains Sodium azide. Sodium azide can react with

Copper, Brass, Lead, and solder in piping systems to form explosive compounds and toxic

gases.

Revision date 07-Feb-2024

Conditions to avoid

Conditions to avoid None known based on information supplied.

**Incompatible materials** 

Incompatible materials Metals.

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.

#### Numerical measures of toxicity - Product Information

No information available

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

**ATEmix (oral)** 34,207.50 mg/kg

**Component Information** 

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Trade secret	= 3 g/kg (Rat)	> 10000 mg/kg(Rabbit)	> 42 mg/L (Rat)1 h

See section 16 for terms and abbreviations

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

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

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

Respiratory or skin sensitisation Based on available data, the classification criteria are not met.

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

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

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

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

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

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

# **SECTION 12: Ecological information**

**Ecotoxicity** 

**Ecotoxicity** 

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

environment.

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

Persistence and degradability

Persistence and degradability No information available.

Bioaccumulative potential

**Bioaccumulation** No information available.

**Mobility** 

Mobility in soil No information available.

**Mobility** No information available.

Other adverse effects

Other adverse effects No information available.

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

**Disposal methods** 

Waste from residues/unused

products

Flush pipes with water frequently if discarding solutions containing Sodium azide into metal piping systems. Dispose of in accordance with local regulations. Dispose of waste in

accordance with environmental legislation.

**Contaminated packaging** Do not reuse empty containers.

# **SECTION 14: Transport information**

ADG Not regulated

IMDG Not regulated

Not regulated

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

No information available

# SECTION 15: Regulatory information

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

#### **National regulations**

#### Australia

See section 8 for national exposure control parameters

#### Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP)

No poisons schedule number allocated

#### **International Inventories**

Contact supplier for inventory compliance status

#### International Regulations

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

The Stockholm Convention on Persistent Organic Pollutants Not applicable

The Rotterdam Convention Not applicable

# **SECTION 16: Other information**

Prepared By Bio-Rad Laboratories, Environmental Health and Safety

Revision date 07-Feb-2024

**Revision Note** SDS sections updated. 2. 12.

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

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA TWA (time-weighted average) STEL STEL (Short Term Exposure Limit)

Ceiling Maximum limit value \* Skin designation

C Carcinogen

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

Agency for Toxic Substances and Disease Registry (ATSDR)

U.S. Environmental Protection Agency ChemView Database

European Food Safety Authority (EFSA)

EPA (Environmental Protection Agency)

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

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

U.S. Environmental Protection Agency High Production Volume Chemicals

Food Research Journal

Hazardous Substance Database

International Uniform Chemical Information Database (IUCLID)

Japan GHS Classification

Australian National Industrial Chemicals Notification and Assessment Scheme (NICNAS)

NIOSH (National Institute for Occupational Safety and Health)

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

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

National Toxicology Program (NTP)

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

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

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

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

RTECS (Registry of Toxic Effects of Chemical Substances)

World Health Organization

#### **Disclaimer**

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

**End of Safety Data Sheet** 



# **SAFETY DATA SHEET**

According to WHS Regulations

Revision date 23-Aug-2023 Revision Number 1.1

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

**Product identifier** 

Bio-Plex Pro Mouse Diabetes 8-Plex Beads **Product Name** 

Catalogue Number(s) 10010394

Other means of identification

Pure substance/mixture Mixture

Recommended use of the chemical and restrictions on use

Recommended use Laboratory chemicals

Uses advised against No information available

Details of manufacturer or importer

**Corporate Headquarters** Bio-Rad Laboratories Inc. 1000 Alfred Nobel Drive

Hercules, CA 94547 USA

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

USA

**Legal Entity / Contact Address** u1A, 62 Ferndell Street, South Granville NSW 2142

Australia

For further information, please contact

+61 2 9914 2800 or 1800 224 354 **Technical Service** 

sales.australia@bio-rad.com

Emergency telephone number

24 Hour Emergency Phone Number CHEMTREC Australia: 61-290372994

Emergency telephone number No information available

### **SECTION 2: Hazards identification**

GHS Classification

Skin sensitisation Category 1A - (H317)

#### Label elements

**Exclamation mark** 



Signal word Warning

#### **Hazard statements**

H317 - May cause an allergic skin reaction

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

Avoid breathing dust/fume/gas/mist/vapours/spray

Contaminated work clothing should not be allowed out of the workplace Wear protective gloves/protective clothing/eye protection/face protection

IF ON SKIN: Wash with plenty of water and soap

If skin irritation or rash occurs: Get medical advice/attention Take off all contaminated clothing and wash it before reuse

#### **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 with long lasting effects Harmful to aquatic life Contains animal source material (Cattle)

# SECTION 3: Composition/information on ingredients

#### Substance

Not applicable

#### Mixture

Chemical name	CAS No	Weight-%
Water	7732-18-5	50 - 100
Magnetic Beads	NO-CAS-23	20 - 35
Trade secret	•	10 - 20
Trade secret	•	5 - 10
Trade secret	•	5 - 10
Trade secret	•	1 - 2.5
Trade secret	•	0.1 - 0.299
Trade secret	•	0.1 - 0.299
Trade secret	•	0.1 - 0.299
Antibodies	NO-CAS-81	0.1 - 0.299
Trade secret	•	0.01 - 0.099
Trade secret	•	0.001 - 0.01
Trade secret	•	0.001 - 0.01
Non-hazardous ingredients	Proprietary	Balance

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

#### **Description of first aid measures**

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

**Emergency telephone number** Poisons Information Centre, Australia: 13 11 26

Poisons Information Centre, New Zealand: 0800 764 766

**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 with soap and water. May cause an allergic skin reaction. In the case of skin irritation

or allergic reactions see a doctor.

**Ingestion** Rinse mouth thoroughly with water.

Revision date 23-Aug-2023

Most important symptoms and effects, both acute and delayed

Symptoms Itching. Rashes. Hives.

Indication of any immediate medical attention and special treatment needed

**Note to doctors**May cause sensitisation in susceptible persons. Treat symptomatically.

### **SECTION 5: Firefighting measures**

**Suitable Extinguishing Media** 

surrounding environment.

**Unsuitable extinguishing media** No information available.

Specific hazards arising from the chemical

Specific hazards arising from the

chemical

Product is or contains a sensitiser. May cause sensitisation by skin contact.

Special protective actions for fire-fighters

Special protective equipment for

fire-fighters

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

Use personal protection equipment.

#### SECTION 6: Accidental release measures

### Personal precautions, protective equipment and emergency procedures

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

protective equipment as required. Evacuate personnel to safe areas. Keep people away

from and upwind of spill/leak.

**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. Avoid contact with

skin, eyes or clothing. Ensure adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. Do not eat, drink or smoke when using this product. Take off

contaminated clothing and wash it before reuse.

Revision date 23-Aug-2023

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

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

Keep out of the reach of children. 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	Australia	ACGIH TLV
Trade secret	TWA: 10 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup>
Trade secret	Peak: 2 mg/m <sup>3</sup>	Ceiling: 2 mg/m <sup>3</sup>
Trade secret	Peak: 0.11 ppm	Ceiling: 0.29 mg/m³ Sodium azide
	Peak: 0.3 mg/m <sup>3</sup>	Ceiling: 0.11 ppm Hydrazoic acid vapor

#### **Biological occupational exposure limits**

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

#### Appropriate engineering controls

Engineering controls Showers

Eyewash stations Ventilation systems.

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

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

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

**Hand protection** Wear suitable gloves.

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 Dilute bead suspension in aqueous solution

Colour Opaque Odourless.

Odour threshold No information available

Property Values Remarks • Method

oH 7.4

Melting point / freezing point No data available None known

Initial boiling point and boiling range> 100 °C
Flash point No data available None known

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Evaporation rateNo data availableNone knownFlammabilityNo data availableNone knownFlammability Limit in AirNone known

Upper flammability or explosive No data available

limits

Lower flammability or explosive No data available

limits

Vapour pressureNo data availableNone knownRelative vapour densityNo data availableNone knownRelative densityNo data availableNone known

Water solubility Partially miscible Solubility(ies) No data available

Solubility(ies)No data availableNone knownPartition coefficientNo data availableNone knownAutoignition temperatureNo data availableNone knownDecomposition temperatureNo data availableNone knownKinematic viscosityNo data availableNone knownDynamic viscosityNo data availableNone known

Dynamic viscosityNo data availableExplosive propertiesNot applicableOxidising propertiesNot applicable

Other information

Molecular weightNot applicableVOC contentNot applicable

# SECTION 10: Stability and reactivity

Reactivity

**Reactivity** No information available.

**Chemical stability** 

**Stability** Stable under normal conditions.

**Explosion data** 

Sensitivity to mechanical impact None.

Sensitivity to static discharge None.

Possibility of hazardous reactions

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

**Conditions to avoid** 

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

Incompatible materials

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

**Hazardous decomposition products** 

Hazardous decomposition products None known based on information supplied.

# SECTION 11: Toxicological information

**Acute toxicity** 

Information on likely routes of exposure

**Product Information** 

Revision date 23-Aug-2023

**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** May cause sensitisation by skin contact. Specific test data for the substance or mixture is

not available. Repeated or prolonged skin contact may cause allergic reactions with

susceptible persons (based on components).

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

Symptoms Itching. Rashes. Hives.

Numerical measures of toxicity - Product Information

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

**ATEmix (oral)** 50,476.20 mg/kg

**Component Information** 

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Water	> 90 mL/kg (Rat)	-	-
Trade secret	= 29700 mg/kg (Rat)	-	-
Trade secret	= 3 g/kg (Rat)	> 10000 mg/kg ( Rabbit )	> 42 mg/L (Rat)1 h
Trade secret	= 15900 mg/kg (Rat)	-	-
Trade secret	= 325 mg/kg (Rat)	= 1350 mg/kg (Rabbit)	-
Trade secret	= 27 mg/kg (Rat)	= 20 mg/kg(Rabbit)	0.054 - 0.52 mg/L (Rat) 4 h
Trade secret	= 53 mg/kg ( Rat )	= 87.12 mg/kg ( Rabbit )	-

See section 16 for terms and abbreviations

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

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

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

**Respiratory or skin sensitisation** May cause sensitisation by skin contact.

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

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

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

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

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

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

# **SECTION 12: Ecological information**

**Ecotoxicity** 

**Ecotoxicity** Harmful to aquatic life with long lasting effects.

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

environment.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Trade secret	-	LC50: 5560 - 6080mg/L	-	EC50: =1000mg/L (48h,
		(96h, Lepomis		Daphnia magna)
		macrochirus)		EC50: 340.7 - 469.2mg/L
		LC50: =12946mg/L (96h,		(48h, Daphnia magna)
		Lepomis macrochirus)		
		LC50: 6020 - 7070mg/L		
		(96h, Pimephales		
		promelas)		
		LC50: =7050mg/L (96h,		
		Pimephales promelas)		
		LC50: 6420 - 6700mg/L		
		(96h, Pimephales		
		promelas)		
		LC50: 4747 - 7824mg/L		
		(96h, Oncorhynchus		
		mykiss)		
Trade secret	-	LC50: =45.4mg/L (96h,	-	-
		Oncorhynchus mykiss)		
Trade secret	-	LC50: =0.8mg/L (96h,	-	-
		Oncorhynchus mykiss)		
		LC50: =0.7mg/L (96h,		
		Lepomis macrochirus)		
		LC50: =5.46mg/L (96h,		
		Pimephales promelas)		

Persistence and degradability

Persistence and degradability No information available.

Bioaccumulative potential

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

**Component Information** 

Chemical name	Partition coefficient
Trade secret	0.7

**Mobility** 

Mobility in soil No information available. **Mobility** No information available.

Other adverse effects

Other adverse effects No information available.

# **SECTION 13: Disposal considerations**

**Disposal methods** 

Waste from residues/unused Dispose of in accordance with local regulations. Dispose of waste in accordance with products

environmental legislation.

Contaminated packaging Do not reuse empty containers.

Revision date 23-Aug-2023

# **SECTION 14: Transport information**

ADG Not regulated

<u>IATA</u> Not regulated

<u>IMDG</u> Not regulated

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

No information available

### SECTION 15: Regulatory information

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

#### **National regulations**

#### Australia

See section 8 for national exposure control parameters

#### Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP)

Classified as a scheduled poison according to the Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP)

Poison Schedule Number

#### International Inventories

Contact supplier for inventory compliance status

#### **International Regulations**

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

The Stockholm Convention on Persistent Organic Pollutants Not applicable

The Rotterdam Convention Not applicable

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

Prepared By Bio-Rad Laboratories, Environmental Health and Safety

Revision date 23-Aug-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) EPA (Environmental Protection Agency)

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

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

U.S. Environmental Protection Agency High Production Volume Chemicals

Food Research Journal

Hazardous Substance Database

International Uniform Chemical Information Database (IUCLID)

Japan GHS Classification

Australian National Industrial Chemicals Notification and Assessment Scheme (NICNAS)

NIOSH (National Institute for Occupational Safety and Health)

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

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

National Toxicology Program (NTP)

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

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

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

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

RTECS (Registry of Toxic Effects of Chemical Substances)

World Health Organization

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**End of Safety Data Sheet** 



# SAFETY DATA SHEET

According to WHS Regulations

Revision date 17-May-2023 Revision Number 1.1

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

**Product identifier** 

**Product Name** Bio-Plex Sample Diluent

Catalogue Number(s) 10014641, 9704423, 9703895, 171305043, 10022628, 10041561, 12005851

Other means of identification

Pure substance/mixture Mixture

Recommended use of the chemical and restrictions on use

Recommended use Laboratory chemicals

Uses advised against No information available

Details of manufacturer or importer

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

USA

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

USA

**Legal Entity / Contact Address** u1A, 62 Ferndell Street, South Granville NSW 2142

Australia

For further information, please contact

**Technical Service** +61 2 9914 2800 or 1800 224 354

sales.australia@bio-rad.com

Emergency telephone number

24 Hour Emergency Phone Number CHEMTREC Australia: 61-290372994

Emergency telephone number No information available

# **SECTION 2: Hazards identification**

GHS Classification

Not classified

Label elements

**Hazard statements** 

Not classified

Other hazards which do not result in classification

Contains animal source material (Cattle)

# SECTION 3: Composition/information on ingredients

#### Substance

Not applicable

#### Mixture

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

Chemical name	CAS No	Weight-%
Water	7732-18-5	50 - 100
Trade secret	-	0.3 - 0.99
HBR 1 Blocker	NO-CAS-18	0.1 - 0.299
Trade secret	-	0.1 - 0.299
Trade secret	-	0.1 - 0.299
Trade secret	-	0.1 - 0.299
Trade secret	-	0.1 - 0.299
Trade secret	-	0.01 - 0.099
Trade secret	-	0.01 - 0.099
Chemical name	CAS No	Weight-%
Non-hazardous ingredients	Proprietary	Balance

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

#### **Description of first aid measures**

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

**Emergency telephone number** Poisons Information Centre, Australia: 13 11 26

Poisons Information Centre, New Zealand: 0800 764 766

**Inhalation** Remove to fresh air.

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

Consult a doctor.

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

**Ingestion** Rinse mouth thoroughly with water.

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

**Symptoms** No information available.

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

Note to doctors Treat symptomatically.

#### **SECTION 5: Firefighting measures**

**Suitable Extinguishing Media** 

surrounding environment.

Unsuitable extinguishing media No information available.

Specific hazards arising from the chemical

Specific hazards arising from the

chemical

None known.

Special protective actions for fire-fighters

Special protective equipment for fire-fighters

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

# SECTION 6: Accidental release measures

#### Personal precautions, protective equipment and emergency procedures

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

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 labelled containers.

Precautions to prevent secondary hazards

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

### SECTION 7: Handling and storage

Precautions for safe handling

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

Conditions for safe storage, including any incompatibilities

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

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

### SECTION 8: Exposure controls/personal protection

#### **Control parameters**

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

exposure limits established by the region specific regulatory bodies.

Chemical name	Australia	ACGIH TLV
Trade secret	Peak: 0.11 ppm	Ceiling: 0.29 mg/m <sup>3</sup> Sodium azide
	Peak: 0.3 mg/m <sup>3</sup>	Ceiling: 0.11 ppm Hydrazoic acid vapor

#### Biological occupational exposure limits

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

#### **Appropriate engineering controls**

Engineering controls Showers

Eyewash stations Ventilation systems.

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

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

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

**Hand protection** Wear suitable gloves.

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

Property Values Remarks • Method

pH 7.4 Melting point / freezing point 0  $^{\circ}$ C Initial boiling point and boiling range100  $^{\circ}$ 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 No data available

limits

Lower flammability or explosive No data available

limits

Vapour pressureNo data availableNone knownRelative vapour densityNo data availableNone knownRelative densityNo data availableNone 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
None known
None known
None known

Kinematic viscosityNo data availableNone knownDynamic viscosityNo data availableNone known

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

Other information

Molecular weightNot applicableVOC contentNot applicable

### SECTION 10: Stability and reactivity

Reactivity

**Reactivity** No information available.

#### **Chemical stability**

**Stability** Stable under normal conditions.

**Explosion data** 

Sensitivity to mechanical impact None.

Sensitivity to static discharge None.

Possibility of hazardous reactions

Possibility of hazardous reactions None under normal processing.

**Conditions to avoid** 

Conditions to avoid None known based on information supplied.

**Incompatible materials** 

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

**Hazardous decomposition products** 

Hazardous decomposition products None known based on information supplied.

# **SECTION 11: Toxicological information**

#### **Acute toxicity**

#### Information on likely routes of exposure

Product Information

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

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

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

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

**Symptoms** No information available.

Numerical measures of toxicity - Product Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Water	Water > 90 mL/kg (Rat)		-
Trade secret	= 8290 mg/kg (Rat)	> 7940 mg/kg (Rabbit)	> 0.83 mg/L (Rat) 4 h
Trade secret	= 22 g/kg (Rat)	> 20 g/kg(Rabbit)	-
Trade secret	= 5700 mg/kg (Rat)	-	= 320 mg/m <sup>3</sup> (Rat) 4 h
	= 16 g/kg (Rat)		
Trade secret	= 27 mg/kg (Rat)	= 20 mg/kg (Rabbit)	0.054 - 0.52 mg/L (Rat)4 h

See section 16 for terms and abbreviations

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

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

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

**Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.

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

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

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

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

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

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

# **SECTION 12: Ecological information**

**Ecotoxicity** 

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

**Unknown aquatic toxicity** 0.095 % of the mixture consists of component(s) of unknown hazards to the aquatic

environment.

Chemical name	Algae/aquatic plants	Fish	Toxicity to	Crustacea
			microorganisms	
Trade secret	-	LC50: =0.8mg/L (96h,	-	-
		Oncorhynchus mykiss)		
		LC50: =0.7mg/L (96h,		
		Lepomis macrochirus)		
		LC50: =5.46mg/L (96h,		
		Pimephales promelas)		

Persistence and degradability

Persistence and degradability No information available.

Bioaccumulative potential

**Bioaccumulation** No information available.

Chemical name	Partition coefficient
Trade secret	-0.698

Mobility

Mobility in soilNo information available.MobilityNo information available.

Other adverse effects

Other adverse effects No information available.

# **SECTION 13: Disposal considerations**

Revision date 17-May-2023

**Disposal methods** 

Waste from residues/unused

products

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

environmental legislation.

**Contaminated packaging** Do not reuse empty containers.

# **SECTION 14: Transport information**

ADG Not regulated

IATA Not regulated

**IMDG** Not regulated

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

No information available

# SECTION 15: Regulatory information

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

#### **National regulations**

#### Australia

See section 8 for national exposure control parameters

#### Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP)

No poisons schedule number allocated

Chemical name	National pollutant inventory
Trade secret -	20 MW Threshold category 2b total
	60000 MWH Threshold category 2b total
	1 tonne/h Threshold category 2a total
	25 tonne/yr Threshold category 1a total
	400 tonne/yr Threshold category 2a total
	2000 tonne/yr Threshold category 2b total

#### **International Inventories**

Contact supplier for inventory compliance status

#### **International Regulations**

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

The Stockholm Convention on Persistent Organic Pollutants Not applicable

The Rotterdam Convention Not applicable

# **SECTION 16: Other information**

Prepared By Bio-Rad Laboratories, Environmental Health and Safety

Revision date 17-May-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)

EPA (Environmental Protection Agency)

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

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

U.S. Environmental Protection Agency High Production Volume Chemicals

Food Research Journal

Hazardous Substance Database

International Uniform Chemical Information Database (IUCLID)

Japan GHS Classification

Australian National Industrial Chemicals Notification and Assessment Scheme (NICNAS)

NIOSH (National Institute for Occupational Safety and Health)

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

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

National Toxicology Program (NTP)

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

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

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

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

RTECS (Registry of Toxic Effects of Chemical Substances)

World Health Organization

#### Disclaimer

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

**End of Safety Data Sheet** 



# SAFETY DATA SHEET

According to WHS Regulations

Revision date 17-May-2023 Revision Number 1.1

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

**Product identifier** 

**Product Name** Bio-Plex Standard Diluent

Catalogue Number(s) 9703888, 9704424, 171305042, 171304080M, 10022368, 12005853

Other means of identification

Pure substance/mixture Mixture

Recommended use of the chemical and restrictions on use

Recommended use Laboratory chemicals

Uses advised against No information available

Details of manufacturer or importer

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

USA

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

USA

**Legal Entity / Contact Address** u1A, 62 Ferndell Street, South Granville NSW 2142

Australia

For further information, please contact

**Technical Service** +61 2 9914 2800 or 1800 224 354

sales.australia@bio-rad.com

Emergency telephone number

24 Hour Emergency Phone Number CHEMTREC Australia: 61-290372994

Emergency telephone number No information available

### **SECTION 2: Hazards identification**

GHS Classification

Not classified

Label elements

**Hazard statements** 

Not classified

Other hazards which do not result in classification

Contains animal source material (Cattle)

# SECTION 3: Composition/information on ingredients

#### Substance

Not applicable

#### Mixture

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

Chemical name	CAS No	Weight-%
Water	7732-18-5	50 - 100
Trade secret	-	20 - 35
Trade secret	-	0.3 - 0.99
HBR 1 Blocker	NO-CAS-18	0.1 - 0.299
Trade secret	-	0.01 - 0.099
Trade secret	-	0.01 - 0.099
Trade secret	-	0.01 - 0.099
Trade secret	-	0.01 - 0.099
Chemical name	CAS No	Weight-%
Non-hazardous ingredients	Proprietary	Balance

# **SECTION 4: First aid measures**

#### Description of first aid measures

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

**Emergency telephone number** Poisons Information Centre, Australia: 13 11 26

Poisons Information Centre, New Zealand: 0800 764 766

**Inhalation** Remove to fresh air.

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

Consult a doctor.

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

**Ingestion** Rinse mouth thoroughly with water.

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

**Symptoms** No information available.

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

Note to doctors Treat symptomatically.

# **SECTION 5: Firefighting measures**

#### **Suitable Extinguishing Media**

surrounding environment.

Unsuitable extinguishing media No information available.

Specific hazards arising from the chemical

Specific hazards arising from the None known.

Bio-Plex Standard Diluent Revision date 17-May-2023

chemical

Special protective actions for fire-fighters

Special protective equipment for

fire-fighters

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

Use personal protection equipment.

### SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

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

**Environmental precautions** 

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

Methods and material for containment and cleaning up

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

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

Precautions to prevent secondary hazards

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

# SECTION 7: Handling and storage

Precautions for safe handling

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

Conditions for safe storage, including any incompatibilities

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

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

### SECTION 8: Exposure controls/personal protection

#### **Control parameters**

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

exposure limits established by the region specific regulatory bodies.

Chemical name	Australia	ACGIH TLV
Trade secret	Peak: 0.11 ppm	Ceiling: 0.29 mg/m³ Sodium azide
	Peak: 0.3 mg/m <sup>3</sup>	Ceiling: 0.11 ppm Hydrazoic acid vapor

#### **Biological occupational exposure limits**

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

#### Appropriate engineering controls

Engineering controls Showers

Eyewash stations Ventilation systems.

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

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

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

**Hand protection** Wear suitable gloves.

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

Appearanceaqueous solutionColourcolourlessOdourOdourless.

Odour threshold No information available

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

**pH** 7.4

Melting point / freezing point No data available None known

Initial boiling point and boiling range100 °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 No data available

limits

Lower flammability or explosive No data available

limits

Vapour pressureNo data availableNone knownRelative vapour densityNo data availableNone knownRelative densityNo data availableNone known

Water solubility Miscible in water

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

Kinematic viscosityNo data availableNone knownDynamic viscosityNo data availableNone known

**Explosive properties**Not applicable
Not applicable

Other information

Molecular weightNot applicableVOC contentNot applicable

# **SECTION 10: Stability and reactivity**

Reactivity

**Reactivity** No information available.

Bio-Plex Standard Diluent Revision date 17-May-2023

#### **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.

Numerical measures of toxicity - Product Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Water	> 90 mL/kg (Rat)	-	-
Trade secret	= 8290 mg/kg (Rat)	> 7940 mg/kg (Rabbit)	> 0.83 mg/L (Rat) 4 h
Trade secret	= 22 g/kg (Rat)	> 20 g/kg(Rabbit)	-
Trade secret	Trade secret = 5700 mg/kg (Rat) = 16 g/kg (Rat)		= 320 mg/m <sup>3</sup> ( Rat ) 4 h
Trade secret	= 27 mg/kg ( Rat )	= 20 mg/kg(Rabbit)	0.054 - 0.52 mg/L (Rat)4 h

See section 16 for terms and abbreviations

Bio-Plex Standard Diluent Revision date 17-May-2023

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

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

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

Respiratory or skin sensitisation Based on available data, the classification criteria are not met.

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

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

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

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

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

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

# **SECTION 12: Ecological information**

**Ecotoxicity** 

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

**Unknown aquatic toxicity** 0.018 % of the mixture consists of component(s) of unknown hazards to the aquatic

environment.

Ch	nemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Т	Frade secret	-	LC50: =0.8mg/L (96h, Oncorhynchus mykiss) LC50: =0.7mg/L (96h, Lepomis macrochirus) LC50: =5.46mg/L (96h, Pimephales promelas)	-	-

Persistence and degradability

Persistence and degradability No information available.

Bioaccumulative potential

**Bioaccumulation** No information available.

Chemical name	Partition coefficient
Trade secret	-0.698

**Mobility** 

Mobility in soil No information available.

**Mobility** No information available.

Other adverse effects

Other adverse effects No information available.

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

**Disposal methods** 

Waste from residues/unused

products

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

environmental legislation.

**Contaminated packaging** Do not reuse empty containers.

# **SECTION 14: Transport information**

ADG Not regulated

IATA Not regulated

IMDG Not regulated

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

No information available

### SECTION 15: Regulatory information

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

#### **National regulations**

#### <u>Australia</u>

See section 8 for national exposure control parameters

#### Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP)

No poisons schedule number allocated

Chemical name	National pollutant inventory		
Trade secret -	20 MW Threshold category 2b total		
	60000 MWH Threshold category 2b total		
	1 tonne/h Threshold category 2a total		
	25 tonne/yr Threshold category 1a total		
	400 tonne/yr Threshold category 2a total		
	2000 tonne/yr Threshold category 2b total		

#### **International Inventories**

Contact supplier for inventory compliance status

### **International Regulations**

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

The Stockholm Convention on Persistent Organic Pollutants Not applicable

The Rotterdam Convention Not applicable

# **SECTION 16: Other information**

Prepared By Bio-Rad Laboratories, Environmental Health and Safety

Revision date 17-May-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)

EPA (Environmental Protection Agency)

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

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

U.S. Environmental Protection Agency High Production Volume Chemicals

Food Research Journal

Hazardous Substance Database

International Uniform Chemical Information Database (IUCLID)

Japan GHS Classification

Australian National Industrial Chemicals Notification and Assessment Scheme (NICNAS)

NIOSH (National Institute for Occupational Safety and Health)

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

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

National Toxicology Program (NTP)

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

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

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

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

RTECS (Registry of Toxic Effects of Chemical Substances)

World Health Organization

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**End of Safety Data Sheet** 



# SAFETY DATA SHEET

According to WHS Regulations

Revision date 17-May-2023 Revision Number 1.1

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

**Product identifier** 

**Product Name** Streptavidin-PE

Catalogue Number(s) 171304501, 9704418, 9703887, 9703897

Other means of identification

Pure substance/mixture Mixture

Recommended use of the chemical and restrictions on use

Recommended use Laboratory chemicals

Uses advised against No information available

Details of manufacturer or importer

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

USA

Manufacturer Bio-Rad Laboratories, Life Science Group Bio-Rad Laboratories Pty Ltd 2000 Alfred Nobel Drive

Hercules, California 94547

USA

**Legal Entity / Contact Address** 

u1A, 62 Ferndell Street, South Granville NSW 2142

Australia

For further information, please contact

**Technical Service** +61 2 9914 2800 or 1800 224 354

sales.australia@bio-rad.com

Emergency telephone number

24 Hour Emergency Phone Number CHEMTREC Australia: 61-290372994

Emergency telephone number No information available

### **SECTION 2: Hazards identification**

GHS Classification

Not classified

Label elements

**Hazard statements** 

Not classified

Other hazards which do not result in classification

UGHS / BE Page 68 / 75 Streptavidin-PE Revision date 17-May-2023

# **SECTION 3: Composition/information on ingredients**

Substance

Not applicable

<u>Mixture</u>

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

Chemical name	CAS No	Weight-%
Water	7732-18-5	50 - 100
Trade secret	-	0.3 - 0.99
Trade secret	-	0.1 - 0.299
Trade secret	-	0.1 - 0.299
Trade secret	-	0.01 - 0.099
Avidin	9013-20-1	0.01 - 0.099
Chemical name	CAS No	Weight-%
Non-hazardous ingredients	Proprietary	Balance

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

**Description of first aid measures** 

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

Emergency telephone number Poisons Information Centre, Australia: 13 11 26

Poisons Information Centre, New Zealand: 0800 764 766

**Inhalation** Remove to fresh air.

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

Consult a doctor.

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

**Ingestion** Rinse mouth thoroughly with water.

Most important symptoms and effects, both acute and delayed

**Symptoms** No information available.

Indication of any immediate medical attention and special treatment needed

Note to doctors Treat symptomatically.

# **SECTION 5: Firefighting measures**

**Suitable Extinguishing Media** 

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

surrounding environment.

Unsuitable extinguishing media No information available.

Specific hazards arising from the chemical

Specific hazards arising from the None known.

Streptavidin-PE Revision date 17-May-2023

chemical

Special protective actions for fire-fighters

Special protective equipment for

fire-fighters

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

### SECTION 6: Accidental release measures

#### Personal precautions, protective equipment and emergency procedures

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

**Environmental precautions** 

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

Methods and material for containment and cleaning up

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

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

Precautions to prevent secondary hazards

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

# SECTION 7: Handling and storage

Precautions for safe handling

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

Conditions for safe storage, including any incompatibilities

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

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

# SECTION 8: Exposure controls/personal protection

#### **Control parameters**

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

exposure limits established by the region specific regulatory bodies.

Chemical name	Australia	ACGIH TLV
Trade secret	Peak: 0.11 ppm	Ceiling: 0.29 mg/m³ Sodium azide
	Peak: 0.3 mg/m <sup>3</sup>	Ceiling: 0.11 ppm Hydrazoic acid vapor

#### **Biological occupational exposure limits**

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

#### Appropriate engineering controls

**Engineering controls** Showers

> Eyewash stations Ventilation systems.

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

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

Wear suitable protective clothing. Skin and body protection

Hand protection Wear suitable gloves.

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

aqueous solution **Appearance** Colour colourless Odour Odourless.

**Odour threshold** No information available

**Property** Values Remarks • Method

7.4 Melting point / freezing point 0 °C

Initial boiling point and boiling range100 °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 No data available

limits

Lower flammability or explosive No data available

limits

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

Water solubility Miscible in water No data available

Solubility(ies) None known **Partition coefficient** No data available None known No data available None known **Autoignition temperature Decomposition temperature** None known

Kinematic viscosity No data available None known **Dynamic viscosity** No data available None known

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

Other information

Not applicable Molecular weight **VOC** content Not applicable

# SECTION 10: Stability and reactivity

Reactivity

No information available. Reactivity

Streptavidin-PE Revision date 17-May-2023

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.

Numerical measures of toxicity - Product Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Water	> 90 mL/kg (Rat)	-	-
Trade secret	= 3 g/kg (Rat)	> 10000 mg/kg ( Rabbit )	> 42 mg/L (Rat) 1 h
Trade secret	= 8290 mg/kg (Rat)	> 7940 mg/kg (Rabbit)	> 0.83 mg/L (Rat)4 h
Trade secret	= 27 mg/kg (Rat)	= 20 mg/kg (Rabbit)	0.054 - 0.52 mg/L (Rat) 4 h

See section 16 for terms and abbreviations

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

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

Serious eye damage/eye irritation

Respiratory or skin sensitisation

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

Germ cell mutagenicity

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

Carcinogenicity

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

Reproductive toxicity

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

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

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

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

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

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

# **SECTION 12: Ecological information**

#### **Ecotoxicity**

#### **Ecotoxicity**

**Unknown aquatic toxicity** 0.02 % of the mixture consists of component(s) of unknown hazards to the aquatic environment.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Trade secret		LC50: 5560 - 6080mg/L	microorganisms	EC50: =1000mg/L (48h,
Trade Secret	-	•	-	
		(96h, Lepomis		Daphnia magna)
		macrochirus)		EC50: 340.7 - 469.2mg/L
		LC50: =12946mg/L (96h,		(48h, Daphnia magna)
		Lepomis macrochirus)		
		LC50: 6020 - 7070mg/L		
		(96h, Pimephales		
		promelas)		
		LC50: =7050mg/L (96h,		
		Pimephales promelas)		
		LC50: 6420 - 6700mg/L		
		(96h, Pimephales		
		promelas)		
		LC50: 4747 - 7824mg/L		
		(96h, Oncorhynchus		
		mykiss)		
Trade secret	-	LC50: =0.8mg/L (96h,	-	-
		Oncorhynchus mykiss)		
		LC50: =0.7mg/L (96h,		
		Lepomis macrochirus)		
		LC50: =5.46mg/L (96h,		
		Pimephales promelas)		

Persistence and degradability

Persistence and degradability No information available.

Bioaccumulative potential

**Bioaccumulation** No information available.

**Mobility** 

Streptavidin-PE Revision date 17-May-2023

Mobility in soil No information available.

**Mobility** No information available.

Other adverse effects

Other adverse effects No information available.

## **SECTION 13: Disposal considerations**

#### **Disposal methods**

Waste from residues/unused

products

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

environmental legislation.

**Contaminated packaging** Do not reuse empty containers.

# **SECTION 14: Transport information**

ADG Not regulated

IMDG Not regulated

Not regulated

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

No information available

# SECTION 15: Regulatory information

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

#### **National regulations**

#### Australia

See section 8 for national exposure control parameters

#### Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP)

No poisons schedule number allocated

#### **International Inventories**

Contact supplier for inventory compliance status

#### **International Regulations**

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

The Stockholm Convention on Persistent Organic Pollutants Not applicable

The Rotterdam Convention Not applicable

# **SECTION 16: Other information**

Prepared By Bio-Rad Laboratories, Environmental Health and Safety

Revision date 17-May-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) EPA (Environmental Protection Agency)

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

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

U.S. Environmental Protection Agency High Production Volume Chemicals

Food Research Journal

Hazardous Substance Database

International Uniform Chemical Information Database (IUCLID)

Japan GHS Classification

Australian National Industrial Chemicals Notification and Assessment Scheme (NICNAS)

NIOSH (National Institute for Occupational Safety and Health)

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

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

National Toxicology Program (NTP)

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

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

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

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

RTECS (Registry of Toxic Effects of Chemical Substances)

World Health Organization

#### Disclaimer

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**End of Safety Data Sheet**