# KIT SAFETY DATA SHEET



Kit Product Name C. elegans Behavior Kit RT RFL

Kit Catalogue Number(s) 1665121

Revision date 19-Dec-2023

## **Kit Contents**

Catalogue Number(s)	Product Name
1665125, 1665125EDU	NGM Agar Lite
10040987	Agar
10030936, 12008160	2.5 M NaCl in wash buffer
10030937, 12008181	C. Elegans Wash Buffer 10X

KITU / BE Page 1/32



# SAFETY DATA SHEET

According to WHS Regulations

Revision date 28-Nov-2023 Revision Number 1.1

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

**Product identifier** 

**Product Name** NGM Agar Lite

Catalogue Number(s) 1665125, 1665125EDU

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

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

Chemical name	CAS No	Weight-%
Sodium chloride	7647-14-5	5 - 10
Dipotassium phosphate	7758-11-4	0.3 - 0.99
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**None known based on information supplied.

## SECTION 8: Exposure controls/personal protection

#### **Control parameters**

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

exposure limits established by the region specific regulatory bodies.

#### Biological occupational exposure limits

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

### **Appropriate engineering controls**

Engineering controls Showers

Eyewash stations Ventilation systems.

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

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

**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.

None known

None known

**Environmental exposure controls** No information available.

## SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Physical stateSolidAppearancegelColourlight yellowOdourOdourless.

Odour threshold No information available

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

None known pН Melting point / freezing point No data available None known Initial boiling point and boiling rangeNo data available None known Flash point No data available None known **Evaporation rate** No data available None known **Flammability** No data available None known

Flammability Limit in Air
Upper flammability or explosive No data available

limits

Lower flammability or explosive No data available

limits

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

Water solubility Soluble in water

Solubility(ies)

No data available

None known

Partition coefficient

No data available

None known

Kinematic viscosity

Dynamic viscosity

No data available

No data available

Not applicable

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

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

**ATEmix (oral)** 11,167.70 mg/kg

**Component Information** 

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Sodium chloride	= 3 g/kg (Rat)	> 10000 mg/kg(Rabbit)	> 42 mg/L (Rat)1 h
Dipotassium phosphate	-	> 5000 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

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
Sodium chloride	-	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)	-	EC50: =1000mg/L (48h, Daphnia magna) EC50: 340.7 - 469.2mg/L (48h, Daphnia magna)

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** 

products

Waste from residues/unused 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

<u>IATA</u> Not regulated

IMDG Not regulated

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

No information available

## SECTION 15: Regulatory information

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

#### **National regulations**

#### 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 28-Nov-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

**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 30-Mar-2022 Revision Number 1.1

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

**Product identifier** 

Product Name Agar

Catalogue Number(s) 10040987

Other means of identification

CAS No 9002-18-0

Pure substance/mixture Substance

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

**Technical Service** 

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

2000 Alfred Nobel Drive

Hercules, California 94547

**Manufacturer** 

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

Agar Revision date 30-Mar-2022

### Substance

Chemical name	CAS No	Weight-%
Agar	9002-18-0	50 - 100

### **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.

**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.

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.

Agar Revision date 30-Mar-2022

None known

None known

None known

None known

None known

## SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Physical stateSolidAppearancePowderColourlight yellowOdourOdourless.

Odour threshold No information available

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

Hq None known Melting point / freezing point No data available None known Initial boiling point and boiling rangeNo data available None known No data available Flash point None known **Evaporation rate** No data available None known Flammability No data available None known

Upper flammability or explosive No data available

limits

Flammability Limit in Air

Lower flammability or explosive No data available

limits

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

Water solubility slightly soluble
Solubility(ies) No data available

Partition coefficient
Autoignition temperature

No data available
No data available
Decomposition temperature

Kinematic viscosity

No data available

None known

No data available

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 None under normal processing.

**Conditions to avoid** 

Conditions to avoid None known based on information supplied.

Incompatible materials

Agar Revision date 30-Mar-2022

**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

**Component Information** 

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Agar	= 11 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** The environmental impact of this product has not been fully investigated.

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

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

<u>IATA</u> Not regulated

IMDG Not regulated

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

No information available

## **SECTION 15: Regulatory information**

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

### **National regulations**

#### <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

Agar Revision date 30-Mar-2022

### **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 30-Mar-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 25-Mar-2022 Revision Number 1.1

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

**Product identifier** 

**Product Name** 2.5 M NaCl in wash buffer

Catalogue Number(s) 10030936, 12008160

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

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

Chemical name	CAS No	Weight-%
Water	7732-18-5	50 - 100
Sodium chloride	7647-14-5	10 - 20
Tripotassium citrate monohydrate	6100-05-6	0.1 - 0.299
Magnesium sulfate	7487-88-9	0.01 - 0.099
Calcium chloride	10043-52-4	0.001 - 0.01
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.

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

Poisons Information Centre, New Zealand: 0800 764 766

Inhalation Remove to fresh air.

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

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** 

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

surrounding environment.

Unsuitable extinguishing media No information available.

Specific hazards arising from the chemical

Specific hazards arising from the

chemical

None known.

Special protective actions for fire-fighters

Special protective equipment for

fire-fighters

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

Use personal protection equipment.

## SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

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

**Environmental precautions** 

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

Methods and material for containment and cleaning up

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

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

Precautions to prevent secondary hazards

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

### SECTION 7: Handling and storage

Precautions for safe handling

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

Conditions for safe storage, including any incompatibilities

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

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

### SECTION 8: Exposure controls/personal protection

**Control parameters** 

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

exposure limits established by the region specific regulatory bodies.

**Biological occupational exposure limits** 

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

**Appropriate engineering controls** 

Engineering controls Showers

Eyewash stations Ventilation systems.

Individual protection measures, such as personal protective equipment

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

**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 aqueous solution colourless
Odour Odourless.

Odour threshold No information available

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

**pH** 5.5

Melting point / freezing point No data available None known Initial boiling point and boiling rangeNo data available None known No data available Flash point None known No data available **Evaporation rate** 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
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 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

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

**ATEmix (oral)** 23,583.2370 mg/kg

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Water	> 90 mL/kg (Rat)	-	-
Sodium chloride	= 3 g/kg (Rat)	> 10000 mg/kg ( Rabbit )	> 42 mg/L (Rat)1 h
Calcium chloride	= 1000 mg/kg (Rat)	> 5000 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

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
Sodium chloride	-	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)	•	EC50: =1000mg/L (48h, Daphnia magna) EC50: 340.7 - 469.2mg/L (48h, Daphnia magna)
Magnesium sulfate	EC50: =2700mg/L (72h, Desmodesmus subspicatus)	LC50: 2610 - 3080mg/L (96h, Pimephales promelas)	-	EC50: 266.4 - 417.3mg/L (48h, Daphnia magna)
Calcium chloride	-	LC50: =10650mg/L (96h, Lepomis macrochirus)	-	LC50: 2280000 - 3948000µg/L (48h, Daphnia magna)

Persistence and degradability

Persistence and degradability No information available.

Bioaccumulative potential

**Bioaccumulation** No information available.

<u>Mobility</u>

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 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

### **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 25-Mar-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 25-Mar-2022 Revision Number 1

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

**Product identifier** 

C. Elegans Wash Buffer 10X **Product Name** 

Catalogue Number(s) 10030937, 12008181

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 25 / 32

Revision date 25-Mar-2022

## **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
Tripotassium citrate monohydrate	6100-05-6	1 - 2.5
Magnesium sulfate	7487-88-9	0.1 - 0.299
Calcium chloride	10043-52-4	0.1 - 0.299
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.

Revision date 25-Mar-2022

### 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.

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

Precautions to prevent secondary hazards

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

### SECTION 7: Handling and storage

Precautions for safe handling

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

Conditions for safe storage, including any incompatibilities

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

Incompatible materials None known based on information supplied.

### SECTION 8: Exposure controls/personal protection

### **Control parameters**

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

exposure limits established by the region specific regulatory bodies.

### **Biological occupational exposure limits**

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

#### **Appropriate engineering controls**

**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 aqueous solution colourless
Odour Odourless.

Odour threshold No information available

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

**pH** 6

Melting point / freezing point No data available None known Initial boiling point and boiling rangeNo data available None known 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
None known
None known
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** 

Revision date 25-Mar-2022

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)	•	•
Calcium chloride	= 1000 mg/kg (Rat)	> 5000 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.

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Revision date 25-Mar-2022

**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
Magnesium sulfate	EC50: =2700mg/L (72h, Desmodesmus subspicatus)	LC50: 2610 - 3080mg/L (96h, Pimephales promelas)	-	EC50: 266.4 - 417.3mg/L (48h, Daphnia magna)
Calcium chloride	-	LC50: =10650mg/L (96h, Lepomis macrochirus)	-	LC50: 2280000 - 3948000µg/L (48h, Daphnia magna)

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

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

environmental legislation.

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

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ADG Not regulated

IATA Not regulated

-

Revision date 25-Mar-2022

IMDG Not regulated

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

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### SECTION 15: Regulatory information

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

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Contact supplier for inventory compliance status

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**End of Safety Data Sheet**