

# KIT SAFETY DATA SHEET



**Kit Product Name** Profinia Native IMAC Buffer Kit

**Kit Catalogue Number(s)** 6200221

**Revision date** 05-Dec-2023

## Kit Contents

| Catalogue Number(s)         | Product Name                   |
|-----------------------------|--------------------------------|
| 6200207, 10005916           | Native IMAC Wash Buffer 2      |
| 6200205, 10005915           | Native IMAC Lysis/Bind Buffer  |
| 6200206                     | Native IMAC Wash Buffer 1      |
| 6200208, 10005917           | Native IMAC Elution Buffer, 2x |
| 6200216, 10005918           | Profinia Desalting Buffer 5X   |
| 6200217, 10006097           | Cleaning Solution 1, 2x        |
| 6200218, 10006098, 10006564 | Cleaning Solution 2, 4x        |
| 6200219, 10006099           | Profinia Storage Solution      |



# SAFETY DATA SHEET

This safety data sheet complies with the requirements of:  
SS586: 2008 (2014)

Revision date 12-Oct-2022

Revision Number 1

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

### Product identifier

Product Name Native IMAC Wash Buffer 2

### Other means of identification

Catalogue Number(s) 6200207, 10005916

Pure substance/mixture Mixture

Contains 1-Imidazole

### Recommended use of the chemical and restrictions on use

Recommended use Laboratory chemicals

Uses advised against No information available

### Details of the supplier of the safety data sheet

#### Corporate Headquarters

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

For further information, please contact

#### Manufacturer

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

#### Legal Entity / Contact Address

Bio-Rad Laboratoires (Singapore) PTE LTD  
3A International Business Park #11-10/16  
ICON@IBP  
Singapore 609935

Technical Service 6424 0262  
ctssingapore@bio-rad.com

### Emergency telephone number

24 Hour Emergency Phone Number CHEMTREC Singapore: 65-31581349

## SECTION 2: Hazards identification

### GHS Classification

Not a hazardous substance or mixture according to the Globally Harmonised System (GHS): SS586: 2008 (2014)

Reproductive toxicity

Category 1B

### Label elements

Not a hazardous substance or mixture according to the Globally Harmonised System (GHS): SS586: 2008 (2014)



Other hazards which do not result in classification**SECTION 3: Composition/information on ingredients****Substance**

Not applicable

**Mixture**

| Chemical name                            | EC No (EU Index No)         | CAS No    | Weight-%    |
|--|-----------------------------|-----------|-------------|
| Water                                    | 231-791-2                   | 7732-18-5 | 50 - 100    |
| Potassium chloride                       | 231-211-8                   | 7447-40-7 | 2.5 - 5     |
| Phosphoric acid, potassium salt<br>(1:1) | 231-913-4                   | 7778-77-0 | 1 - 2.5     |
| 1-Imidazole                              | (613-319-00-0)<br>206-019-2 | 288-32-4  | 0.1 - 0.299 |

Non-hazardous  
ingredients

Proprietary

Balance

**SECTION 4: First aid measures****Description of first aid measures**

|                       |  |
|-----------------------|--|
| <b>General advice</b> | No hazards which require special first aid measures.   |
| <b>Inhalation</b>     | Remove to fresh air.   |
| <b>Eye contact</b>    | Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids.<br>Consult a doctor. |
| <b>Skin contact</b>   | In the case of skin irritation or allergic reactions see a doctor. Wash skin with soap and water.                    |
| <b>Ingestion</b>      | Rinse mouth thoroughly with water.   |

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

|                 |   |
|-----------------|---|
| <b>Symptoms</b> | Prolonged contact may cause redness and irritation. |
|-----------------|---|

**For emergency responders**

|   |                           |
|---|---------------------------|
| <b>Self-protection of the first aider</b> | No information available. |
|---|---------------------------|

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

|                        |                        |
|------------------------|------------------------|
| <b>Note to doctors</b> | Treat symptomatically. |
|------------------------|------------------------|

**SECTION 5: Firefighting measures****Suitable Extinguishing Media**

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

|                                       |                           |
|---------------------------------------|---------------------------|
| <b>Unsuitable extinguishing media</b> | 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 and precautions 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** Ensure adequate ventilation.

**For emergency responders** Use personal protection recommended in Section 8.

**Environmental precautions**

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

**Methods and material for containment and cleaning up**

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

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

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

**Reference to other sections** See section 8 for more information. See section 13 for more information.

**SECTION 7: Handling and storage****Precautions for safe handling**

**Advice on safe handling** Ensure adequate ventilation.

**General hygiene considerations** Handle in accordance with good industrial hygiene and safety practice.

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

**Storage Conditions** Keep container tightly closed in a dry and well-ventilated place.

**SECTION 8: Exposure controls/personal protection****Control parameters**

**Occupational 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**

|  |  |
|--|--|
| <b>Eye/face protection</b>             | Wear safety glasses with side shields (or goggles).  |
| <b>Skin and body protection</b>        | Wear suitable protective clothing.   |
| <b>Hand protection</b>                 | Wear suitable gloves.  |
| <b>Respiratory protection</b>          | No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required. |
| <b>Environmental exposure controls</b> | No information available.  |

**SECTION 9: Physical and chemical properties****Information on basic physical and chemical properties**

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

| <b>Property</b>                                | <b>Values</b>     | <b>Remarks • Method</b> |
|--|-------------------|-------------------------|
| <b>pH</b>                                      | 8                 |                         |
| <b>Melting point / freezing point</b>          | No data available | None known              |
| <b>Initial boiling point and boiling range</b> | No data available | None known              |
| <b>Flash point</b>                             | No data available | None known              |
| <b>Evaporation rate</b>                        | No data available | None known              |
| <b>Flammability</b>                            | No data available | None known              |
| <b>Flammability Limit in Air</b>               |                   | None known              |
| <b>Upper flammability or explosive limits</b>  | No data available |                         |
| <b>Lower flammability or explosive limits</b>  | No data available |                         |
| <b>Vapour pressure</b>                         | No data available | None known              |
| <b>Relative vapour density</b>                 | No data available | None known              |
| <b>Relative density</b>                        | No data available | None known              |
| <b>Water solubility</b>                        | Miscible in water |                         |
| <b>Solubility(ies)</b>                         | No data available | None known              |
| <b>Partition coefficient</b>                   | No data available | None known              |
| <b>Autoignition temperature</b>                | No data available | None known              |
| <b>Decomposition temperature</b>               |                   | None known              |
| <b>Kinematic viscosity</b>                     | No data available | None known              |
| <b>Dynamic viscosity</b>                       | No data available | None known              |

|                          |                          |
|--------------------------|--------------------------|
| <b>Other information</b> | No information available |
|--------------------------|--------------------------|

**SECTION 10: Stability and reactivity****Reactivity**

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

**Chemical stability**

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

**Explosion data**

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

**Possibility of hazardous reactions** 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

**Information on likely routes of exposure**

**Product Information**

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

**Symptoms related to the physical, chemical and toxicological characteristics**

**Symptoms** Prolonged contact may cause redness and irritation.

**Acute toxicity**

**Numerical measures of toxicity**

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

|                                      |                 |
|--------------------------------------|-----------------|
| <b>ATEmix (oral)</b>                 | 61,611.40 mg/kg |
| <b>ATEmix (inhalation-dust/mist)</b> | 64.30 mg/l      |

**Component Information**

| Chemical name                            | Oral LD50            | Dermal LD50 | Inhalation LC50         |
|--|----------------------|-------------|-------------------------|
| Water                                    | > 90 mL/kg ( Rat )   |             |                         |
| Potassium chloride                       | = 2600 mg/kg ( Rat ) |             |                         |
| Phosphoric acid, potassium salt<br>(1:1) | = 3200 mg/kg ( Rat ) |             | > 0.83 mg/L ( Rat ) 4 h |
| 1-Imidazole                              | = 220 mg/kg ( Rat )  |             |                         |

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

|  |  |
|--|--|
| <b>Skin corrosion/irritation</b>         | Classification based on data available for ingredients. Causes mild skin irritation. |
| <b>Serious eye damage/eye irritation</b> | Based on available data, the classification criteria are not met.                    |
| <b>Respiratory or skin sensitisation</b> | Based on available data, the classification criteria are not met.                    |
| <b>Germ cell mutagenicity</b>            | Based on available data, the classification criteria are not met.                    |

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

**Reproductive toxicity** May damage fertility or the unborn child.

| Chemical name | European Union |
|---------------|----------------|
| 1-Imidazole   | Repr. 1B       |

**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** Classification not possible.

## SECTION 12: Ecological information

### Ecotoxicity

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

**Unknown aquatic toxicity** Contains 0 % of components with unknown hazards to the aquatic environment

| Chemical name      | Algae/aquatic plants  | Fish  | Crustacea   |
|--------------------|---|---|---|
| Potassium chloride | EC50: =2500mg/L (72h, <i>Desmodesmus subspicatus</i> )  | LC50: =1060mg/L (96h, <i>Lepomis macrochirus</i> )<br>LC50: 750 - 1020mg/L (96h, <i>Pimephales promelas</i> ) | EC50: =825mg/L (48h, <i>Daphnia magna</i> )<br>EC50: =83mg/L (48h, <i>Daphnia magna</i> ) |
| 1-Imidazole        | EC50: =130mg/L (72h, <i>Desmodesmus subspicatus</i> )<br>EC50: =82mg/L (96h, <i>Desmodesmus subspicatus</i> ) | -   | EC50: =341.5mg/L (48h, <i>Daphnia magna</i> )   |

### Persistence and degradability

**Persistence and degradability** No information available.

### Bioaccumulative potential

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

| Chemical name | Partition coefficient |
|---------------|-----------------------|
| 1-Imidazole   | -0.02                 |

### Mobility

**Mobility in soil** No information available.

**PBT and vPvB assessment** No information available

| Chemical name                         | PBT and vPvB assessment         |
|---------------------------------------|---------------------------------|
| Potassium chloride                    | The substance is not PBT / vPvB |
| Phosphoric acid, potassium salt (1:1) | The substance is not PBT / vPvB |
| 1-Imidazole                           | The substance is not PBT / vPvB |

### Other adverse effects

**Other adverse effects** No information available

## SECTION 13: Disposal considerations

### Disposal methods

|  |   |
|--|---|
| <b>Waste from residues/unused products</b> | Dispose of waste in accordance with environmental legislation. Dispose of in accordance with local regulations. |
| <b>Contaminated packaging</b>              | Do not reuse empty containers.  |

## SECTION 14: Transport information

|   |                          |
|---|--------------------------|
| <b>IMDG</b>   | Not regulated            |
| <b>Transport in bulk according to Annex II of MARPOL and the IBC Code</b> | No information available |

|             |               |
|-------------|---------------|
| <b>IATA</b> | Not regulated |
|-------------|---------------|

## SECTION 15: Regulatory information

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

#### Singapore

##### **Environmental Public Health Act**

Dispose of waste product or used containers according to local regulations.

##### **Hazardous Waste (Control of Export, Import and Transit) Act**

It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations. Take note that wastes may be subject to export, import, or transit controls pursuant to the Basel convention and/or local regulations implementing the Basel convention.

##### **Poison**

None Listed

##### **Workplace Safety and Health Act**

Comply with the health and safety at work laws.

### International Regulations

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

**The Stockholm Convention on Persistent Organic Pollutants** Not applicable

**The Rotterdam Convention** Not applicable

### International Inventories

Contact supplier for inventory compliance status

## SECTION 16: Other 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                 |

### **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

**Label elements**

P202 - Do not handle until all safety precautions have been read and understood  
P280 - Wear protective gloves/protective clothing/eye protection/face protection  
P501 - Dispose of contents/container in accordance with local, regional, national, and international regulations as applicable

**Issuing Date** Bio-Rad Laboratories, Environmental Health and Safety

**Revision date** 12-Oct-2022

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

**This safety data sheet complies with the requirements of: SS586: 2008 (2014)**

**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

This safety data sheet complies with the requirements of:  
SS586: 2008 (2014)

Revision date 12-Oct-2022

Revision Number 1

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

### Product identifier

**Product Name** Native IMAC Lysis/Bind Buffer

### Other means of identification

**Catalogue Number(s)** 6200205, 10005915

**Pure substance/mixture** Mixture

Contains 1-Imidazole

### Recommended use of the chemical and restrictions on use

**Recommended use** Laboratory chemicals

**Uses advised against** No information available

### Details of the supplier of the safety data sheet

#### Corporate Headquarters

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

For further information, please contact

#### Manufacturer

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

#### Legal Entity / Contact Address

Bio-Rad Laboratoires (Singapore) PTE LTD  
3A International Business Park #11-10/16  
ICON@IBP  
Singapore 609935

**Technical Service** 6424 0262  
ctssingapore@bio-rad.com

### Emergency telephone number

**24 Hour Emergency Phone Number** CHEMTREC Singapore: 65-31581349

## SECTION 2: Hazards identification

### GHS Classification

Not a hazardous substance or mixture according to the Globally Harmonised System (GHS): SS586: 2008 (2014)

**Reproductive toxicity**

Category 1B

### Label elements

Not a hazardous substance or mixture according to the Globally Harmonised System (GHS): SS586: 2008 (2014)



Other hazards which do not result in classification**SECTION 3: Composition/information on ingredients****Substance**

Not applicable

**Mixture**

| Chemical name                            | EC No (EU Index No)         | CAS No    | Weight-%    |
|--|-----------------------------|-----------|-------------|
| Water                                    | 231-791-2                   | 7732-18-5 | 50 - 100    |
| Potassium chloride                       | 231-211-8                   | 7447-40-7 | 2.5 - 5     |
| Phosphoric acid, potassium salt<br>(1:1) | 231-913-4                   | 7778-77-0 | 1 - 2.5     |
| 1-Imidazole                              | (613-319-00-0)<br>206-019-2 | 288-32-4  | 0.1 - 0.299 |

Non-hazardous  
ingredients

Proprietary

Balance

**SECTION 4: First aid measures****Description of first aid measures**

|                       |  |
|-----------------------|--|
| <b>General advice</b> | No hazards which require special first aid measures.   |
| <b>Inhalation</b>     | Remove to fresh air.   |
| <b>Eye contact</b>    | Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids.<br>Consult a doctor. |
| <b>Skin contact</b>   | In the case of skin irritation or allergic reactions see a doctor. Wash skin with soap and water.                    |
| <b>Ingestion</b>      | Rinse mouth thoroughly with water.   |

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

|                 |   |
|-----------------|---|
| <b>Symptoms</b> | Prolonged contact may cause redness and irritation. |
|-----------------|---|

**For emergency responders**

|   |                           |
|---|---------------------------|
| <b>Self-protection of the first aider</b> | No information available. |
|---|---------------------------|

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

|                        |                        |
|------------------------|------------------------|
| <b>Note to doctors</b> | Treat symptomatically. |
|------------------------|------------------------|

**SECTION 5: Firefighting measures****Suitable Extinguishing Media**

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

|                                       |                           |
|---------------------------------------|---------------------------|
| <b>Unsuitable extinguishing media</b> | 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 and precautions 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**      Ensure adequate ventilation.

**For emergency responders**      Use personal protection recommended in Section 8.

**Environmental precautions**

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

**Methods and material for containment and cleaning up**

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

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

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

**Reference to other sections**      See section 8 for more information. See section 13 for more information.

**SECTION 7: Handling and storage****Precautions for safe handling**

**Advice on safe handling**      Ensure adequate ventilation.

**General hygiene considerations**      Handle in accordance with good industrial hygiene and safety practice.

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

**Storage Conditions**      Keep container tightly closed in a dry and well-ventilated place.

**SECTION 8: Exposure controls/personal protection****Control parameters**

**Occupational 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**

|  |  |
|--|--|
| <b>Eye/face protection</b>             | Wear safety glasses with side shields (or goggles).  |
| <b>Skin and body protection</b>        | Wear suitable protective clothing.   |
| <b>Hand protection</b>                 | Wear suitable gloves.  |
| <b>Respiratory protection</b>          | No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required. |
| <b>Environmental exposure controls</b> | No information available.  |

**SECTION 9: Physical and chemical properties****Information on basic physical and chemical properties**

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

| <b>Property</b>                                | <b>Values</b>     | <b>Remarks • Method</b> |
|--|-------------------|-------------------------|
| <b>pH</b>                                      | 8                 |                         |
| <b>Melting point / freezing point</b>          | No data available | None known              |
| <b>Initial boiling point and boiling range</b> | No data available | None known              |
| <b>Flash point</b>                             | No data available | None known              |
| <b>Evaporation rate</b>                        | No data available | None known              |
| <b>Flammability</b>                            | No data available | None known              |
| <b>Flammability Limit in Air</b>               |                   | None known              |
| <b>Upper flammability or explosive limits</b>  | No data available |                         |
| <b>Lower flammability or explosive limits</b>  | No data available |                         |
| <b>Vapour pressure</b>                         | No data available | None known              |
| <b>Relative vapour density</b>                 | No data available | None known              |
| <b>Relative density</b>                        | No data available | None known              |
| <b>Water solubility</b>                        | Miscible in water |                         |
| <b>Solubility(ies)</b>                         | No data available | None known              |
| <b>Partition coefficient</b>                   | No data available | None known              |
| <b>Autoignition temperature</b>                | No data available | None known              |
| <b>Decomposition temperature</b>               |                   | None known              |
| <b>Kinematic viscosity</b>                     | No data available | None known              |
| <b>Dynamic viscosity</b>                       | No data available | None known              |

|                          |                          |
|--------------------------|--------------------------|
| <b>Other information</b> | No information available |
|--------------------------|--------------------------|

**SECTION 10: Stability and reactivity****Reactivity**

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

**Chemical stability**

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

**Explosion data**

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

**Possibility of hazardous reactions** 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**

**Information on likely routes of exposure**

**Product Information**

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

**Symptoms related to the physical, chemical and toxicological characteristics**

**Symptoms** Prolonged contact may cause redness and irritation.

**Acute toxicity**

**Numerical measures of toxicity**

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

|                                      |                 |
|--------------------------------------|-----------------|
| <b>ATEmix (oral)</b>                 | 61,611.40 mg/kg |
| <b>ATEmix (inhalation-dust/mist)</b> | 64.30 mg/l      |

**Component Information**

| Chemical name                            | Oral LD50            | Dermal LD50 | Inhalation LC50         |
|--|----------------------|-------------|-------------------------|
| Water                                    | > 90 mL/kg ( Rat )   |             |                         |
| Potassium chloride                       | = 2600 mg/kg ( Rat ) |             |                         |
| Phosphoric acid, potassium salt<br>(1:1) | = 3200 mg/kg ( Rat ) |             | > 0.83 mg/L ( Rat ) 4 h |
| 1-Imidazole                              | = 220 mg/kg ( Rat )  |             |                         |

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

|  |  |
|--|--|
| <b>Skin corrosion/irritation</b>         | Classification based on data available for ingredients. Causes mild skin irritation. |
| <b>Serious eye damage/eye irritation</b> | Based on available data, the classification criteria are not met.                    |
| <b>Respiratory or skin sensitisation</b> | Based on available data, the classification criteria are not met.                    |
| <b>Germ cell mutagenicity</b>            | Based on available data, the classification criteria are not met.                    |

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

**Reproductive toxicity** May damage fertility or the unborn child.

| Chemical name | European Union |
|---------------|----------------|
| 1-Imidazole   | Repr. 1B       |

**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** Classification not possible.

## SECTION 12: Ecological information

### Ecotoxicity

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

**Unknown aquatic toxicity** Contains 0 % of components with unknown hazards to the aquatic environment

| Chemical name      | Algae/aquatic plants  | Fish  | Crustacea   |
|--------------------|---|---|---|
| Potassium chloride | EC50: =2500mg/L (72h, <i>Desmodesmus subspicatus</i> )  | LC50: =1060mg/L (96h, <i>Lepomis macrochirus</i> )<br>LC50: 750 - 1020mg/L (96h, <i>Pimephales promelas</i> ) | EC50: =825mg/L (48h, <i>Daphnia magna</i> )<br>EC50: =83mg/L (48h, <i>Daphnia magna</i> ) |
| 1-Imidazole        | EC50: =130mg/L (72h, <i>Desmodesmus subspicatus</i> )<br>EC50: =82mg/L (96h, <i>Desmodesmus subspicatus</i> ) | -   | EC50: =341.5mg/L (48h, <i>Daphnia magna</i> )   |

### Persistence and degradability

**Persistence and degradability** No information available.

### Bioaccumulative potential

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

| Chemical name | Partition coefficient |
|---------------|-----------------------|
| 1-Imidazole   | -0.02                 |

### Mobility

**Mobility in soil** No information available.

**PBT and vPvB assessment** No information available

| Chemical name                         | PBT and vPvB assessment         |
|---------------------------------------|---------------------------------|
| Potassium chloride                    | The substance is not PBT / vPvB |
| Phosphoric acid, potassium salt (1:1) | The substance is not PBT / vPvB |
| 1-Imidazole                           | The substance is not PBT / vPvB |

### Other adverse effects

**Other adverse effects** No information available

## SECTION 13: Disposal considerations

### Disposal methods

|  |   |
|--|---|
| <b>Waste from residues/unused products</b> | Dispose of waste in accordance with environmental legislation. Dispose of in accordance with local regulations. |
| <b>Contaminated packaging</b>              | Do not reuse empty containers.  |

## SECTION 14: Transport information

|   |                          |
|---|--------------------------|
| <b>IMDG</b>   | Not regulated            |
| <b>Transport in bulk according to Annex II of MARPOL and the IBC Code</b> | No information available |

|             |               |
|-------------|---------------|
| <b>IATA</b> | Not regulated |
|-------------|---------------|

## SECTION 15: Regulatory information

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

#### Singapore

##### **Environmental Public Health Act**

Dispose of waste product or used containers according to local regulations.

##### **Hazardous Waste (Control of Export, Import and Transit) Act**

It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations. Take note that wastes may be subject to export, import, or transit controls pursuant to the Basel convention and/or local regulations implementing the Basel convention.

##### **Poison**

None Listed

##### **Workplace Safety and Health Act**

Comply with the health and safety at work laws.

#### International Regulations

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

**The Stockholm Convention on Persistent Organic Pollutants** Not applicable

**The Rotterdam Convention** Not applicable

#### International Inventories

Contact supplier for inventory compliance status

## SECTION 16: Other 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                 |

### **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

**Label elements**

P202 - Do not handle until all safety precautions have been read and understood  
P280 - Wear protective gloves/protective clothing/eye protection/face protection  
P501 - Dispose of contents/container in accordance with local, regional, national, and international regulations as applicable

**Issuing Date** Bio-Rad Laboratories, Environmental Health and Safety

**Revision date** 12-Oct-2022

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

**This safety data sheet complies with the requirements of: SS586: 2008 (2014)**

**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

This safety data sheet complies with the requirements of:  
SS586: 2008 (2014)

Revision date 12-Oct-2022

Revision Number 1

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

### Product identifier

Product Name Native IMAC Wash Buffer 1

### Other means of identification

Catalogue Number(s) 6200206

Pure substance/mixture Mixture

Contains 1-Imidazole

### Recommended use of the chemical and restrictions on use

Recommended use Laboratory chemicals

Uses advised against No information available

### Details of the supplier of the safety data sheet

#### Corporate Headquarters

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

For further information, please contact

#### Manufacturer

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

#### Legal Entity / Contact Address

Bio-Rad Laboratoires (Singapore) PTE LTD  
3A International Business Park #11-10/16  
ICON@IBP  
Singapore 609935

Technical Service 6424 0262  
ctssingapore@bio-rad.com

### Emergency telephone number

24 Hour Emergency Phone Number CHEMTREC Singapore: 65-31581349

## SECTION 2: Hazards identification

### GHS Classification

Not a hazardous substance or mixture according to the Globally Harmonised System (GHS): SS586: 2008 (2014)

Reproductive toxicity

Category 1B

### Label elements

Not a hazardous substance or mixture according to the Globally Harmonised System (GHS): SS586: 2008 (2014)



Other hazards which do not result in classification**SECTION 3: Composition/information on ingredients****Substance**

Not applicable

**Mixture**

| Chemical name                            | EC No (EU Index No)         | CAS No    | Weight-%    |
|--|-----------------------------|-----------|-------------|
| Water                                    | 231-791-2                   | 7732-18-5 | 50 - 100    |
| Potassium chloride                       | 231-211-8                   | 7447-40-7 | 2.5 - 5     |
| Phosphoric acid, potassium salt<br>(1:1) | 231-913-4                   | 7778-77-0 | 1 - 2.5     |
| 1-Imidazole                              | (613-319-00-0)<br>206-019-2 | 288-32-4  | 0.1 - 0.299 |

Non-hazardous  
ingredients

Proprietary

Balance

**SECTION 4: First aid measures****Description of first aid measures**

|                       |  |
|-----------------------|--|
| <b>General advice</b> | No hazards which require special first aid measures.   |
| <b>Inhalation</b>     | Remove to fresh air.   |
| <b>Eye contact</b>    | Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids.<br>Consult a doctor. |
| <b>Skin contact</b>   | In the case of skin irritation or allergic reactions see a doctor. Wash skin with soap and water.                    |
| <b>Ingestion</b>      | Rinse mouth thoroughly with water.   |

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

|                 |   |
|-----------------|---|
| <b>Symptoms</b> | Prolonged contact may cause redness and irritation. |
|-----------------|---|

**For emergency responders**

|   |                           |
|---|---------------------------|
| <b>Self-protection of the first aider</b> | No information available. |
|---|---------------------------|

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

|                        |                        |
|------------------------|------------------------|
| <b>Note to doctors</b> | Treat symptomatically. |
|------------------------|------------------------|

**SECTION 5: Firefighting measures****Suitable Extinguishing Media**

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

|                                       |                           |
|---------------------------------------|---------------------------|
| <b>Unsuitable extinguishing media</b> | 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 and precautions 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**      Ensure adequate ventilation.

**For emergency responders**      Use personal protection recommended in Section 8.

**Environmental precautions**

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

**Methods and material for containment and cleaning up**

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

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

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

**Reference to other sections**      See section 8 for more information. See section 13 for more information.

**SECTION 7: Handling and storage****Precautions for safe handling**

**Advice on safe handling**      Ensure adequate ventilation.

**General hygiene considerations**      Handle in accordance with good industrial hygiene and safety practice.

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

**Storage Conditions**      Keep container tightly closed in a dry and well-ventilated place.

**SECTION 8: Exposure controls/personal protection****Control parameters**

**Occupational 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**

|  |  |
|--|--|
| <b>Eye/face protection</b>             | Wear safety glasses with side shields (or goggles).  |
| <b>Skin and body protection</b>        | Wear suitable protective clothing.   |
| <b>Hand protection</b>                 | Wear suitable gloves.  |
| <b>Respiratory protection</b>          | No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required. |
| <b>Environmental exposure controls</b> | No information available.  |

**SECTION 9: Physical and chemical properties****Information on basic physical and chemical properties**

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

| <b>Property</b>                                | <b>Values</b>     | <b>Remarks • Method</b> |
|--|-------------------|-------------------------|
| <b>pH</b>                                      | 8                 |                         |
| <b>Melting point / freezing point</b>          | No data available | None known              |
| <b>Initial boiling point and boiling range</b> | No data available | None known              |
| <b>Flash point</b>                             | No data available | None known              |
| <b>Evaporation rate</b>                        | No data available | None known              |
| <b>Flammability</b>                            | No data available | None known              |
| <b>Flammability Limit in Air</b>               |                   | None known              |
| <b>Upper flammability or explosive limits</b>  | No data available |                         |
| <b>Lower flammability or explosive limits</b>  | No data available |                         |
| <b>Vapour pressure</b>                         | No data available | None known              |
| <b>Relative vapour density</b>                 | No data available | None known              |
| <b>Relative density</b>                        | No data available | None known              |
| <b>Water solubility</b>                        | Miscible in water |                         |
| <b>Solubility(ies)</b>                         | No data available | None known              |
| <b>Partition coefficient</b>                   | No data available | None known              |
| <b>Autoignition temperature</b>                | No data available | None known              |
| <b>Decomposition temperature</b>               |                   | None known              |
| <b>Kinematic viscosity</b>                     | No data available | None known              |
| <b>Dynamic viscosity</b>                       | No data available | None known              |

|                          |                          |
|--------------------------|--------------------------|
| <b>Other information</b> | No information available |
|--------------------------|--------------------------|

**SECTION 10: Stability and reactivity****Reactivity**

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

**Chemical stability**

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

**Explosion data**

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

**Possibility of hazardous reactions** 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**

**Information on likely routes of exposure**

**Product Information**

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

**Symptoms related to the physical, chemical and toxicological characteristics**

**Symptoms** Prolonged contact may cause redness and irritation.

**Acute toxicity**

**Numerical measures of toxicity**

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

|                                      |                 |
|--------------------------------------|-----------------|
| <b>ATEmix (oral)</b>                 | 61,611.40 mg/kg |
| <b>ATEmix (inhalation-dust/mist)</b> | 64.30 mg/l      |

**Component Information**

| Chemical name                            | Oral LD50            | Dermal LD50 | Inhalation LC50         |
|--|----------------------|-------------|-------------------------|
| Water                                    | > 90 mL/kg ( Rat )   |             |                         |
| Potassium chloride                       | = 2600 mg/kg ( Rat ) |             |                         |
| Phosphoric acid, potassium salt<br>(1:1) | = 3200 mg/kg ( Rat ) |             | > 0.83 mg/L ( Rat ) 4 h |
| 1-Imidazole                              | = 220 mg/kg ( Rat )  |             |                         |

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

|  |  |
|--|--|
| <b>Skin corrosion/irritation</b>         | Classification based on data available for ingredients. Causes mild skin irritation. |
| <b>Serious eye damage/eye irritation</b> | Based on available data, the classification criteria are not met.                    |
| <b>Respiratory or skin sensitisation</b> | Based on available data, the classification criteria are not met.                    |
| <b>Germ cell mutagenicity</b>            | Based on available data, the classification criteria are not met.                    |

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

**Reproductive toxicity** May damage fertility or the unborn child.

| Chemical name | European Union |
|---------------|----------------|
| 1-Imidazole   | Repr. 1B       |

**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** Classification not possible.

## SECTION 12: Ecological information

### Ecotoxicity

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

**Unknown aquatic toxicity** Contains 0 % of components with unknown hazards to the aquatic environment

| Chemical name      | Algae/aquatic plants  | Fish  | Crustacea   |
|--------------------|---|---|---|
| Potassium chloride | EC50: =2500mg/L (72h, <i>Desmodesmus subspicatus</i> )  | LC50: =1060mg/L (96h, <i>Lepomis macrochirus</i> )<br>LC50: 750 - 1020mg/L (96h, <i>Pimephales promelas</i> ) | EC50: =825mg/L (48h, <i>Daphnia magna</i> )<br>EC50: =83mg/L (48h, <i>Daphnia magna</i> ) |
| 1-Imidazole        | EC50: =130mg/L (72h, <i>Desmodesmus subspicatus</i> )<br>EC50: =82mg/L (96h, <i>Desmodesmus subspicatus</i> ) | -   | EC50: =341.5mg/L (48h, <i>Daphnia magna</i> )   |

### Persistence and degradability

**Persistence and degradability** No information available.

### Bioaccumulative potential

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

| Chemical name | Partition coefficient |
|---------------|-----------------------|
| 1-Imidazole   | -0.02                 |

### Mobility

**Mobility in soil** No information available.

**PBT and vPvB assessment** No information available

| Chemical name                         | PBT and vPvB assessment         |
|---------------------------------------|---------------------------------|
| Potassium chloride                    | The substance is not PBT / vPvB |
| Phosphoric acid, potassium salt (1:1) | The substance is not PBT / vPvB |
| 1-Imidazole                           | The substance is not PBT / vPvB |

### Other adverse effects

**Other adverse effects** No information available

## SECTION 13: Disposal considerations

### Disposal methods

|  |   |
|--|---|
| <b>Waste from residues/unused products</b> | Dispose of waste in accordance with environmental legislation. Dispose of in accordance with local regulations. |
| <b>Contaminated packaging</b>              | Do not reuse empty containers.  |

## SECTION 14: Transport information

|   |                          |
|---|--------------------------|
| <b>IMDG</b>   | Not regulated            |
| <b>Transport in bulk according to Annex II of MARPOL and the IBC Code</b> | No information available |

|             |               |
|-------------|---------------|
| <b>IATA</b> | Not regulated |
|-------------|---------------|

## SECTION 15: Regulatory information

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

#### Singapore

##### **Environmental Public Health Act**

Dispose of waste product or used containers according to local regulations.

##### **Hazardous Waste (Control of Export, Import and Transit) Act**

It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations. Take note that wastes may be subject to export, import, or transit controls pursuant to the Basel convention and/or local regulations implementing the Basel convention.

##### **Poison**

None Listed

##### **Workplace Safety and Health Act**

Comply with the health and safety at work laws.

#### International Regulations

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

**The Stockholm Convention on Persistent Organic Pollutants** Not applicable

**The Rotterdam Convention** Not applicable

#### International Inventories

Contact supplier for inventory compliance status

## SECTION 16: Other 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                 |

### **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

**Label elements**

P202 - Do not handle until all safety precautions have been read and understood  
P280 - Wear protective gloves/protective clothing/eye protection/face protection  
P501 - Dispose of contents/container in accordance with local, regional, national, and international regulations as applicable

**Issuing Date** Bio-Rad Laboratories, Environmental Health and Safety

**Revision date** 12-Oct-2022

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

**This safety data sheet complies with the requirements of: SS586: 2008 (2014)**

**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

This safety data sheet complies with the requirements of:  
SS586: 2008 (2014)

Revision date 11-Oct-2022

Revision Number 1

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

### Product identifier

**Product Name** Native IMAC Elution Buffer, 2x

### Other means of identification

**Catalogue Number(s)** 6200208, 10005917

**Pure substance/mixture** Mixture

Contains 1-Imidazole

### Recommended use of the chemical and restrictions on use

**Recommended use** Laboratory chemicals

**Uses advised against** No information available

### Details of the supplier of the safety data sheet

#### Corporate Headquarters

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

For further information, please contact

#### Manufacturer

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

#### Legal Entity / Contact Address

Bio-Rad Laboratoires (Singapore) PTE LTD  
3A International Business Park #11-10/16  
ICON@IBP  
Singapore 609935

#### **Technical Service**

6424 0262  
ctssingapore@bio-rad.com

### Emergency telephone number

**24 Hour Emergency Phone Number** CHEMTREC Singapore: 65-31581349

## SECTION 2: Hazards identification

### GHS Classification

Not a hazardous substance or mixture according to the Globally Harmonised System (GHS): SS586: 2008 (2014)

|  |             |
|--|-------------|
| <b>Skin corrosion/irritation</b>         | Category 2  |
| <b>Serious eye damage/eye irritation</b> | Category 1  |
| <b>Reproductive toxicity</b>             | Category 1B |

### Label elements

Not a hazardous substance or mixture according to the Globally Harmonised System (GHS): SS586: 2008 (2014)



Other hazards which do not result in classification

### SECTION 3: Composition/information on ingredients

#### Substance

Not applicable

#### Mixture

| Chemical name                            | EC No (EU Index No)         | CAS No    | Weight-% |
|--|-----------------------------|-----------|----------|
| Water                                    | 231-791-2                   | 7732-18-5 | 50 - 100 |
| Potassium chloride                       | 231-211-8                   | 7447-40-7 | 2.5 - 5  |
| 1-Imidazole                              | (613-319-00-0)<br>206-019-2 | 288-32-4  | 2.5 - 5  |
| Phosphoric acid, potassium salt<br>(1:1) | 231-913-4                   | 7778-77-0 | 1 - 2.5  |

Non-hazardous  
ingredients

Proprietary

Balance

### SECTION 4: First aid measures

#### Description of first aid measures

##### **General advice**

Immediate medical attention is required. Show this safety data sheet to the doctor in attendance.

##### **Inhalation**

Remove to fresh air. Get medical attention immediately if symptoms occur.

##### **Eye contact**

Get immediate medical attention. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open while rinsing. Do not rub affected area.

##### **Skin contact**

Wash off immediately with soap and plenty of water for at least 15 minutes. Get medical attention if irritation develops and persists.

##### **Ingestion**

Rinse mouth. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Call a doctor.

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

##### **Symptoms**

Burning sensation.

#### For emergency responders

##### **Self-protection of the first aider**

Avoid contact with skin, eyes or clothing. Wear personal protective clothing (see section 8).

#### 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 chemical** None known.

**Special protective actions for fire-fighters**

**Special protective equipment and precautions for fire-fighters** Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. 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. Use personal protective equipment as required. Ensure adequate ventilation.

**Other information** Refer to protective measures listed in Sections 7 and 8.

**For emergency responders** Use personal protection recommended in Section 8.

**Environmental precautions**

**Environmental precautions** Prevent further leakage or spillage if safe to do so.

**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.

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

**Reference to other sections** See section 8 for more information. See section 13 for more information.

**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. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash it before reuse.

**General hygiene considerations** Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product.

**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.

## SECTION 8: Exposure controls/personal protection

### Control parameters

**Occupational 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** Tight sealing safety goggles.

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

**Hand protection** Wear suitable gloves. Impervious 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

**Colour** colourless

**Odour** Odourless.

**Odour threshold** No information available

| <u>Property</u>                         | <u>Values</u>     | <u>Remarks • Method</u> |
|---|-------------------|-------------------------|
| pH                                      | 8                 |                         |
| Melting point / freezing point          | No data available | None known              |
| Initial boiling point and boiling range | No 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 limits  | No data available |                         |
| Lower flammability or explosive limits  | No data available |                         |
| Vapour pressure                         | No data available | None known              |
| Relative vapour density                 | No data available | None known              |
| Relative density                        | No data available | None known              |
| Water solubility                        | Miscible in water |                         |
| Solubility(ies)                         | No data available | None known              |
| Partition coefficient                   | No data available | None known              |
| Autoignition temperature                | No data available | None known              |
| Decomposition temperature               |                   | None known              |
| Kinematic viscosity                     | No data available | None known              |
| Dynamic viscosity                       | No data available | None known              |

Other information No information available

## SECTION 10: Stability and reactivity

### Reactivity

Reactivity No information available.

### Chemical stability

Stability Stable under normal conditions.

### Explosion data

Sensitivity to mechanical impact None.

Sensitivity to static discharge None.

Possibility of hazardous reactions None under normal processing.

### Conditions to avoid

Conditions to avoid None known based on information supplied.

### Incompatible materials

Incompatible materials Strong acids. Strong bases. Strong oxidising agents.

### Hazardous decomposition products

Hazardous decomposition products None known based on information supplied.

## SECTION 11: Toxicological information

### Information on likely routes of exposure

#### Product Information

|              |  |
|--------------|--|
| Inhalation   | Specific test data for the substance or mixture is not available. May cause irritation of respiratory tract.                                       |
| Eye contact  | Specific test data for the substance or mixture is not available. Causes serious eye damage. May cause irreversible damage to eyes.                |
| Skin contact | Specific test data for the substance or mixture is not available. Causes skin irritation. (based on components).                                   |
| Ingestion    | Specific test data for the substance or mixture is not available. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea. |

### Symptoms related to the physical, chemical and toxicological characteristics

Symptoms Redness. Burning. May cause blindness. May cause redness and tearing of the eyes.

### Acute toxicity

#### Numerical measures of toxicity

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

ATEmix (oral) 12,831.90 mg/kg

ATEmix (inhalation-dust/mist) 66.40 mg/l

**Component Information**

| Chemical name                         | Oral LD50            | Dermal LD50 | Inhalation LC50         |
|---------------------------------------|----------------------|-------------|-------------------------|
| Water                                 | > 90 mL/kg ( Rat )   |             |                         |
| Potassium chloride                    | = 2600 mg/kg ( Rat ) |             |                         |
| 1-Imidazole                           | = 220 mg/kg ( Rat )  |             |                         |
| Phosphoric acid, potassium salt (1:1) | = 3200 mg/kg ( Rat ) |             | > 0.83 mg/L ( Rat ) 4 h |

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

|  |  |
|--|--|
| <b>Skin corrosion/irritation</b>         | May cause skin irritation. Classification based on data available for ingredients. Causes skin irritation. |
| <b>Serious eye damage/eye irritation</b> | Classification based on data available for ingredients. Causes burns. Causes serious eye damage.           |
| <b>Respiratory or skin sensitisation</b> | Based on available data, the classification criteria are not met.  |
| <b>Germ cell mutagenicity</b>            | Based on available data, the classification criteria are not met.  |
| <b>Carcinogenicity</b>                   | Based on available data, the classification criteria are not met.  |
| <b>Reproductive toxicity</b>             | May damage fertility or the unborn child.  |

| Chemical name | European Union |
|---------------|----------------|
| 1-Imidazole   | Repr. 1B       |

**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** Classification not possible.

**SECTION 12: Ecological information****Ecotoxicity**

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

**Unknown aquatic toxicity** Contains 0 % of components with unknown hazards to the aquatic environment

| Chemical name      | Algae/aquatic plants  | Fish  | Crustacea   |
|--------------------|---|---|---|
| Potassium chloride | EC50: =2500mg/L (72h, <i>Desmodesmus subspicatus</i> )  | LC50: =1060mg/L (96h, <i>Lepomis macrochirus</i> )<br>LC50: 750 - 1020mg/L (96h, <i>Pimephales promelas</i> ) | EC50: =825mg/L (48h, <i>Daphnia magna</i> )<br>EC50: =83mg/L (48h, <i>Daphnia magna</i> ) |
| 1-Imidazole        | EC50: =130mg/L (72h, <i>Desmodesmus subspicatus</i> )<br>EC50: =82mg/L (96h, <i>Desmodesmus subspicatus</i> ) | -   | EC50: =341.5mg/L (48h, <i>Daphnia magna</i> )   |

**Persistence and degradability**

**Persistence and degradability** No information available.

**Bioaccumulative potential**

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

| Chemical name | Partition coefficient |
|---------------|-----------------------|
| 1-Imidazole   | -0.02                 |

**Mobility**

**Mobility in soil** No information available.

**PBT and vPvB assessment** No information available

| Chemical name                         | PBT and vPvB assessment         |
|---------------------------------------|---------------------------------|
| Potassium chloride                    | The substance is not PBT / vPvB |
| 1-Imidazole                           | The substance is not PBT / vPvB |
| Phosphoric acid, potassium salt (1:1) | The substance is not PBT / vPvB |

**Other adverse effects**

**Other adverse effects** No information available

**SECTION 13: Disposal considerations****Disposal methods**

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

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

**SECTION 14: Transport information**

**IMDG** Not regulated  
**Transport in bulk according to Annex II of MARPOL and the IBC Code** No information available

**IATA** Not regulated

**SECTION 15: Regulatory information****Safety, health and environmental regulations/legislation specific for the substance or mixture****Singapore****Environmental Public Health Act**

Dispose of waste product or used containers according to local regulations.

**Hazardous Waste (Control of Export, Import and Transit) Act**

It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations. Take note that wastes may be subject to export, import, or transit controls pursuant to the Basel convention and/or local regulations implementing the Basel convention.

**Poison**

None Listed

**Workplace Safety and Health Act**

Comply with the health and safety at work laws.



**International Regulations**

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

**The Stockholm Convention on Persistent Organic Pollutants** Not applicable

**The Rotterdam Convention** Not applicable

**International Inventories**

Contact supplier for inventory compliance status

**SECTION 16: Other 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                 |

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

Agency for Toxic Substances and Disease Registry (ATSDR)  
U.S. Environmental Protection Agency ChemView Database  
European Food Safety Authority (EFSA)  
EPA (Environmental Protection Agency)  
Acute Exposure Guideline Level(s) (AELG(s))  
U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act  
U.S. Environmental Protection Agency High Production Volume Chemicals  
Food Research Journal  
Hazardous Substance Database  
International Uniform Chemical Information Database (IUCLID)  
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

**Label elements**

P264 - Wash face, hands and any exposed skin thoroughly after handling  
P280 - Wear protective gloves/protective clothing/eye protection/face protection  
P310 - Immediately call a POISON CENTER or doctor

**Issuing Date** Bio-Rad Laboratories, Environmental Health and Safety

**Revision date** 11-Oct-2022

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

**This safety data sheet complies with the requirements of: SS586: 2008 (2014)**

**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

This safety data sheet complies with the requirements of:  
SS586: 2008 (2014)

Revision date 12-Oct-2022

Revision Number 1

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

### Product identifier

**Product Name** Profinia Desalting Buffer 5X

### Other means of identification

**Catalogue Number(s)** 6200216, 10005918

**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 the supplier of the safety data sheet

#### Corporate Headquarters

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

For further information, please contact

#### Manufacturer

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

#### Legal Entity / Contact Address

Bio-Rad Laboratoires (Singapore) PTE LTD  
3A International Business Park #11-10/16  
ICON@IBP  
Singapore 609935

#### **Technical Service**

6424 0262  
ctssingapore@bio-rad.com

### Emergency telephone number

**24 Hour Emergency Phone Number** CHEMTREC Singapore: 65-31581349

## SECTION 2: Hazards identification

### GHS Classification

Not a hazardous substance or mixture according to the Globally Harmonised System (GHS): SS586: 2008 (2014)

### Label elements

Not a hazardous substance or mixture according to the Globally Harmonised System (GHS): SS586: 2008 (2014)

### Other hazards which do not result in classification

## SECTION 3: Composition/information on ingredients

### Substance

Not applicable

**Mixture**

| Chemical name                         | EC No (EU Index No) | CAS No    | Weight-%    |
|---------------------------------------|---------------------|-----------|-------------|
| Water                                 | 231-791-2           | 7732-18-5 | 50 - 100    |
| Sodium chloride                       | 231-598-3           | 7647-14-5 | 2.5 - 5     |
| Disodium orthophosphate heptahydrate  | -                   | 7782-85-6 | 0.3 - 0.99  |
| Phosphoric acid, potassium salt (1:1) | 231-913-4           | 7778-77-0 | 0.3 - 0.99  |
| Potassium chloride                    | 231-211-8           | 7447-40-7 | 0.1 - 0.299 |

Non-hazardous  
ingredients

Proprietary

Balance

**SECTION 4: First aid measures****Description of first aid measures**

|                       |   |
|-----------------------|---|
| <b>General advice</b> | No hazards which require special first aid measures.  |
| <b>Inhalation</b>     | Remove to fresh air.  |
| <b>Eye contact</b>    | Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a doctor. |
| <b>Skin contact</b>   | In the case of skin irritation or allergic reactions see a doctor. Wash skin with soap and water.                 |
| <b>Ingestion</b>      | Rinse mouth thoroughly with water.  |

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

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

**For emergency responders**

|   |                           |
|---|---------------------------|
| <b>Self-protection of the first aider</b> | No information available. |
|---|---------------------------|

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

|                        |                        |
|------------------------|------------------------|
| <b>Note to doctors</b> | Treat symptomatically. |
|------------------------|------------------------|

**SECTION 5: Firefighting measures****Suitable Extinguishing Media**

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

|                                       |                           |
|---------------------------------------|---------------------------|
| <b>Unsuitable extinguishing media</b> | No information available. |
|---------------------------------------|---------------------------|

**Specific hazards arising from the chemical**

|   |             |
|---|-------------|
| <b>Specific hazards arising from the chemical</b> | None known. |
|---|-------------|

**Special protective actions for fire-fighters**

|   |  |
|---|--|
| <b>Special protective equipment and precautions for fire-fighters</b> | 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** Ensure adequate ventilation.

**For emergency responders** Use personal protection recommended in Section 8.

### Environmental precautions

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

### Methods and material for containment and cleaning up

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

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

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

**Reference to other sections** See section 8 for more information. See section 13 for more information.

## SECTION 7: Handling and storage

### Precautions for safe handling

**Advice on safe handling** Ensure adequate ventilation.

**General hygiene considerations** Handle in accordance with good industrial hygiene and safety practice.

### Conditions for safe storage, including any incompatibilities

**Storage Conditions** Keep container tightly closed in a dry and well-ventilated place.

## SECTION 8: Exposure controls/personal protection

### Control parameters

**Occupational 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  
**Colour** colourless  
**Odour** Odourless.  
**Odour threshold** No information available

| <u>Property</u>                                | <u>Values</u>     | <u>Remarks • Method</u> |
|--|-------------------|-------------------------|
| <b>pH</b>                                      | 7                 |                         |
| <b>Melting point / freezing point</b>          | 0 °C              |                         |
| <b>Initial boiling point and boiling range</b> | No data available | None known              |
| <b>Flash point</b>                             | No data available | None known              |
| <b>Evaporation rate</b>                        | No data available | None known              |
| <b>Flammability</b>                            | No data available | None known              |
| <b>Flammability Limit in Air</b>               |                   | None known              |
| <b>Upper flammability or explosive limits</b>  | No data available |                         |
| <b>Lower flammability or explosive limits</b>  | No data available |                         |
| <b>Vapour pressure</b>                         | No data available | None known              |
| <b>Relative vapour density</b>                 | No data available | None known              |
| <b>Relative density</b>                        | No data available | None known              |
| <b>Water solubility</b>                        | Miscible in water |                         |
| <b>Solubility(ies)</b>                         | No data available | None known              |
| <b>Partition coefficient</b>                   | No data available | None known              |
| <b>Autoignition temperature</b>                | No data available | None known              |
| <b>Decomposition temperature</b>               |                   | None known              |
| <b>Kinematic viscosity</b>                     | No data available | None known              |
| <b>Dynamic viscosity</b>                       | No data available | None known              |

**Other information** No information available

## SECTION 10: Stability and reactivity

### Reactivity

**Reactivity** No information available.

### Chemical stability

**Stability** Stable under normal conditions.

### Explosion data

**Sensitivity to mechanical impact** None.  
    **Sensitivity to static discharge** None.

**Possibility of hazardous reactions** 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****Information on likely routes of exposure****Product Information**

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

**Symptoms related to the physical, chemical and toxicological characteristics**

**Symptoms** No information available.

**Acute toxicity****Numerical measures of toxicity**

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

ATEmix (oral) 78,740.20 mg/kg

**Component Information**

| 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   |
| Phosphoric acid, potassium salt (1:1) | = 3200 mg/kg ( Rat ) |                          | > 0.83 mg/L ( Rat ) 4 h |
| Potassium chloride                    | = 2600 mg/kg ( Rat ) |                          |                         |

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

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

## SECTION 12: Ecological information

### Ecotoxicity

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

**Unknown aquatic toxicity** Contains 0 % of components with unknown hazards to the aquatic environment

| Chemical name      | Algae/aquatic plants                                   | Fish  | Crustacea  |
|--------------------|--|---|--|
| Sodium chloride    | -  | LC50: 5560 - 6080mg/L (96h, <i>Lepomis macrochirus</i> )<br>LC50: =12946mg/L (96h, <i>Lepomis macrochirus</i> )<br>LC50: 6020 - 7070mg/L (96h, <i>Pimephales promelas</i> )<br>LC50: =7050mg/L (96h, <i>Pimephales promelas</i> )<br>LC50: 6420 - 6700mg/L (96h, <i>Pimephales promelas</i> )<br>LC50: 4747 - 7824mg/L (96h, <i>Oncorhynchus mykiss</i> ) | EC50: =1000mg/L (48h, <i>Daphnia magna</i> )<br>EC50: 340.7 - 469.2mg/L (48h, <i>Daphnia magna</i> ) |
| Potassium chloride | EC50: =2500mg/L (72h, <i>Desmodesmus subspicatus</i> ) | LC50: =1060mg/L (96h, <i>Lepomis macrochirus</i> )<br>LC50: 750 - 1020mg/L (96h, <i>Pimephales promelas</i> )   | EC50: =825mg/L (48h, <i>Daphnia magna</i> )<br>EC50: =83mg/L (48h, <i>Daphnia magna</i> )            |

### Persistence and degradability

**Persistence and degradability** No information available.

### Bioaccumulative potential

**Bioaccumulation** No information available.

### Mobility

**Mobility in soil** No information available.

**PBT and vPvB assessment** No information available

| Chemical name                         | PBT and vPvB assessment         |
|---------------------------------------|---------------------------------|
| Sodium chloride                       | The substance is not PBT / vPvB |
| Phosphoric acid, potassium salt (1:1) | The substance is not PBT / vPvB |
| Potassium chloride                    | The substance is not PBT / vPvB |

### Other adverse effects

**Other adverse effects** No information available

## SECTION 13: Disposal considerations

### Disposal methods

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

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



## SECTION 14: Transport information

**IMDG** Not regulated  
**Transport in bulk according to** No information available  
**Annex II of MARPOL and the IBC**  
**Code**

**IATA** Not regulated

## SECTION 15: Regulatory information

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

#### Singapore

##### **Environmental Public Health Act**

Dispose of waste product or used containers according to local regulations.

##### **Hazardous Waste (Control of Export, Import and Transit) Act**

It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations. Take note that wastes may be subject to export, import, or transit controls pursuant to the Basel convention and/or local regulations implementing the Basel convention.

##### **Poison**

None Listed

##### **Workplace Safety and Health Act**

Comply with the health and safety at work laws.

#### International Regulations

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

**The Stockholm Convention on Persistent Organic Pollutants** Not applicable

**The Rotterdam Convention** Not applicable

#### International Inventories

Contact supplier for inventory compliance status

## SECTION 16: Other 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                 |

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

Agency for Toxic Substances and Disease Registry (ATSDR)  
 U.S. Environmental Protection Agency ChemView Database  
 European Food Safety Authority (EFSA)  
 EPA (Environmental Protection Agency)  
 Acute Exposure Guideline Level(s) (AELG(s))  
 U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act  
 U.S. Environmental Protection Agency High Production Volume Chemicals  
 Food Research Journal  
 Hazardous Substance Database

International Uniform Chemical Information Database (IUCLID)  
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

**Label elements**

|                      |   |
|----------------------|---|
| <b>Issuing Date</b>  | Bio-Rad Laboratories, Environmental Health and Safety |
| <b>Revision date</b> | 12-Oct-2022   |
| <b>Revision Note</b> | Reformatted and updated existing information.         |

**This safety data sheet complies with the requirements of: SS586: 2008 (2014)**

**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

This safety data sheet complies with the requirements of:  
SS586: 2008 (2014)

Revision date 12-Oct-2022

Revision Number 1

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

### Product identifier

**Product Name** Cleaning Solution 1, 2x

### Other means of identification

**Catalogue Number(s)** 6200217, 10006097

**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 the supplier of the safety data sheet

#### Corporate Headquarters

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

For further information, please contact

#### Manufacturer

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

#### Legal Entity / Contact Address

Bio-Rad Laboratoires (Singapore) PTE LTD  
3A International Business Park #11-10/16  
ICON@IBP  
Singapore 609935

#### **Technical Service**

6424 0262  
ctssingapore@bio-rad.com

### Emergency telephone number

**24 Hour Emergency Phone Number** CHEMTREC Singapore: 65-31581349

## SECTION 2: Hazards identification

### GHS Classification

Not a hazardous substance or mixture according to the Globally Harmonised System (GHS): SS586: 2008 (2014)

### Label elements

Not a hazardous substance or mixture according to the Globally Harmonised System (GHS): SS586: 2008 (2014)

### Other hazards which do not result in classification

## SECTION 3: Composition/information on ingredients

### Substance

Not applicable

**Mixture**

| Chemical name                                  | EC No (EU Index No) | CAS No    | Weight-% |
|--|---------------------|-----------|----------|
| Water  | 231-791-2           | 7732-18-5 | 50 - 100 |
| Sodium chloride                                | 231-598-3           | 7647-14-5 | 5 - 10   |
| 1,3-Propanediol,<br>2-amino-2-(hydroxymethyl)- | 201-064-4           | 77-86-1   | 1 - 2.5  |

Non-hazardous  
ingredients

Proprietary

Balance

**SECTION 4: First aid measures****Description of first aid measures**

|                       |  |
|-----------------------|--|
| <b>General advice</b> | No hazards which require special first aid measures.   |
| <b>Inhalation</b>     | Remove to fresh air.   |
| <b>Eye contact</b>    | Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids.<br>Consult a doctor. |
| <b>Skin contact</b>   | In the case of skin irritation or allergic reactions see a doctor. Wash skin with soap and water.                    |
| <b>Ingestion</b>      | Rinse mouth thoroughly with water.   |

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

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

**For emergency responders**

|   |                           |
|---|---------------------------|
| <b>Self-protection of the first aider</b> | No information available. |
|---|---------------------------|

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

|                        |                        |
|------------------------|------------------------|
| <b>Note to doctors</b> | Treat symptomatically. |
|------------------------|------------------------|

**SECTION 5: Firefighting measures****Suitable Extinguishing Media**

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

|                                       |                           |
|---------------------------------------|---------------------------|
| <b>Unsuitable extinguishing media</b> | No information available. |
|---------------------------------------|---------------------------|

**Specific hazards arising from the chemical**

|   |             |
|---|-------------|
| <b>Specific hazards arising from the chemical</b> | None known. |
|---|-------------|

**Special protective actions for fire-fighters**

|   |   |
|---|---|
| <b>Special protective equipment and precautions for fire-fighters</b> | Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear.<br>Use personal protection equipment. |
|---|---|

**SECTION 6: Accidental release measures**

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

**Personal precautions** Ensure adequate ventilation.

**For emergency responders** Use personal protection recommended in Section 8.

**Environmental precautions**

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

**Methods and material for containment and cleaning up**

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

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

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

**Reference to other sections** See section 8 for more information. See section 13 for more information.

**SECTION 7: Handling and storage****Precautions for safe handling**

**Advice on safe handling** Ensure adequate ventilation.

**General hygiene considerations** Handle in accordance with good industrial hygiene and safety practice.

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

**Storage Conditions** Keep container tightly closed in a dry and well-ventilated place.

**SECTION 8: Exposure controls/personal protection****Control parameters**

**Occupational 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

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

| <b>Property</b>                                | <b>Values</b>            | <b>Remarks • Method</b> |
|--|--------------------------|-------------------------|
| <b>pH</b>                                      | 8                        |                         |
| <b>Melting point / freezing point</b>          | 0 °C                     |                         |
| <b>Initial boiling point and boiling range</b> | No data available        | None known              |
| <b>Flash point</b>                             | No data available        | None known              |
| <b>Evaporation rate</b>                        | No data available        | None known              |
| <b>Flammability</b>                            | No data available        | None known              |
| <b>Flammability Limit in Air</b>               |                          | None known              |
| <b>Upper flammability or explosive limits</b>  | No data available        |                         |
| <b>Lower flammability or explosive limits</b>  | No data available        |                         |
| <b>Vapour pressure</b>                         | No data available        | None known              |
| <b>Relative vapour density</b>                 | No data available        | None known              |
| <b>Relative density</b>                        | No data available        | None known              |
| <b>Water solubility</b>                        | Miscible in water        |                         |
| <b>Solubility(ies)</b>                         | No data available        | None known              |
| <b>Partition coefficient</b>                   | No data available        | None known              |
| <b>Autoignition temperature</b>                | No data available        | None known              |
| <b>Decomposition temperature</b>               |                          | None known              |
| <b>Kinematic viscosity</b>                     | No data available        | None known              |
| <b>Dynamic viscosity</b>                       | No data available        | None known              |
| <b>Other information</b>                       | No information available |                         |

## SECTION 10: Stability and reactivity

### Reactivity

**Reactivity** No information available.

### Chemical stability

**Stability** Stable under normal conditions.

### Explosion data

**Sensitivity to mechanical impact** None.  
**Sensitivity to static discharge** None.

**Possibility of hazardous reactions** 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

### 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 related to the physical, chemical and toxicological characteristics

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

### Acute toxicity

#### Numerical measures of toxicity

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

ATEmix (oral) 49,713.50 mg/kg

#### Component Information

| 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 |
| 1,3-Propanediol,<br>2-amino-2-(hydroxymethyl)- | = 5900 mg/kg ( Rat ) | > 5000 mg/kg ( Rat )     |                       |

### 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                 | Classification not possible.                                      |

## SECTION 12: Ecological information

### Ecotoxicity

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

**Unknown aquatic toxicity** Contains 0 % of components with unknown hazards to the aquatic environment

| Chemical name   | Algae/aquatic plants | Fish  | Crustacea  |
|-----------------|----------------------|---|--|
| Sodium chloride | -                    | LC50: 5560 - 6080mg/L (96h, Lepomis macrochirus)<br>LC50: =12946mg/L (96h, Lepomis macrochirus)<br>LC50: 6020 - 7070mg/L (96h, Pimephales promelas)<br>LC50: =7050mg/L (96h, Pimephales promelas)<br>LC50: 6420 - 6700mg/L (96h, Pimephales promelas)<br>LC50: 4747 - 7824mg/L (96h, Oncorhynchus mykiss) | EC50: =1000mg/L (48h, Daphnia magna)<br>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.

**PBT and vPvB assessment** No information available

| Chemical name                               | PBT and vPvB assessment         |
|---|---------------------------------|
| Sodium chloride                             | The substance is not PBT / vPvB |
| 1,3-Propanediol, 2-amino-2-(hydroxymethyl)- | The substance is not PBT / vPvB |

#### Other adverse effects

**Other adverse effects** No information available

### SECTION 13: Disposal considerations

#### Disposal methods

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

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

### SECTION 14: Transport information

#### IMDG

Not regulated

**Transport in bulk according to Annex II of MARPOL and the IBC Code** No information available

#### IATA

Not regulated



## SECTION 15: Regulatory information

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

#### Singapore

##### **Environmental Public Health Act**

Dispose of waste product or used containers according to local regulations.

##### **Hazardous Waste (Control of Export, Import and Transit) Act**

It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations. Take note that wastes may be subject to export, import, or transit controls pursuant to the Basel convention and/or local regulations implementing the Basel convention.

##### **Poison**

None Listed

##### **Workplace Safety and Health Act**

Comply with the health and safety at work laws.

### International Regulations

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

**The Stockholm Convention on Persistent Organic Pollutants** Not applicable

**The Rotterdam Convention** Not applicable

### International Inventories

Contact supplier for inventory compliance status

## SECTION 16: Other 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                 |

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

Agency for Toxic Substances and Disease Registry (ATSDR)  
 U.S. Environmental Protection Agency ChemView Database  
 European Food Safety Authority (EFSA)  
 EPA (Environmental Protection Agency)  
 Acute Exposure Guideline Level(s) (AELG(s))  
 U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act  
 U.S. Environmental Protection Agency High Production Volume Chemicals  
 Food Research Journal  
 Hazardous Substance Database  
 International Uniform Chemical Information Database (IUCLID)  
 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

**Label elements**

**Issuing Date** Bio-Rad Laboratories, Environmental Health and Safety

**Revision date** 12-Oct-2022

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

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**End of Safety Data Sheet**



# SAFETY DATA SHEET

This safety data sheet complies with the requirements of:  
SS586: 2008 (2014)

Revision date 12-Oct-2022

Revision Number 1

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

### Product identifier

**Product Name** Cleaning Solution 2, 4x

### Other means of identification

**Catalogue Number(s)** 6200218, 10006098, 10006564

**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 the supplier of the safety data sheet

#### Corporate Headquarters

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

For further information, please contact

#### Manufacturer

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

#### Legal Entity / Contact Address

Bio-Rad Laboratoires (Singapore) PTE LTD  
3A International Business Park #11-10/16  
ICON@IBP  
Singapore 609935

#### **Technical Service**

6424 0262  
ctssingapore@bio-rad.com

### Emergency telephone number

**24 Hour Emergency Phone Number** CHEMTREC Singapore: 65-31581349

## SECTION 2: Hazards identification

### GHS Classification

Not a hazardous substance or mixture according to the Globally Harmonised System (GHS): SS586: 2008 (2014)

### Label elements

Not a hazardous substance or mixture according to the Globally Harmonised System (GHS): SS586: 2008 (2014)

### Other hazards which do not result in classification

## SECTION 3: Composition/information on ingredients

### Substance

Not applicable

**Mixture**

| Chemical name             | EC No (EU Index No) | CAS No    | Weight-% |
|---------------------------|---------------------|-----------|----------|
| Water                     | 231-791-2           | 7732-18-5 | 50 - 100 |
| Sodium chloride           | 231-598-3           | 7647-14-5 | 5 - 10   |
| Sodium acetate trihydrate | -                   | 6131-90-4 | 2.5 - 5  |

Non-hazardous  
ingredients

Proprietary

Balance

**SECTION 4: First aid measures****Description of first aid measures**

|                       |   |
|-----------------------|---|
| <b>General advice</b> | No hazards which require special first aid measures.  |
| <b>Inhalation</b>     | Remove to fresh air.  |
| <b>Eye contact</b>    | Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a doctor. |
| <b>Skin contact</b>   | In the case of skin irritation or allergic reactions see a doctor. Wash skin with soap and water.                 |
| <b>Ingestion</b>      | Rinse mouth thoroughly with water.  |

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

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

**For emergency responders**

|   |                           |
|---|---------------------------|
| <b>Self-protection of the first aider</b> | No information available. |
|---|---------------------------|

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

|                        |                        |
|------------------------|------------------------|
| <b>Note to doctors</b> | Treat symptomatically. |
|------------------------|------------------------|

**SECTION 5: Firefighting measures****Suitable Extinguishing Media**

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

|                                       |                           |
|---------------------------------------|---------------------------|
| <b>Unsuitable extinguishing media</b> | No information available. |
|---------------------------------------|---------------------------|

**Specific hazards arising from the chemical**

|   |             |
|---|-------------|
| <b>Specific hazards arising from the chemical</b> | None known. |
|---|-------------|

**Special protective actions for fire-fighters**

|   |  |
|---|--|
| <b>Special protective equipment and precautions for fire-fighters</b> | 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**

|  |  |
|--|--|
| <b>Personal precautions</b>  | Ensure adequate ventilation.   |
| <b>For emergency responders</b>                                    | Use personal protection recommended in Section 8.                                    |
| <b><u>Environmental precautions</u></b>                            |  |
| <b>Environmental precautions</b>                                   | See Section 12 for additional Ecological Information.                                |
| <b><u>Methods and material for containment and cleaning up</u></b> |  |
| <b>Methods for containment</b>                                     | Prevent further leakage or spillage if safe to do so.                                |
| <b>Methods for cleaning up</b>                                     | Pick up and transfer to properly labelled containers.                                |
| <b>Prevention of secondary hazards</b>                             | Clean contaminated objects and areas thoroughly observing environmental regulations. |
| <b>Reference to other sections</b>                                 | See section 8 for more information. See section 13 for more information.             |

## **SECTION 7: Handling and storage**

### **Precautions for safe handling**

|                                       |  |
|---------------------------------------|--|
| <b>Advice on safe handling</b>        | Ensure adequate ventilation.   |
| <b>General hygiene considerations</b> | Handle in accordance with good industrial hygiene and safety practice. |

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

|                           |   |
|---------------------------|---|
| <b>Storage Conditions</b> | Keep container tightly closed in a dry and well-ventilated place. |
|---------------------------|---|

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

### **Control parameters**

|                                     |   |
|-------------------------------------|---|
| <b>Occupational exposure limits</b> | 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**

|                             |   |
|-----------------------------|---|
| <b>Engineering controls</b> | Showers<br>Eyewash stations<br>Ventilation systems. |
|-----------------------------|---|

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

|  |  |
|--|--|
| <b>Eye/face protection</b>             | Wear safety glasses with side shields (or goggles).  |
| <b>Skin and body protection</b>        | Wear suitable protective clothing.   |
| <b>Hand protection</b>                 | Wear suitable gloves.  |
| <b>Respiratory protection</b>          | No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required. |
| <b>Environmental exposure controls</b> | No information available.  |

## SECTION 9: Physical and chemical properties

### Information on basic physical and chemical properties

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

| <u>Property</u>                         | <u>Values</u>     | <u>Remarks • Method</u> |
|---|-------------------|-------------------------|
| pH                                      | 4.5               |                         |
| Melting point / freezing point          | 0 °C              |                         |
| Initial boiling point and boiling range | No 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 limits  | No data available |                         |
| Lower flammability or explosive limits  | No data available |                         |
| Vapour pressure                         | No data available | None known              |
| Relative vapour density                 | No data available | None known              |
| Relative density                        | No data available | None known              |
| Water solubility                        | Miscible in water |                         |
| Solubility(ies)                         | No data available | None known              |
| Partition coefficient                   | No data available | None known              |
| Autoignition temperature                | No data available | None known              |
| Decomposition temperature               |                   | None known              |
| Kinematic viscosity                     | No data available | None known              |
| Dynamic viscosity                       | No data available | None known              |

Other information No information available

## SECTION 10: Stability and reactivity

### Reactivity

Reactivity No information available.

### Chemical stability

Stability Stable under normal conditions.

### Explosion data

Sensitivity to mechanical impact None.

Sensitivity to static discharge None.

Possibility of hazardous reactions 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

### 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 related to the physical, chemical and toxicological characteristics

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

### Acute toxicity

#### Numerical measures of toxicity

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

ATEmix (oral) 30,060.10 mg/kg

#### Component Information

| 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 |

### 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                 | Classification not possible.                                      |

## SECTION 12: Ecological information

### Ecotoxicity

|                          |  |
|--------------------------|--|
| Ecotoxicity              | The environmental impact of this product has not been fully investigated.  |
| Unknown aquatic toxicity | Contains 0 % of components with unknown hazards to the aquatic environment |

| Chemical name   | Algae/aquatic plants | Fish  | Crustacea  |
|-----------------|----------------------|---|--|
| Sodium chloride | -                    | LC50: 5560 - 6080mg/L (96h, Lepomis macrochirus)<br>LC50: =12946mg/L (96h, Lepomis macrochirus)<br>LC50: 6020 - 7070mg/L (96h, Pimephales promelas)<br>LC50: =7050mg/L (96h, Pimephales promelas)<br>LC50: 6420 - 6700mg/L (96h, Pimephales promelas)<br>LC50: 4747 - 7824mg/L (96h, Oncorhynchus mykiss) | EC50: =1000mg/L (48h, Daphnia magna)<br>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.

**PBT and vPvB assessment** No information available

| Chemical name   | PBT and vPvB assessment         |
|-----------------|---------------------------------|
| Sodium chloride | The substance is not PBT / vPvB |

**Other adverse effects**

**Other adverse effects** No information available

**SECTION 13: Disposal considerations****Disposal methods**

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

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

**SECTION 14: Transport information****IMDG**

Transport in bulk according to Annex II of MARPOL and the IBC Code Not regulated  
No information available

**IATA**

Not regulated

**SECTION 15: Regulatory information**



**Safety, health and environmental regulations/legislation specific for the substance or mixture****Singapore****Environmental Public Health Act**

Dispose of waste product or used containers according to local regulations.

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It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations. Take note that wastes may be subject to export, import, or transit controls pursuant to the Basel convention and/or local regulations implementing the Basel convention.

**Poison**

None Listed

**Workplace Safety and Health Act**

Comply with the health and safety at work laws.

**International Regulations**

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

**The Stockholm Convention on Persistent Organic Pollutants** Not applicable

**The Rotterdam Convention** Not applicable

**International Inventories**

Contact supplier for inventory compliance status

**SECTION 16: Other 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                 |

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 RTECS (Registry of Toxic Effects of Chemical Substances)  
 World Health Organization

**Label elements**

**Issuing Date** Bio-Rad Laboratories, Environmental Health and Safety

**Revision date** 12-Oct-2022

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

**This safety data sheet complies with the requirements of: SS586: 2008 (2014)**

**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

This safety data sheet complies with the requirements of:  
SS586: 2008 (2014)

Revision date 12-Oct-2022

Revision Number 1

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

### Product identifier

**Product Name** Profinia Storage Solution

### Other means of identification

**Catalogue Number(s)** 6200219, 10006099

**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 the supplier of the safety data sheet

#### Corporate Headquarters

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

For further information, please contact

#### Manufacturer

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

#### Legal Entity / Contact Address

Bio-Rad Laboratoires (Singapore) PTE LTD  
3A International Business Park #11-10/16  
ICON@IBP  
Singapore 609935

**Technical Service** 6424 0262  
ctssingapore@bio-rad.com

### Emergency telephone number

**24 Hour Emergency Phone Number** CHEMTREC Singapore: 65-31581349

## SECTION 2: Hazards identification

### GHS Classification

Not a hazardous substance or mixture according to the Globally Harmonised System (GHS): SS586: 2008 (2014)

### Label elements

Not a hazardous substance or mixture according to the Globally Harmonised System (GHS): SS586: 2008 (2014)

### Other hazards which do not result in classification

## SECTION 3: Composition/information on ingredients

### Substance

Not applicable

**Mixture**

| Chemical name  | EC No (EU Index No)         | CAS No    | Weight-% |
|----------------|-----------------------------|-----------|----------|
| Water          | 231-791-2                   | 7732-18-5 | 50 - 100 |
| Benzyl alcohol | (603-057-00-5)<br>202-859-9 | 100-51-6  | 2.5 - 5  |

Non-hazardous  
ingredients

Proprietary

Balance

**SECTION 4: First aid measures****Description of first aid measures**

|                       |  |
|-----------------------|--|
| <b>General advice</b> | No hazards which require special first aid measures.   |
| <b>Inhalation</b>     | Remove to fresh air.   |
| <b>Eye contact</b>    | Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids.<br>Consult a doctor. |
| <b>Skin contact</b>   | In the case of skin irritation or allergic reactions see a doctor. Wash skin with soap and water.                    |
| <b>Ingestion</b>      | Rinse mouth thoroughly with water.   |

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

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

**For emergency responders**

|   |                           |
|---|---------------------------|
| <b>Self-protection of the first aider</b> | No information available. |
|---|---------------------------|

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

|                        |                        |
|------------------------|------------------------|
| <b>Note to doctors</b> | Treat symptomatically. |
|------------------------|------------------------|

**SECTION 5: Firefighting measures****Suitable Extinguishing Media**

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

|                                       |                           |
|---------------------------------------|---------------------------|
| <b>Unsuitable extinguishing media</b> | No information available. |
|---------------------------------------|---------------------------|

**Specific hazards arising from the chemical**

|   |             |
|---|-------------|
| <b>Specific hazards arising from the chemical</b> | None known. |
|---|-------------|

**Special protective actions for fire-fighters**

|   |   |
|---|---|
| <b>Special protective equipment and precautions for fire-fighters</b> | Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear.<br>Use personal protection equipment. |
|---|---|

## SECTION 6: Accidental release measures

### Personal precautions, protective equipment and emergency procedures

|                          |   |
|--------------------------|---|
| Personal precautions     | Ensure adequate ventilation.                      |
| For emergency responders | Use personal protection recommended in Section 8. |

### Environmental precautions

|                           |   |
|---------------------------|---|
| Environmental precautions | See Section 12 for additional Ecological Information. |
|---------------------------|---|

### Methods and material for containment and cleaning up

|                                 |  |
|---------------------------------|--|
| Methods for containment         | Prevent further leakage or spillage if safe to do so.                                |
| Methods for cleaning up         | Pick up and transfer to properly labelled containers.                                |
| Prevention of secondary hazards | Clean contaminated objects and areas thoroughly observing environmental regulations. |
| Reference to other sections     | See section 8 for more information. See section 13 for more information.             |

## SECTION 7: Handling and storage

### Precautions for safe handling

|                                |  |
|--------------------------------|--|
| Advice on safe handling        | Ensure adequate ventilation.   |
| General hygiene considerations | Handle in accordance with good industrial hygiene and safety practice. |

### Conditions for safe storage, including any incompatibilities

|                    |   |
|--------------------|---|
| Storage Conditions | Keep container tightly closed in a dry and well-ventilated place. |
|--------------------|---|

## SECTION 8: Exposure controls/personal protection

### Control parameters

|                              |   |
|------------------------------|---|
| Occupational 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<br>Eyewash stations<br>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

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

| <u>Property</u>                         | <u>Values</u>     | <u>Remarks • Method</u> |
|---|-------------------|-------------------------|
| pH                                      |                   | None known              |
| Melting point / freezing point          | 0 °C              |                         |
| Initial boiling point and boiling range | No 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 limits  | No data available |                         |
| Lower flammability or explosive limits  | No data available |                         |
| Vapour pressure                         | No data available | None known              |
| Relative vapour density                 | No data available | None known              |
| Relative density                        | No data available | None known              |
| Water solubility                        | Miscible in water |                         |
| Solubility(ies)                         | No data available | None known              |
| Partition coefficient                   | No data available | None known              |
| Autoignition temperature                | No data available | None known              |
| Decomposition temperature               |                   | None known              |
| Kinematic viscosity                     | No data available | None known              |
| Dynamic viscosity                       | No data available | None known              |

Other information No information available

## SECTION 10: Stability and reactivity

### Reactivity

**Reactivity** No information available.

### Chemical stability

**Stability** Stable under normal conditions.

### Explosion data

**Sensitivity to mechanical impact** None.

**Sensitivity to static discharge** None.

**Possibility of hazardous reactions** 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

### 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 related to the physical, chemical and toxicological characteristics

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

### Acute toxicity

#### Numerical measures of toxicity

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

|                               |                 |
|-------------------------------|-----------------|
| ATEmix (oral)                 | 46,067.40 mg/kg |
| ATEmix (dermal)               | 74,906.40 mg/kg |
| ATEmix (inhalation-dust/mist) | 156.479 mg/l    |

#### Component Information

| Chemical name  | Oral LD50            | Dermal LD50         | Inhalation LC50                      |
|----------------|----------------------|---------------------|--------------------------------------|
| Water          | > 90 mL/kg ( Rat )   |                     |                                      |
| Benzyl alcohol | = 1230 mg/kg ( Rat ) | = 2 g/kg ( Rabbit ) | > 4178 mg/m <sup>3</sup> ( Rat ) 4 h |

### 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                 | Classification not possible.                                      |

## SECTION 12: Ecological information

**Ecotoxicity**

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

**Unknown aquatic toxicity** Contains 0 % of components with unknown hazards to the aquatic environment

| Chemical name  | Algae/aquatic plants | Fish  | Crustacea                       |
|----------------|----------------------|---|---------------------------------|
| Benzyl alcohol | -                    | LC50: =460mg/L (96h, Pimephales promelas)<br>LC50: =10mg/L (96h, Lepomis macrochirus) | EC50: =23mg/L (48h, water flea) |

**Persistence and degradability**

**Persistence and degradability** No information available.

**Bioaccumulative potential**

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

| Chemical name  | Partition coefficient |
|----------------|-----------------------|
| Benzyl alcohol | 1.05                  |

**Mobility**

**Mobility in soil** No information available.

**PBT and vPvB assessment** No information available

| Chemical name  | PBT and vPvB assessment         |
|----------------|---------------------------------|
| Benzyl alcohol | The substance is not PBT / vPvB |

**Other adverse effects**

**Other adverse effects** No information available

**SECTION 13: Disposal considerations****Disposal methods**

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

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

**SECTION 14: Transport information****IMDG**

Not regulated

**Transport in bulk according to Annex II of MARPOL and the IBC Code** No information available

**IATA**

Not regulated

**SECTION 15: Regulatory information**

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



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**Poison**

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World Health Organization

**Label elements**

P273 - Avoid release to the environment

P501 - Dispose of contents/container in accordance with local, regional, national, and international regulations as applicable

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