

# SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of: GB/T 16483-2008, GB/T 17519-2013

Product Name Native IMAC Lysis/Bind Buffer

Revision date 11-Oct-2022 **Revision Number** 3

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

**Product identifier** 

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

Catalogue Number(s) 6200205, 10005915

Other means of identification

Pure substance/mixture Mixture

Details of the supplier of the safety data sheet

**Corporate Headquarters** 

Bio-Rad Laboratories Inc. 1000 Alfred Nobel Drive 2000 Alfred Nobel Drive

Hercules, CA 94547 Hercules, California 94547 USA USA

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

1st and 2nd Floor, Lumpini 1 Building 239/2, Rajdamri Road, Lumpini, Pathumwan, Bangkok 10330

**Legal Entity / Contact Address** 

Thailand

**Technical Service** +66 2 652 8313

ctsthailand@bio-rad.com

Emergency telephone number

24 Hour Emergency Phone Number CHEMTREC Hong Kong: 800-968-793

Recommended use of the chemical and restrictions on use

Recommended use Laboratory chemicals

## SECTION 2: Hazards identification

## **Emergency Overview**

Irritating to skin

Appearance aqueous solution Physical state Liquid **Odour** Odourless

#### Classification of the substance or mixture

Skin corrosion/irritation	Category 3
Reproductive toxicity	Category 1B

## Label elements

Review Date 11-Oct-2022



Signal word

Danger

### **Hazard statements**

Causes mild skin irritation

May damage fertility or the unborn child

### **Precautionary statements**

#### Prevention

Wear protective gloves/protective clothing/eye protection/face protection

#### Response

IF exposed or concerned: Get medical advice/attention If skin irritation occurs: Get medical advice/attention

#### Disposal

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

#### Physical and chemical hazards

Not applicable.

#### **Health hazards**

Immediate Health Effects: Causes skin irritation (pain, redness and swelling).

Chronic effects: Contains a known or suspected reproductive toxin.

### **Environmental hazards**

Not applicable

### Other hazards which do not result in classification

Not applicable

## SECTION 3: Composition/information on ingredients

## Substance

Not applicable.

## <u>Mixture</u>

Chemical name	Weight-%	CAS No
Potassium chloride	2.5 - 5	7447-40-7
1-Imidazole	0.1 - 0.299	288-32-4

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

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

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

**Inhalation** Remove to fresh air.

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

Consult a doctor.

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

**Ingestion** Rinse mouth thoroughly with water.

Most important symptoms and effects, both acute and delayed

Prolonged contact may cause redness and irritation.

For emergency responders No information available.

**Note to doctors** Treat symptomatically.

## **SECTION 5: Firefighting measures**

**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

No information available.

Special protective actions for

fire-fighters

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

Use personal protection equipment.

## SECTION 6: Accidental release measures

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

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

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

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

Methods and material for containment and cleaning up

Prevent further leakage or spillage if safe to do so. Pick up and transfer to properly labelled

containers.

Precautions to prevent secondary

hazards

Clean contaminated objects and areas thoroughly observing environmental regulations.

## SECTION 7: Handling and storage

<u>Precautions for safe handling</u> 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. Remove contaminated clothing and shoes. Do not eat, drink or smoke when using this product. Wash hands before breaks and immediately after handling the product. See Section 8 for

information on appropriate personal protective equipment.

Conditions for safe storage, including any incompatibilities

Store locked up. Store according to product and label instructions.

Incompatible materials None known based on information supplied.

## SECTION 8: Exposure controls/personal protection

### Occupational exposure limits

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

See section 16 for terms and abbreviations Note

#### Biological occupational exposure limits

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

### Monitoring and observation processes

No applicable information was found.

Showers **Engineering controls** 

> Eyewash stations Ventilation systems.

## Individual protection measures, such as personal protective equipment

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

Wear suitable protective clothing. Skin and body protection

Hand protection Wear suitable gloves.

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

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

General hygiene considerations Do not eat, drink or smoke when using this product. Wash hands before breaks and

immediately after handling the product.

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

### Information on basic physical and chemical properties

aqueous solution **Appearance** Colour colourless Physical state Liquid Odour Odourless

**Odour threshold** No information available

Property Values Remarks • Method

pН

Melting point / freezing point No data available None known No data available Boiling point / boiling range None known Flash point No data available None known **Evaporation rate** No data available None known Flammability (solid, gas) No data available None known Flammability Limit in Air None known

Upper flammability or explosive No data available

limits

Lower flammability or explosive No data available

limits

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

Page 4/8

No data available None known Relative density 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 No data available **Decomposition temperature** None known No data available None known Kinematic viscosity Dynamic viscosity No data available None known

Additional information

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

## SECTION 10: Stability and reactivity

Stable under normal conditions. **Stability** 

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

Sensitivity to mechanical impact None. Sensitivity to static discharge

Conditions to avoid None known based on information supplied.

Incompatible materials None known based on information supplied.

Hazardous decomposition products None known based on information supplied.

## SECTION 11: Toxicological information

Acute toxicity

Numerical measures of toxicity

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

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

**Component Information** 

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Potassium chloride	= 2600 mg/kg (Rat)	-	-
1-Imidazole	= 220 mg/kg ( Rat )	-	-

Skin corrosion/irritation Classification based on data available for ingredients. May cause skin irritation.

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

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

Contains a known or suspected reproductive toxin. Classification based on data available Reproductive toxicity

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

Germ cell mutagenicity

for ingredients. May damage fertility or the unborn child.

Specific target organ toxicity —

single exposure

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

Specific target organ toxicity —

repeated exposure

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

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

## **SECTION 12: Ecological information**

### **Ecotoxicity**

Unknown aquatic toxicity

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

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

<u>Persistence and degradability</u> No information available.

**Bioaccumulative potential**There is no data for this product.

**Component Information** 

Chemical name	Partition coefficient
1-Imidazole	-0.02

Mobility in soil No information available.

## **SECTION 13: Disposal considerations**

<u>Waste chemicals</u> Dispose of in accordance with local regulations. Dispose of waste in accordance with

environmental legislation.

<u>Contaminated packaging</u> Do not reuse empty containers.

## **SECTION 14: Transport information**

<u>IMDG</u> Not regulated

Transport in bulk according to No information available

Annex II of MARPOL and the IBC

Code

<u>IATA</u> Not regulated

China Not regulated

Special precautions for user

Please refer to the applicable dangerous goods regulations for additional information

## **SECTION 15: Regulatory information**

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

### **National regulations**

Law of the People's Republic of China on Prevention and Control of Occupational Diseases

Catalogue of occupational hazard factors:

Catalogue of occupational diseases:

Not applicable.

Not applicable.

Regulations on the Control over Safety of Hazardous Chemicals

Inventory of hazardous chemicals Not applicable.

GB 18218-2009 Identification of major hazard installations for dangerous chemicals Not applicable

List of hazardous chemicals under priority management Not applicable

Regulations on Labour Protection in Workplaces Where Toxic Substances Are Used

Inventory of highly toxic goods Not applicable

Regulations for Environmental Management on the First Import of Chemicals and the Import and Export of Toxic Chemicals

List of toxic chemicals severely restricted for import and export in China Not applicable

Measures for the Environmental Management of New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances 
Contact supplier for inventory compliance status.

International Regulations

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

The Stockholm Convention on Persistent Organic Pollutants Not applicable

The Rotterdam Convention Not applicable

## **SECTION 16: Other information**

Prepared By Bio-Rad Laboratories, Environmental Health and Safety

Revision date 11-Oct-2022

**Revision Note** Significant changes throughout SDS. Review all sections.

Abbreviations and acronyms

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

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

Ceiling Maximum limit value \* Skin designation

C Carcinogen

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

Agency for Toxic Substances and Disease Registry (ATSDR) U.S. Environmental Protection Agency ChemView Database

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

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

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

U.S. Environmental Protection Agency High Production Volume Chemicals

GHS / BE Page 7/8

Food Research Journal

Hazardous Substance Database

International Uniform Chemical Information Database (IUCLID)

Japan GHS Classification

Australia 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)

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

Organization for Economic Co-operation and Development High Production Volume Chemicals Program

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

RTECS (Registry of Toxic Effects of Chemical Substances)

World Health Organization

#### **Disclaimer**

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

**End of Safety Data Sheet**