KIT SAFETY DATA SHEET



Kit Product Name Bio-Plex Pro Acute Phase Kit

Kit Catalogue Number(s) 171A4009M, 171A4010M, 171A4007M, 171A4008M

Revision date 15-Aug-2023

Kit Contents

Catalogue Number(s)	Product Name
10010154, 10010155	Bio-Plex Acute Phase Standard/Control
10010148, 10010149, 10010889, 10010890	Bio-Plex Pro Coupled Magnetic Beads (25x)
10010150, 10010151, 10010891, 10010892	Bio-Plex Pro Detection Antibody

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SAFETY DATA SHEET

Legal Entity / Contact Address

239/2, Rajdamri Road, Lumpini, Pathumwan, Bangkok 10330

Thailand

1st and 2nd Floor, Lumpini 1 Building

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

Product Name Bio-Plex Acute Phase Standard/Control

Revision date 09-Aug-2023 **Revision Number** 1.2

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

Product identifier

Product Name Bio-Plex Acute Phase Standard/Control

Catalogue Number(s) 10010154, 10010155

Other means of identification

Mixture Pure substance/mixture

Details of the supplier of the safety data sheet

Corporate Headquarters Manufacturer Bio-Rad Laboratories Inc. Bio-Rad Laboratories, Life Science Group Bio-Rad Laboratories Ltd.

1000 Alfred Nobel Drive 2000 Alfred Nobel Drive Hercules, CA 94547 Hercules, California 94547

USA USA

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

No significant adverse health effects

Appearance powder or cake, lyophilised **Odour** Odourless Physical state Solid

Classification of the substance or mixture

Category 5 Acute toxicity - Oral

Label elements

Signal word Warning

Hazard statements

May be harmful if swallowed

Precautionary statements

Physical and chemical hazards

Not applicable.

Health hazards

Immediate Health Effects: If large quantities of this material are swallowed, call a doctor immediately. If symptoms persist, call a

doctor.

Chronic effects: Not applicable.

Environmental hazards

Not applicable

Other hazards which do not result in classification

Not applicable

SECTION 3: Composition/information on ingredients

Substance

Not applicable.

Mixture

Chemical name	Weight-%	CAS No
Trade secret	5 - 10	-

SECTION 4: First aid measures

Description of necessary first aid measures

General advice No hazards which require special first aid measures.

Inhalation Remove to fresh air.

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

Consult a doctor.

Skin contact Wash skin with soap and water.

Ingestion Rinse mouth thoroughly with water.

Most important symptoms and effects, both acute and delayed

No information available.

For emergency responders No information available.

Note to doctors Treat symptomatically.

SECTION 5: Firefighting measures

Extinguishing media

surrounding environment.

Unsuitable extinguishing media No information available.

Specific hazards arising from the

No information available.

chemical

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.

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

Precautions for safe handling Handle in accordance with good industrial hygiene and safety practice. See Section 8 for

information on appropriate personal protective equipment.

Conditions for safe storage, including any incompatibilities

Store according to product and label instructions.

Incompatible materialsNone 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.

Note See section 16 for terms and abbreviations

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.

Engineering controls Showers

Eyewash stations Ventilation systems.

Individual protection measures, such as personal protective equipment

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

Skin and body protection Wear suitable protective clothing.

Hand protection Wear suitable gloves.

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

None known

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

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance powder or cake, lyophilised

Colour white
Physical state Solid
Odour Odourless

Odour threshold No information available

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

pHNone knownMelting point / freezing pointNo data availableNone known

Boiling point / boiling range1461 °CFlash pointNo data availableNone knownEvaporation rateNo data availableNone knownFlammability (solid, gas)No data availableNone known

Flammability Limit in Air

Upper flammability or explosive No data available limits

Lower flammability or explosive No data available

limits

Vapour pressureNo data availableNone knownVapour densityNo data availableNone knownRelative densityNo data availableNone known

Water solubility
Solubility(ies)
No data available
No data available

None known **Partition coefficient** No data available None known No data available None known **Autoignition temperature Decomposition temperature** No data available 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

Stability Stable under normal conditions.

Possibility of hazardous reactions
None under normal processing.

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

<u>Conditions to avoid</u> None known based on information supplied.

Incompatible materialsNone 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) 3,129.50 mg/kg

Unknown acute toxicity

90.112 % of the mixture consists of ingredient(s) of unknown acute oral toxicity

Component Information

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

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. 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 Specific target organ toxicity — Based on available data, the classification criteria are not met. single exposure Based on available data, the classification criteria are not met. Specific target organ toxicity repeated exposure

SECTION 12: Ecological information

Ecotoxicity

Aspiration hazard

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

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

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

No information available.

Persistence and degradability No information available.

Mobility in soil No information available.

SECTION 13: Disposal considerations

Bioaccumulative potential

Product Name Bio-Plex Acute Phase Standard/Control

Revision date 09-Aug-2023

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

environmental legislation.

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

<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: Not applicable. Catalogue of occupational diseases: Not applicable.

Regulations on the Control over Safety of Hazardous Chemicals

Not applicable. Inventory of hazardous chemicals

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

Bio-Rad Laboratories, Environmental Health and Safety Prepared By

Revision Note Reformatted and updated existing information.

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

Food Research Journal

Hazardous Substance Database

International Uniform Chemical Information Database (IUCLID)

Japan GHS Classification

Australian National Industrial Chemicals Notification and Assessment Scheme (NICNAS)

NIOSH (National Institute for Occupational Safety and Health)

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

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

National Toxicology Program (NTP)

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

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

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

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

RTECS (Registry of Toxic Effects of Chemical Substances)

World Health Organization

Disclaimer

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

End of Safety Data Sheet



SAFETY DATA SHEET

Legal Entity / Contact Address

Pathumwan, Bangkok 10330

Thailand

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

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

Product Name Bio-Plex Pro Coupled Magnetic Beads (25x)

Revision date 09-Aug-2023

Revision Number 1

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

Product identifier

Product Name Bio-Plex Pro Coupled Magnetic Beads (25x)

10010148, 10010149, 10010889, 10010890 Catalogue Number(s)

Other means of identification

Mixture Pure substance/mixture

Details of the supplier of the safety data sheet

Corporate Headquarters Manufacturer Bio-Rad Laboratories Inc. Bio-Rad Laboratories, Life Science Group Bio-Rad Laboratories Ltd.

1000 Alfred Nobel Drive 2000 Alfred Nobel Drive Hercules, CA 94547 Hercules, California 94547

USA USA

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

No significant adverse health effects

Appearance Dilute bead suspension in Physical state Liquid **Odour** Odourless

aqueous solution

Classification of the substance or mixture

Not classified

Label elements

Hazard statements

Not classified

Physical and chemical hazards

Product Name Bio-Plex Pro Coupled Magnetic Beads

(25x)

Revision date 09-Aug-2023

Not applicable.

Health hazards

Immediate Health Effects: Not applicable.

Chronic effects: Not applicable.

Environmental hazards

Not applicable

Other hazards which do not result in classification

Contains animal source material (Cattle)

SECTION 3: Composition/information on ingredients

Substance

Not applicable.

Mixture

Not classified.

SECTION 4: First aid measures

Description of necessary first aid measures

General advice No hazards which require special first aid measures.

Inhalation Remove to fresh air.

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

Consult a doctor.

Skin contact Wash skin with soap and water.

Ingestion Rinse mouth thoroughly with water.

Most important symptoms and effects, both acute and delayed

No information available.

<u>For emergency responders</u> No information available.

Note to doctorsTreat symptomatically.

SECTION 5: Firefighting measures

Extinguishing media

surrounding environment.

Unsuitable extinguishing media No information available.

Specific hazards arising from the

chemical_

No information available.

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

Product Name Bio-Plex Pro Coupled Magnetic Beads

(25x)

fire-fighters Use personal protection equipment.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions See section 8 for more information.

For emergency responders

Use personal protection recommended in Section 8.

Environmental precautionsSee 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

Revision date 09-Aug-2023

containers.

Precautions to prevent secondary

hazards

Clean contaminated objects and areas thoroughly observing environmental regulations.

SECTION 7: Handling and storage

Precautions for safe handling Handle in accordance with good industrial hygiene and safety practice. See Section 8 for

information on appropriate personal protective equipment.

Conditions for safe storage, including any incompatibilities

Store according to product and label instructions.

Incompatible materialsNone 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.

Note See section 16 for terms and abbreviations

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.

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 protectionWear suitable protective clothing.

Hand protection Wear suitable gloves.

 (25%)

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

Revision date 09-Aug-2023

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

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance Dilute bead suspension in aqueous solution

Colour colourless
Physical state Liquid
Odour Odourless

Odour threshold No information available

PropertyValuesRemarks • MethodpH7.4

Melting point / freezing point No data available None known

Boiling point / boiling range 100 °C

Flash point

Evaporation rate

No data available

None known
No data available

None known
No data available

None known
None known
None known
None known
None known

Upper flammability or explosive No data available

limits

Lower flammability or explosive No data available

limits

Vapour pressure No data available None known Vapour density No data available None known Relative density No data available None known Water solubility Partially miscible Solubility(ies) No data available None known Partition coefficient No data available None known Autoignition temperature No data available None known **Decomposition temperature** No data available None known Kinematic viscosity No data available None known Dynamic viscosity No data available None known

Additional information

Explosive properties Not applicable
Oxidising properties Not applicable

SECTION 10: Stability and reactivity

<u>Stability</u> Stable under normal conditions.

<u>Possibility of hazardous reactions</u> None under normal processing.

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

<u>Conditions to avoid</u> None known based on information supplied.

<u>Incompatible materials</u> 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

(25x)

Component Information

Skin corrosion/irritationBased 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 mutagenicityBased on available data, the classification criteria are not met.

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

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

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

SECTION 12: Ecological information

Ecotoxicity

Unknown aquatic toxicity 0.0795 % of the mixture consists of component(s) of unknown hazards to the aquatic

environment

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

Bioaccumulative potential No information available.

Mobility in soil No information available.

SECTION 13: Disposal considerations

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

environmental legislation.

Contaminated packaging Do not reuse empty containers.

SECTION 14: Transport information

IMDG Not regulated

Transport in bulk according to No information available

Annex II of MARPOL and the IBC

Code

IATA Not regulated

China Not regulated

Product Name Bio-Plex Pro Coupled Magnetic Beads

(25x)

Revision date 09-Aug-2023

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 09-Aug-2023

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

Food Research Journal

Hazardous Substance Database

International Uniform Chemical Information Database (IUCLID)

Japan GHS Classification

Australian National Industrial Chemicals Notification and Assessment Scheme (NICNAS)

NIOSH (National Institute for Occupational Safety and Health)

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

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

National Toxicology Program (NTP)

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

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

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

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

RTECS (Registry of Toxic Effects of Chemical Substances)

World Health Organization

Disclaimer

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End of Safety Data Sheet



SAFETY DATA SHEET

Legal Entity / Contact Address

Pathumwan, Bangkok 10330

Thailand

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

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

Product Name Bio-Plex Pro Detection Antibody

Revision date 15-Aug-2023

Revision Number 1

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

Product identifier

Product Name Bio-Plex Pro Detection Antibody

Catalogue Number(s) 10010150, 10010151, 10010891, 10010892

Other means of identification

Mixture Pure substance/mixture

Details of the supplier of the safety data sheet

Corporate Headquarters Manufacturer Bio-Rad Laboratories Inc. Bio-Rad Laboratories, Life Science Group Bio-Rad Laboratories Ltd.

1000 Alfred Nobel Drive 2000 Alfred Nobel Drive Hercules, CA 94547 Hercules, California 94547

USA USA

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

No significant adverse health effects

Odour Odourless Physical state Liquid Appearance aqueous solution

Classification of the substance or mixture

Not classified

Label elements

Hazard statements

Not classified

Page 16 / 22

Physical and chemical hazards

Not applicable.

Health hazards

Immediate Health Effects: Not applicable.

Chronic effects: Not applicable.

Environmental hazards

Not applicable

Other hazards which do not result in classification

Contains animal source material (Cattle)

SECTION 3: Composition/information on ingredients

Substance

Not applicable.

Mixture

Not classified.

SECTION 4: First aid measures

Description of necessary first aid measures

General advice No hazards which require special first aid measures.

Inhalation Remove to fresh air.

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

Consult a doctor.

Skin contact Wash skin with soap and water.

Ingestion Rinse mouth thoroughly with water.

Most important symptoms and

effects, both acute and delayed

No information available.

For emergency responders No information available.

Note to doctorsTreat symptomatically.

SECTION 5: Firefighting measures

Extinguishing media

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.

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

Precautions for safe handling Handle in accordance with good industrial hygiene and safety practice. See Section 8 for

information on appropriate personal protective equipment.

Conditions for safe storage, including any incompatibilities

Store according to product and label instructions.

Incompatible materialsNone 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.

Note See section 16 for terms and abbreviations

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.

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 protectionWear suitable protective clothing.

Hand protection Wear suitable gloves.

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

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

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance aqueous solution
Colour colourless
Physical state Liquid
Odour Odourless

Odour threshold No information available

Property Values Remarks • Method

pH 7.4

Melting point / freezing point 0 °C

Boiling point / boiling range 100 °C

Flash pointNo data availableNone knownEvaporation rateNo data availableNone knownFlammability (solid, gas)No data availableNone knownFlammability Limit in AirNone known

Upper flammability or explosive No data available

limits

Lower flammability or explosive No data available

limits

Vapour pressureNo data availableNone knownVapour densityNo data availableNone knownRelative densityNo data availableNone knownWater solubilityMiscible in water

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

Additional information

Explosive properties Not applicable Oxidising properties Not applicable

SECTION 10: Stability and reactivity

Stability Stable under normal conditions.

<u>Possibility of hazardous reactions</u> None under normal processing.

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

<u>Conditions to avoid</u> None known based on information supplied.

<u>Incompatible materials</u> 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

Component Information

Skin corrosion/irritationBased 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 toxicityBased on available data, the classification criteria are not met.

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

SECTION 12: Ecological information

Ecotoxicity

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

environment

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

Bioaccumulative potential No information available.

Mobility in soil No information available.

SECTION 13: Disposal considerations

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

environmental legislation.

Contaminated packaging Do not reuse empty containers.

SECTION 14: Transport information

IMDG 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

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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

Food Research Journal

Hazardous Substance Database

International Uniform Chemical Information Database (IUCLID)

Japan GHS Classification

Australian National Industrial Chemicals Notification and Assessment Scheme (NICNAS)

NIOSH (National Institute for Occupational Safety and Health)

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

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

National Toxicology Program (NTP)

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

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

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

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

RTECS (Registry of Toxic Effects of Chemical Substances)

World Health Organization

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End of Safety Data Sheet