

# KIT SAFETY DATA SHEET



**Kit Product Name** Bio-Plex Pro Human Cytokine Screening Panel, Singleplex Kit

**Kit Catalogue Number(s)** 171B5001M, 171B5002M, 171B5003M, 171B5004M, 171B5005M, 171B5006M, 171B5007M, 171B5008M, 171B5009M, 171B5010M, 171B5011M, 171B5012M, 171B5013M, 171B5014M, 171B5015M, 171B5016M, 171B5017M, 171B5018M, 171B5019M, 171B5020M, 171B5021M, 171B5022M, 171B5023M, 171B5024M, 171B5025M, 171B5026M, 171B5027M, 171B6001M, 171B6002M, 171B6003M, 171B6004M, 171B6005M, 171B6006M, 171B6007M, 171B6008M, 171B6009M, 171B6010M, 171B6011M, 171B6012M, 171B6013M, 171B6014M, 171B6015M, 171B6016M, 171B6017M, 171B6018M, 171B6019M, 171B6020M, 171B6021M, 171B6022M, 171B6023M

**Revision date** 19-Oct-2021

## Kit Contents

Catalogue Number(s)	Product Name
10014716, 10014717, 10014718, 10014719, 10014720, 10014721, 10014722, 10014723, 10014724, 10014725, 10014726, 10014727, 10014728, 10014729, 10014730, 10014731, 10014732, 10014733, 10014734, 10014735, 10014736, 10014737, 10014738, 10014739, 10014740, 10014741, 10014742, 10014743, 10014744, 10014745, 10014746, 10014747, 10014748, 10014749, 10014750, 10014751, 10014752, 10014753, 10014754, 10014755, 10014756, 10014757, 10014758, 10014759, 10014760, 10014761, 10014762, 10014763, 10014764, 10015032	Bio-Plex Pro Human Cytokine Screening Panel, Bead Blend Singleplex
10014945, 10014946, 10014947, 10014948, 10014949, 10014950, 10014951, 10014952, 10014953, 10014954, 10014955, 10014956, 10014957, 10014958, 10014959, 10014960, 10014961, 10014962, 10014963, 10014964, 10014965, 10014966, 10014967, 10014968, 10014969, 10014970, 10014971, 10014972, 10014973, 10014974, 10014975, 10014976, 10014977, 10014978, 10014979, 10014980, 10014981, 10014982, 10014983, 10014984, 10014985, 10014986, 10014987, 10014988, 10014989, 10014990, 10014991, 10014992, 10014993, 10015073	Bio-Plex Pro Human Cytokine Screening Panel, Detection Antibodies Blend Singleplex



# SAFETY DATA SHEET

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

Revision date 25-Mar-2021

Revision Number 1

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

### Product identifier

**Product Name** Bio-Plex Pro Human Cytokine Screening Panel, Bead Blend Singleplex

### Other means of identification

**Catalogue Number(s)** 10014716, 10014717, 10014718, 10014719, 10014720, 10014721, 10014722, 10014723, 10014724, 10014725, 10014726, 10014727, 10014728, 10014729, 10014730, 10014731, 10014732, 10014733, 10014734, 10014735, 10014736, 10014737, 10014738, 10014739, 10014740, 10014741, 10014742, 10014743, 10014744, 10014745, 10014746, 10014747, 10014748, 10014749, 10014750, 10014751, 10014752, 10014753, 10014754, 10014755, 10014756, 10014757, 10014758, 10014759, 10014760, 10014761, 10014762, 10014763, 10014764, 10015032

**Pure substance/mixture** Mixture

Contains 5-Chloro-2-methyl-3(2H)-isothiazolone, mixture with 2-methyl-3(2H)-isothiazolone

### 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

#### Manufacturer

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

#### Legal Entity / Contact Address

Bio-Rad Laboratories Ltd.  
1st and 2nd Floor, Lumpini 1 Building  
239/2, Rajdamri Road, Lumpini,  
Pathumwan, Bangkok 10330  
Thailand

For further information, please contact

**Technical Service** +66 2 652 8313  
ctsthailand@bio-rad.com

### Emergency telephone number

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

## SECTION 2: Hazards identification

### GHS Classification

**Skin sensitization**

Category 1A

### Label elements



**Signal word**

Warning

**Hazard statements**

H317 - May cause an allergic skin reaction

**Precautionary Statements - Prevention**

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

Contaminated work clothing should not be allowed out of the workplace

Wear protective gloves

**Precautionary Statements - Response**

If skin irritation or rash occurs: Get medical advice/attention

Take off all contaminated clothing and wash it before reuse

IF ON SKIN: Wash with plenty of water and soap

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Other hazards which do not result in classification**

### SECTION 3: Composition/information on ingredients

**Substance**

Not applicable

**Mixture**

Chemical name	EC No	CAS No	Weight-%
Water	231-791-2	7732-18-5	50 - 100
Magnetic Beads	-	NO-CAS-23	20 - 35
Trade secret	.?	-	2.5 - 5
Trade secret	.?	-	2.5 - 5
Trade secret	.?	-	1 - 2.5
Modified Glycol	-	NO-CAS-54	0.1 - 0.299
Trade secret	No information available	-	0.1 - 0.299
Trade secret	.?	-	0.1 - 0.299
Antibodies	-	NO-CAS-81	0.1 - 0.299
5-Chloro-2-methyl-3(2H)-isothiazolone, mixture with 2-methyl-3(2H)-isothiazolone	-	55965-84-9	0.001 - 0.01
Modified alkyl carboxylate	-	NO-CAS-53	0.001 - 0.01

Non-hazardous ingredients

Proprietary

Balance

### SECTION 4: First aid measures

**Description of first aid measures**

**General advice**

Show this safety data sheet to the doctor in attendance.

**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 physician.

**Skin contact** Wash with soap and water. May cause an allergic skin reaction. In the case of skin irritation or allergic reactions see a physician.

**Ingestion** Rinse mouth thoroughly with water.

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

**Symptoms** Itching. Rashes. Hives.

**For emergency responders**

**Self-protection of the first aider** No information available.

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

**Note to physicians** May cause sensitization in susceptible persons. 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** Product is or contains a sensitizer. May cause sensitization by skin contact.

**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. Ensure adequate ventilation. Use personal protective equipment as required. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

**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 labeled 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. Ensure adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash before reuse.

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

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

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

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

### **Control parameters**

#### **Occupational exposure limits**

#### **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>	Suspension
<b>Colour</b>	colourless
<b>Odour</b>	Odourless.
<b>Odour threshold</b>	No information available

<b><u>Property</u></b>	<b><u>Values</u></b>	<b><u>Remarks • Method</u></b>
pH		None known

<b>Melting point / freezing point</b>	No data available	None known
<b>Boiling point / boiling range</b>	100 °C	
<b>Flash point</b>	No data available	None known
<b>Evaporation rate</b>	No data available	None known
<b>Flammability (solid, gas)</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>Vapour density</b>	No data available	None known
<b>Relative density</b>	No data available	None known
<b>Water solubility</b>	Partially miscible	
<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**

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

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

**Skin contact** May cause sensitization by skin contact. Specific test data for the substance or mixture is not available. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons. (based on components).

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

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

**Symptoms** Itching. Rashes. Hives.

**Acute toxicity**

**Numerical measures of toxicity**

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

**ATEmix (oral)** 39,855.00 mg/kg

**Component Information**

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Water	> 90 mL/kg ( Rat )		
Trade secret	= 3 g/kg ( Rat )	> 10 g/kg ( Rabbit )	> 42 g/m <sup>3</sup> ( Rat ) 1 h
Trade secret	= 5900 mg/kg ( Rat )		
Trade secret	> 3 g/kg ( Rat )		
Trade secret	= 37000 mg/kg ( Rat ) = 36700 µL/kg ( Rat )		
5-Chloro-2-methyl-3(2H)-isothiazolone, mixture with 2-methyl-3(2H)-isothiazolone	= 53 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 sensitization** May cause sensitization by skin contact.

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

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

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

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

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

**Aspiration hazard** 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
Trade secret	-	LC50: 4747 - 7824mg/L (96h, Oncorhynchus mykiss) LC50: 5560 - 6080mg/L (96h, Lepomis macrochirus) LC50: 6020 - 7070mg/L (96h, Pimephales promelas) LC50: 6420 - 6700mg/L (96h, Pimephales promelas) LC50: =12946mg/L (96h, Lepomis macrochirus) LC50: =7050mg/L (96h, Pimephales promelas)	EC50: 340.7 - 469.2mg/L (48h, Daphnia magna) EC50: =1000mg/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**

Chemical name	PBT and vPvB assessment
Trade secret	The substance is not PBT / vPvB PBT assessment does not apply
Trade secret	The substance is not PBT / vPvB
Trade secret	The substance is not PBT / vPvB PBT assessment does not apply
5-Chloro-2-methyl-3(2H)-isothiazolone, mixture with 2-methyl-3(2H)-isothiazolone	The substance is not PBT / vPvB

**Other adverse effects**

**Other adverse effects** No information available

**SECTION 13: Disposal considerations**

**Waste treatment methods**

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

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

**SECTION 14: Transport information**

**ADR** Not regulated

**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 Protection and Management (Hazardous Substances) Regulations**

Verify that licence requirements are met.

##### **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**

See section 8 for national exposure control parameters. 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**

P333 + P313 - If skin irritation or rash occurs: Get medical advice/attention  
P273 - Avoid release to the environment  
P302 + P352 - IF ON SKIN: Wash with plenty of soap and water  
P501 - Dispose of contents/container in accordance with local, regional, national, and international regulations as applicable  
P280 - Wear protective gloves/protective clothing/eye protection/face protection

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

**Revision date** 25-Mar-2021

**Revision Note** SDS sections updated, 1.

**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 25-Mar-2021

Revision Number 1

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

### Product identifier

**Product Name** Bio-Plex Pro Human Cytokine Screening Panel, Detection Antibodies Blend Singleplex

### Other means of identification

**Catalogue Number(s)** 10014945, 10014946, 10014947, 10014948, 10014949, 10014950, 10014951, 10014952, 10014953, 10014954, 10014955, 10014956, 10014957, 10014958, 10014959, 10014960, 10014961, 10014962, 10014963, 10014964, 10014965, 10014966, 10014967, 10014968, 10014969, 10014970, 10014971, 10014972, 10014973, 10014974, 10014975, 10014976, 10014977, 10014978, 10014979, 10014980, 10014981, 10014982, 10014983, 10014984, 10014985, 10014986, 10014987, 10014988, 10014989, 10014990, 10014991, 10014992, 10014993, 10015073

**Pure substance/mixture** Mixture

Contains 5-Chloro-2-methyl-3(2H)-isothiazolone, mixture with 2-methyl-3(2H)-isothiazolone

### 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

#### Manufacturer

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

#### Legal Entity / Contact Address

Bio-Rad Laboratories Ltd.  
1st and 2nd Floor, Lumpini 1 Building  
239/2, Rajdamri Road, Lumpini,  
Pathumwan, Bangkok 10330  
Thailand

For further information, please contact

**Technical Service** +66 2 652 8313  
ctsthailand@bio-rad.com

### Emergency telephone number

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

## SECTION 2: Hazards identification

### GHS Classification

**Skin sensitization**

Category 1A

### Label elements



**Signal word**

Warning

**Hazard statements**

H317 - May cause an allergic skin reaction

**Precautionary Statements - Prevention**

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

Contaminated work clothing should not be allowed out of the workplace

Wear protective gloves

**Precautionary Statements - Response**

If skin irritation or rash occurs: Get medical advice/attention

Take off all contaminated clothing and wash it before reuse

IF ON SKIN: Wash with plenty of water and soap

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Other hazards which do not result in classification**

## SECTION 3: Composition/information on ingredients

**Substance**

Not applicable

**Mixture**

Chemical name	EC No	CAS No	Weight-%
Water	231-791-2	7732-18-5	50 - 100
Animal Source Antibody	-	NO-CAS-90	10 - 20
Trade secret	.?	-	0.3 - 0.999
Sodium phosphate dibasic	231-448-7	7558-79-4	0.1 - 0.299
Modified Glycol	-	NO-CAS-54	0.1 - 0.299
Trade secret	.?	-	0.1 - 0.299
Trade secret	.?	-	0.01 - 0.099
Sodium azide	247-852-1	26628-22-8	0.01 - 0.099
Trade secret	.?	-	0.001 - 0.01
Trade secret	.?	-	0.001 - 0.01
Antibodies	-	NO-CAS-81	0.001 - 0.01
5-Chloro-2-methyl-3(2H)-isothiazolone, mixture with 2-methyl-3(2H)-isothiazolone	-	55965-84-9	0.001 - 0.01
Modified alkyl carboxylate	-	NO-CAS-53	0.001 - 0.01
Animal Source Material (Mouse)	-	NO-CAS-46	< 0.001
Animal Source Material (Goat)	-	NO-CAS-17	< 0.001
Animal Source Material (Cattle)	-	NO-CAS-44	< 0.001

Non-hazardous  
ingredients

Proprietary

Balance

## SECTION 4: First aid measures

**Description of first aid measures**

<b>General advice</b>	Show this safety data sheet to the doctor in attendance.
<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 physician.
<b>Skin contact</b>	Wash with soap and water. May cause an allergic skin reaction. In the case of skin irritation or allergic reactions see a physician.
<b>Ingestion</b>	Rinse mouth thoroughly with water.

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

<b>Symptoms</b>	Itching. Rashes. Hives.
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**For emergency responders**

<b>Self-protection of the first aider</b>	No information available.
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**Indication of any immediate medical attention and special treatment needed**

<b>Note to physicians</b>	May cause sensitization in susceptible persons. Treat symptomatically.
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**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.
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<b>Unsuitable extinguishing media</b>	No information available.
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**Specific hazards arising from the chemical**

<b>Specific hazards arising from the chemical</b>	Product is or contains a sensitizer. May cause sensitization by skin contact.
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**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.
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**SECTION 6: Accidental release measures**

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

<b>Personal precautions</b>	Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal protective equipment as required. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.
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<b>For emergency responders</b>	Use personal protection recommended in Section 8.
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**Environmental precautions**

<b>Environmental precautions</b>	See Section 12 for additional Ecological Information.
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**Methods and material for containment and cleaning up**

<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 labeled 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**

**Advice on safe handling** Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash before reuse.

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

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

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

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

**Control parameters**

**Occupational exposure limits**

Chemical name	Singapore	ACGIH TLV
Sodium azide 26628-22-8	STEL: 0.29 mg/m <sup>3</sup> STEL: 0.11 ppm	Ceiling: 0.29 mg/m <sup>3</sup> Sodium azide Ceiling: 0.11 ppm Hydrazoic acid vapor

**Biological occupational exposure limits**

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

**Appropriate engineering controls**

**Engineering controls** Showers  
Eyewash stations  
Ventilation systems.

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

<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>	No information available
<b>Colour</b>	colourless
<b>Odour</b>	Odourless.
<b>Odour threshold</b>	No information available

<b><u>Property</u></b>	<b><u>Values</u></b>	<b><u>Remarks • Method</u></b>
<b>pH</b>		None known
<b>Melting point / freezing point</b>	No data available	None known
<b>Boiling point / boiling range</b>	100 °C	
<b>Flash point</b>	No data available	None known
<b>Evaporation rate</b>	No data available	None known
<b>Flammability (solid, gas)</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>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><u>Other information</u></b>	No information available	

**SECTION 10: Stability and reactivity**

**Reactivity**

<b>Reactivity</b>	No information available.
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**Chemical stability**

<b>Stability</b>	Stable under normal conditions.
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**Explosion data**

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

<b>Possibility of hazardous reactions</b>	None under normal processing.
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**Conditions to avoid**

<b>Conditions to avoid</b>	None known based on information supplied.
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**Incompatible materials**

<b>Incompatible materials</b>	None known based on information supplied.
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**Hazardous decomposition products**

<b>Hazardous decomposition products</b>	None known based on information supplied.
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**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>	May cause sensitization by skin contact. Specific test data for the substance or mixture is not available. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons. (based on components).
<b>Ingestion</b>	Specific test data for the substance or mixture is not available.

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

<b>Symptoms</b>	Itching. Rashes. Hives.
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**Acute toxicity**

**Numerical measures of toxicity**

**Component Information**

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Water	> 90 mL/kg ( Rat )		
Trade secret	= 3 g/kg ( Rat )	> 10 g/kg ( Rabbit )	> 42 g/m <sup>3</sup> ( Rat ) 1 h
Sodium phosphate dibasic	= 17 g/kg ( Rat )		
Trade secret	= 8290 mg/kg ( Rat )	> 7940 mg/kg ( Rabbit )	
Sodium azide	= 27 mg/kg ( Rat )	= 20 mg/kg ( Rabbit ) = 50 mg/kg ( Rat )	
Trade secret	= 2600 mg/kg ( Rat )		
Trade secret	= 3200 mg/kg ( Rat )	> 4640 mg/kg ( Rabbit )	
5-Chloro-2-methyl-3(2H)-isothiazolone, mixture with 2-methyl-3(2H)-isothiazolone	= 53 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 sensitization</b>	May cause sensitization by skin contact.
<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.



**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
Trade secret	-	LC50: 4747 - 7824mg/L (96h, Oncorhynchus mykiss) LC50: 5560 - 6080mg/L (96h, Lepomis macrochirus) LC50: 6020 - 7070mg/L (96h, Pimephales promelas) LC50: 6420 - 6700mg/L (96h, Pimephales promelas) LC50: =12946mg/L (96h, Lepomis macrochirus) LC50: =7050mg/L (96h, Pimephales promelas)	EC50: 340.7 - 469.2mg/L (48h, Daphnia magna) EC50: =1000mg/L (48h, Daphnia magna)
Sodium azide	-	LC50: =0.7mg/L (96h, Lepomis macrochirus) LC50: =0.8mg/L (96h, Oncorhynchus mykiss) LC50: =5.46mg/L (96h, Pimephales promelas)	-
Trade secret	EC50: =2500mg/L (72h, Desmodemus subspicatus)	LC50: 750 - 1020mg/L (96h, Pimephales promelas) LC50: =1060mg/L (96h, Lepomis macrochirus)	EC50: =825mg/L (48h, Daphnia magna) EC50: =83mg/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**

Chemical name	PBT and vPvB assessment
Trade secret	The substance is not PBT / vPvB PBT assessment does not apply
Sodium phosphate dibasic	PBT assessment does not apply
Trade secret	PBT assessment does not apply
Sodium azide	PBT assessment does not apply
Trade secret	The substance is not PBT / vPvB PBT assessment does not apply
Trade secret	The substance is not PBT / vPvB PBT assessment does

	not apply
5-Chloro-2-methyl-3(2H)-isothiazolone, mixture with 2-methyl-3(2H)-isothiazolone	The substance is not PBT / vPvB

**Other adverse effects**

**Other adverse effects** No information available

**SECTION 13: Disposal considerations**

**Waste treatment methods**

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

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

**SECTION 14: Transport information**

**ADR** Not regulated

**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 Protection and Management (Hazardous Substances) Regulations**

Verify that licence requirements are met.

Chemical name	Hazardous Substances	transport
Sodium azide	Exclusions: Air bag devices in motor vehicles	0kg

**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**

See section 8 for national exposure control parameters. 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**

P333 + P313 - If skin irritation or rash occurs: Get medical advice/attention

P273 - Avoid release to the environment

P302 + P352 - IF ON SKIN: Wash with plenty of soap and water

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

P280 - Wear protective gloves/protective clothing/eye protection/face protection

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

**Revision date** 25-Mar-2021

**Revision Note** SDS sections updated, 1.

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

**Disclaimer**

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**End of Safety Data Sheet**