

KIT SAFETY DATA SHEET



Kit Product Name Anti-Beta 2 Glycoprotein IgG, IgM, IgA
Kit Catalogue Number(s) 4252060, 4252080, 4252100

Revision date 28-Feb-2024

Kit Contents

| Catalogue Number(s) | Product Name |
|---|-----------------------------------|
| 4252010, 4251227 | Stop Solution |
| 4252002, 4252022, 4252042, 4252003, 4252023, 4252043, 4252004, 4252024, 4252044, 4252062, 4252063, 4252064, 4252082, 4252083, 4252084, 4252102, 4252103, 4252104, 4252122, 4252123, 4252124, 4252142, 4252143, 4252144, 4252162, 4252163, 4252164, 4252182, 4252183, 4252184, 4252202, 4252203, 4252204 | Calibrators 1, 2, 3 |
| 4252005, 4252006, 4252025, 4252026, 4252045, 4252046, 4252065, 4252066, 4252085, 4252086, 4252105, 4252106, 4252125, 4252126, 4252145, 4252146, 4252165, 4252166, 4252185, 4252186, 4252205, 4252206 | Positive Control/Negative Control |
| 4252009 | Substrate |
| 4252068 | Sample Diluent |
| 4252069 | Wash Concentrate |
| 4252067, 4252087, 4252107 | Conjugate |



SAFETY DATA SHEET

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

Product Name Stop Solution
Revision date 21-Apr-2022
Revision Number 1.1

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

Product identifier

Product Name Stop Solution
Catalogue Number(s) 4252010, 4251227

Other means of identification

UN/ID no UN3264

Pure substance/mixture Mixture

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, Diagnostic Group
4000 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

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 In-vitro laboratory reagent or component

SECTION 2: Hazards identification

Emergency Overview

Irritating to eyes

Appearance aqueous solution

Physical state Liquid

Odour Odourless

Classification of the substance or mixture

Corrosive to metals

Category 1

Serious eye damage/eye irritation

Category 2A

Label elements

**Signal word**

Warning

Hazard statements

May be corrosive to metals
Causes serious eye irritation

Precautionary statements**Prevention**

Wash face, hands and any exposed skin thoroughly after handling
Wear protective gloves/protective clothing/eye protection/face protection

Response

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
If eye irritation persists: Get medical advice/attention
Absorb spillage to prevent material damage

Physical and chemical hazards

Not applicable.

Health hazards

Immediate Health Effects: Causes severe irritation (tears, blurred vision and redness). Irritating, but will not permanently injure eye tissue.

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 |
|---------------|----------|-----------|
| Water | 50 - 100 | 7732-18-5 |
| Sulfuric acid | 1 - 2.5 | 7664-93-9 |

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. Get medical attention immediately if symptoms occur.

Eye contact

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. Get medical attention if irritation develops and persists. |
| 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 | Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Call a doctor. |
| <u>Most important symptoms and effects, both acute and delayed</u> | May cause redness and tearing of the eyes. Burning sensation. |
| <u>For emergency responders</u> | Avoid contact with skin, eyes or clothing. Wear personal protective clothing (see section 8). |
| <u>Note to doctors</u> | 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. |
| <u>Specific hazards arising from the chemical</u> | No information available. |
| <u>Special protective actions for fire-fighters</u> | 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. |
| Other information | Refer to protective measures listed in Sections 7 and 8. |
| For emergency responders | Use personal protection recommended in Section 8. |
| <u>Environmental precautions</u> | Prevent further leakage or spillage if safe to do so. |
| <u>Methods and material for containment and cleaning up</u> | Prevent further leakage or spillage if safe to do so. Pick up and transfer to properly labelled containers. |
| <u>Precautions to prevent secondary hazards</u> | 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. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product. Regular cleaning of equipment, work area and clothing is recommended. Avoid contact with skin, eyes or clothing. See Section 8 for information on appropriate personal protective equipment. |
|---|--|

Conditions for safe storage, including any incompatibilities

Keep containers tightly closed in a dry, cool and well-ventilated place. Protect from moisture. Store locked up. Keep out of the reach of children. Store away from other materials. Store according to product and label instructions.

Incompatible materials

Oxidising agent.

SECTION 8: Exposure controls/personal protection**Occupational exposure limits**

| Chemical name | China | ACGIH TLV |
|---------------------------|--|--|
| Sulfuric acid - 7664-93-9 | TWA: 1 mg/m ³ STEL: 2 mg/m ³ G1(C**) | TWA: 0.2 mg/m ³ thoracic particulate matter |

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**

If splashes are likely to occur, wear safety glasses with side-shields.

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.

General hygiene considerations

Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product. Regular cleaning of equipment, work area and clothing is recommended. Avoid contact with skin, eyes or clothing.

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 | < 3 | |
| Melting point / freezing point | No data available | None known |
| Initial boiling point and boiling range | > 100 °C | |
| Flash point | No data available | None known |
| Evaporation rate | No data available | None known |
| Flammability | No data available | None known |
| Flammability Limit in Air | | None known |
| Upper flammability or explosive | No data available | |

| | | |
|---|-------------------|------------|
| limits | | |
| Lower flammability or explosive 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 | 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

Stability Stable under normal conditions.

Possibility of hazardous reactions None under normal processing.

Sensitivity to mechanical impact None.

Sensitivity to static discharge None.

Conditions to avoid Exposure to air or moisture over prolonged periods.

Incompatible materials Oxidising agent.

Hazardous decomposition products None known based on information supplied.

SECTION 11: Toxicological information**Acute toxicity****Numerical measures of toxicity**

No information available

Component Information

| Chemical name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|---------------|----------------------|-------------|--------------------------|
| Water | > 90 mL/kg (Rat) | - | - |
| Sulfuric acid | = 2140 mg/kg (Rat) | - | = 0.375 mg/L (Rat) 4 h |

Skin corrosion/irritation May cause skin irritation.

Serious eye damage/eye irritation Classification based on data available for ingredients. Causes serious eye irritation.

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

The table below indicates whether each agency has listed any ingredient as a carcinogen.

| Chemical name | China | IARC |
|---------------|------------------------|---------|
| Sulfuric acid | Carcinogenic to humans | Group 1 |

Legend**IARC (International Agency for Research on Cancer)**

Group 1 - Carcinogenic to Humans

| | |
|---|---|
| Reproductive toxicity | Based 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. |
| Target organ effects | Respiratory system. Eyes. Skin. Teeth. |
| 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 |
|---------------|----------------------|---|-----------|
| Sulfuric acid | - | LC50: >500mg/L (96h, Brachydanio rerio) | - |

Persistence and degradability 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**

| | |
|---|---|
| UN number or ID number | UN3264 |
| UN proper shipping name | CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Sulfuric acid) |
| Description | UN3264, CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Sulfuric acid), 8, III |
| Transport hazard class(es) | 8 |
| Packing group | III |
| Marine pollutant | NP |
| Special Provisions | 223, 274 |
| EmS-No | F-A, S-B |
| Transport in bulk according to Annex II of MARPOL and the IBC Code | No information available |

IATA

| | |
|--------------------------------|---|
| UN number or ID number | UN3264 |
| UN proper shipping name | Corrosive liquid, acidic, inorganic, n.o.s. (Sulfuric acid) |
| Description | UN3264, Corrosive liquid, acidic, inorganic, n.o.s. (Sulfuric acid), 8, III |

Transport hazard class(es) 8
 Packing group III
 Special Provisions A3, A803
 ERG Code 8L

China

UN number or ID number UN3264
 UN proper shipping name CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Sulfuric acid)
 Transport hazard class(es) 8
 Packing group III
 Description UN3264, CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Sulfuric acid), 8, III

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:

Listed. Chemical hazards.

Catalogue of occupational diseases:

Listed. Occupational poisoning.

| Chemical name | Category |
|---------------|------------------|
| Sulfuric acid | Chemical hazards |

Regulations on the Control over Safety of Hazardous Chemicals

Inventory of hazardous chemicals

The table below indicates ingredients above the cut-off threshold considered as relevant which are listed. Weight-%
1

| Chemical name | Inventory of hazardous chemicals |
|---------------|----------------------------------|
| Sulfuric acid | Listed |

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 21-Apr-2022

Revision Note Reformatted and updated existing information.

Abbreviations and acronymsLegend 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

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

Product Name Calibrators 1, 2, 3
Revision date 23-Jan-2024
Revision Number 1.2

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

Product identifier

Product Name Calibrators 1, 2, 3

Catalogue Number(s) 4252002, 4252022, 4252042, 4252003, 4252023, 4252043, 4252004, 4252024, 4252044, 4252062, 4252063, 4252064, 4252082, 4252083, 4252084, 4252102, 4252103, 4252104, 4252122, 4252123, 4252124, 4252142, 4252143, 4252144, 4252162, 4252163, 4252164, 4252182, 4252183, 4252184, 4252202, 4252203, 4252204

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
Hercules, CA 94547
USA

Manufacturer

Bio-Rad Laboratories, Diagnostic Group
4000 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

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 In-vitro laboratory reagent or component

SECTION 2: Hazards identification

Emergency Overview

No significant adverse health effects

Appearance Liquid **Physical state** Liquid **Odour** Odourless

Classification of the substance or mixture

Not classified

Label elements

Hazard statements

Not classified

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

Not applicable

Contains human source material and / or potentially infectious components.

SECTION 3: Composition/information on ingredients**Substance**

Not applicable.

Mixture

Not classified.

| Chemical name | Weight-% | CAS No |
|---------------|-------------|------------|
| Sodium azide | 0.1 - 0.299 | 26628-22-8 |

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 | Contains human source material and / or potentially infectious components. 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 | Call a doctor. Contains human source material and / or potentially infectious components. |
| <u>Most important symptoms and effects, both acute and delayed</u> | No information available. |
| <u>For emergency responders</u> | No information available. |
| <u>Note to doctors</u> | Contains human source material and / or potentially infectious components. |

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 Do not allow into any sewer, on the ground or into any body of water. Clean contaminated surface thoroughly. Use: Disinfectant.

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. Follow universal and standard precautions for handling potentially infectious materials. 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 materials Metals.

SECTION 8: Exposure controls/personal protection

Occupational exposure limits

| Chemical name | China | ACGIH TLV |
|---------------------------|--|--|
| Sodium azide - 26628-22-8 | Ceiling: 0.3 mg/m ³ Ceiling | Ceiling: 0.29 mg/m ³ Sodium azide Ceiling: 0.11 ppm Hydrazoic acid vapor |

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. |
| 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 | Follow universal and standard precautions for handling potentially infectious materials. |

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

| | |
|------------------------|--------------------------|
| Appearance | Liquid |
| Colour | Opaque |
| Physical state | Liquid |
| Odour | Odourless |
| Odour threshold | No information available |

| Property | Values | Remarks • Method |
|--|-------------------|-------------------------|
| pH | No data available | None known |
| 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 | No data available | 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 | 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

| | |
|---|---|
| Stability | Stable under normal conditions. |
| Possibility of hazardous reactions | Avoid contact with metals. This product contains Sodium azide. Sodium azide can react with Copper, Brass, Lead, and solder in piping systems to form explosive compounds and toxic gases. |
| Sensitivity to mechanical impact | None. |
| Sensitivity to static discharge | None. |
| Conditions to avoid | None known based on information supplied. |
| Incompatible materials | Metals. |

Hazardous decomposition products None known based on information supplied.

SECTION 11: Toxicological information

Acute toxicity

Numerical measures of toxicity

No information available

Component Information

| Chemical name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|---------------|--------------------|-----------------------|-------------------------------|
| Sodium azide | = 27 mg/kg (Rat) | = 20 mg/kg (Rabbit) | 0.054 - 0.52 mg/L (Rat) 4 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.

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.

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 |
|---------------|----------------------|--|-----------|
| Sodium azide | - | LC50: =0.8mg/L (96h, Oncorhynchus mykiss) LC50: =0.7mg/L (96h, Lepomis macrochirus) LC50: =5.46mg/L (96h, Pimephales promelas) | - |

Persistence and degradability No information available.

Bioaccumulative potential No information available.

Mobility in soil No information available.

SECTION 13: Disposal considerations

| | |
|--------------------------------------|--|
| <u>Waste chemicals</u> | Flush pipes with water frequently if discarding solutions containing Sodium azide into metal piping systems. 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 Annex II of MARPOL and the IBC Code | No information available |

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

| | |
|---------------------|---------------|
| <u>China</u> | 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

| | |
|---|--|
| <u>Inventory of hazardous chemicals</u> | The table below indicates ingredients above the cut-off threshold considered as relevant which are listed. Weight-% 0 |
|---|--|

| Chemical name | Inventory of hazardous chemicals |
|---------------|----------------------------------|
| Sodium azide | Listed, Highly toxic |

| | |
|---|----------------|
| <u>GB 18218-2009 Identification of major hazard installations for dangerous chemicals</u> | 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 23-Jan-2024

Revision Note SDS sections updated. 1. 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

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

Product Name Positive Control/Negative Control

Revision date 21-Apr-2022

Revision Number 1.1

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

Product identifier

Product Name Positive Control/Negative Control

Catalogue Number(s) 4252005, 4252006, 4252025, 4252026, 4252045, 4252046, 4252065, 4252066, 4252085, 4252086, 4252105, 4252106, 4252125, 4252126, 4252145, 4252146, 4252165, 4252166, 4252185, 4252186, 4252205, 4252206

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
Hercules, CA 94547
USA

Manufacturer

Bio-Rad Laboratories, Diagnostic Group
4000 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

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 In-vitro laboratory reagent or component

SECTION 2: Hazards identification

Emergency Overview

No significant adverse health effects

Appearance Liquid

Physical state Liquid

Odour Odourless

Classification of the substance or mixture

Not classified

Label elements

Hazard statements

Not classified

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

Not applicable

Contains human source material and / or potentially infectious components.

SECTION 3: Composition/information on ingredients**Substance**

Not applicable.

Mixture

Not classified.

| Chemical name | Weight-% | CAS No |
|---------------|-------------|------------|
| Sodium azide | 0.1 - 0.299 | 26628-22-8 |

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

Contains human source material and / or potentially infectious components. 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

Call a doctor. Contains human source material and / or potentially infectious components.

Most important symptoms and effects, both acute and delayed

No information available.

For emergency responders

No information available.

Note to doctors

Contains human source material and / or potentially infectious components.

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 Do not allow into any sewer, on the ground or into any body of water. Clean contaminated surface thoroughly. Use: Disinfectant.

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. Follow universal and standard precautions for handling potentially infectious materials. 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 materials Metals.

SECTION 8: Exposure controls/personal protection

Occupational exposure limits

| Chemical name | China | ACGIH TLV |
|---------------------------|--|--|
| Sodium azide - 26628-22-8 | Ceiling: 0.3 mg/m ³ Ceiling | Ceiling: 0.29 mg/m ³ Sodium azide Ceiling: 0.11 ppm Hydrazoic acid vapor |

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. |
| 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 | Follow universal and standard precautions for handling potentially infectious materials. |

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

| | |
|------------------------|--------------------------|
| Appearance | Liquid |
| Colour | Opaque |
| Physical state | Liquid |
| Odour | Odourless |
| Odour threshold | No information available |

| <u>Property</u> | <u>Values</u> | <u>Remarks • Method</u> |
|--|-------------------|-------------------------|
| pH | | None known |
| 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 | 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> | Avoid contact with metals. This product contains Sodium azide. Sodium azide can react with Copper, Brass, Lead, and solder in piping systems to form explosive compounds and toxic gases. |
| 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> | Metals. |
| <u>Hazardous decomposition products</u> | None known based on information supplied. |

SECTION 11: Toxicological information**Acute toxicity****Numerical measures of toxicity**

No information available

Component Information

| Chemical name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|---------------|--------------------|-----------------------|-------------------------------|
| Sodium azide | = 27 mg/kg (Rat) | = 20 mg/kg (Rabbit) | 0.054 - 0.52 mg/L (Rat) 4 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.

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.

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 |
|---------------|----------------------|--|-----------|
| Sodium azide | - | LC50: =0.8mg/L (96h, Oncorhynchus mykiss) LC50: =0.7mg/L (96h, Lepomis macrochirus) LC50: =5.46mg/L (96h, Pimephales promelas) | - |

Persistence and degradability No information available.

Bioaccumulative potential No information available.

Mobility in soil No information available.

SECTION 13: Disposal considerations

Waste chemicals Flush pipes with water frequently if discarding solutions containing Sodium azide into metal

pipng systems. 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 Annex II of MARPOL and the IBC Code
No information available

IATA

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

Inventory of hazardous chemicals

The table below indicates ingredients above the cut-off threshold considered as relevant which are listed. Weight-%
0

| Chemical name | Inventory of hazardous chemicals |
|---------------|----------------------------------|
| Sodium azide | Listed, Highly toxic |

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 21-Apr-2022

Revision Note SDS sections updated. 1. 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

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End of Safety Data Sheet



SAFETY DATA SHEET

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

Product Name Substrate
Revision date 21-Apr-2022
Revision Number 1.1

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

Product identifier

Product Name Substrate
Catalogue Number(s) 4252009

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
Hercules, CA 94547
USA

Manufacturer

Bio-Rad Laboratories, Diagnostic Group
4000 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

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 In-vitro laboratory reagent or component

SECTION 2: Hazards identification

Emergency Overview

No significant adverse health effects

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

Classification of the substance or mixture

Not classified

Label elements

Hazard statements

Not classified

Precautionary statements

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

Not applicable

SECTION 3: Composition/information on ingredients**Substance**

Not applicable.

Mixture

Not classified.

| Chemical name | Weight-% | CAS No |
|--|--------------|------------|
| Water | 50 - 100 | 7732-18-5 |
| Hydrogen peroxide | 0.1 - 0.299 | 7722-84-1 |
| Isopropyl alcohol | 0.01 - 0.099 | 67-63-0 |
| Dimethyl sulfoxide | 0.01 - 0.099 | 67-68-5 |
| 1,3-Butanediol | 0.01 - 0.099 | 107-88-0 |
| Sodium acetate | 0.001 - 0.01 | 127-09-3 |
| [1,1-Biphenyl]-4,4-diamine, 3,3,5,5-tetramethyl- | < 0.001 | 54827-17-7 |

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. |
| <u>Most important symptoms and effects, both acute and delayed</u> | No information available. |
| <u>For emergency responders</u> | No information available. |
| <u>Note to doctors</u> | 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

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 materials None known based on information supplied.

SECTION 8: Exposure controls/personal protection

Occupational exposure limits

| Chemical name | China | ACGIH TLV |
|-------------------------------|---|-------------------------------|
| Hydrogen peroxide - 7722-84-1 | TWA: 1.5 mg/m ³ | TWA: 1 ppm |
| Isopropyl alcohol - 67-63-0 | TWA: 350 mg/m ³ STEL: 700 mg/m ³ | STEL: 400 ppm TWA: 200 ppm |
| Dimethyl sulfoxide - 67-68-5 | TWA: 160 mg/m ³ Skin* | No data available |

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

| Chemical name | Biological standards | Monitoring and observation processes | ACGIH |
|-----------------------------|----------------------|--------------------------------------|---|
| Isopropyl alcohol - 67-63-0 | | | 40 mg/L - urine (Acetone) - end of shift at end of workweek |

Monitoring and observation processes

No applicable information was found.

Engineering controlsShowers
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. |
| 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 |

| <u>Property</u> | <u>Values</u> | <u>Remarks • Method</u> |
|--|----------------------|--------------------------------|
| pH | 5 | |
| Melting point / freezing point | > 0 °C | |
| Initial boiling point and boiling range | > 100 °C | |
| 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 | 215 °C | 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.

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

No information available

| Chemical name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|--------------------|-----------------------|-------------------------|--------------------------------------|
| Water | > 90 mL/kg (Rat) | - | - |
| Hydrogen peroxide | = 1518 mg/kg (Rat) | = 9200 mg/kg (Rabbit) | = 2000 mg/m ³ (Rat) 4 h |
| Isopropyl alcohol | = 1870 mg/kg (Rat) | = 4059 mg/kg (Rabbit) | > 10000 ppm (Rat) 6 h |
| Dimethyl sulfoxide | = 28300 mg/kg (Rat) | = 40000 mg/kg (Rat) | > 5.33 mg/L (Rat) 4 h |
| 1,3-Butanediol | = 18610 mg/kg (Rat) | - | > 60 ppm (Rat) 8 h |
| Sodium acetate | = 3530 mg/kg (Rat) | > 10 g/kg (Rabbit) | > 30 g/m ³ (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.

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

Carcinogenicity

The table below indicates whether each agency has listed any ingredient as a carcinogen.

| Chemical name | China | IARC |
|-------------------|-------|---------|
| Hydrogen peroxide | - | Group 3 |
| Isopropyl alcohol | - | Group 3 |

Legend

IARC (International Agency for Research on Cancer)

Group 3 - Not Classifiable as to Carcinogenicity in Humans

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

SECTION 12: Ecological information**Ecotoxicity****Unknown aquatic toxicity**

0.9777 % of the mixture consists of component(s) of unknown hazards to the aquatic environment

| Chemical name | Algae/aquatic plants | Fish | Crustacea |
|--------------------|--|--|--|
| Hydrogen peroxide | - | LC50: =16.4mg/L (96h, Pimephales promelas) LC50: 18 - 56mg/L (96h, Lepomis macrochirus) LC50: 10.0 - 32.0mg/L (96h, Oncorhynchus mykiss) | EC50: 18 - 32mg/L (48h, Daphnia magna) |
| Isopropyl alcohol | EC50: >1000mg/L (96h, Desmodesmus subspicatus) EC50: >1000mg/L (72h, Desmodesmus subspicatus) | LC50: =9640mg/L (96h, Pimephales promelas) LC50: =11130mg/L (96h, Pimephales promelas) LC50: >1400000µg/L (96h, Lepomis macrochirus) | EC50: =13299mg/L (48h, Daphnia magna) |
| Dimethyl sulfoxide | - | LC50: =34000mg/L (96h, Pimephales promelas) LC50: 33 - 37g/L (96h, Oncorhynchus mykiss) LC50: >40g/L (96h, Lepomis macrochirus) LC50: =41.7g/L (96h, Cyprinus carpio) | - |
| Sodium acetate | - | LC50: >100mg/L (96h, Danio rerio) | EC50: >1000mg/L (48h, Daphnia magna) |

Persistence and degradability

No information available.

Bioaccumulative potential

There is no data for this product.

| Chemical name | Partition coefficient |
|--------------------|-----------------------|
| Isopropyl alcohol | 0.05 |
| Dimethyl sulfoxide | -1.35 |
| 1,3-Butanediol | -0.9 |

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
Annex II of MARPOL and the IBC
Code

No information available

IATA

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:

Listed. Chemical hazards.

Catalogue of occupational diseases:

Listed. Occupational poisoning.

| Chemical name | Category |
|--------------------|------------------|
| Hydrogen peroxide | Chemical hazards |
| Isopropyl alcohol | Chemical hazards |
| Dimethyl sulfoxide | Chemical hazards |

Regulations on the Control over Safety of Hazardous Chemicals

Inventory of hazardous chemicals

The table below indicates ingredients above the cut-off threshold considered as relevant which are listed. Weight-%
0

| Chemical name | Inventory of hazardous chemicals |
|-------------------|----------------------------------|
| Hydrogen peroxide | Listed |
| Isopropyl alcohol | Listed |

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 21-Apr-2022

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
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Organisation for Economic Co-operation and Development Screening Information Data Set
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End of Safety Data Sheet



SAFETY DATA SHEET

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

Product Name Sample Diluent
Revision date 09-Nov-2022
Revision Number 1

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

Product identifier

Product Name Sample Diluent
Catalogue Number(s) 4252068

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
Hercules, CA 94547
USA

Manufacturer

Bio-Rad Laboratories, Diagnostic Group
4000 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

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 In-vitro laboratory reagent or component

SECTION 2: Hazards identification

Emergency Overview

May cause allergic skin reaction

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

Classification of the substance or mixture

Skin sensitisation Category 1A

Label elements



Signal word

Warning

Hazard statements

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/protective clothing/eye protection/face protection

IF ON SKIN: Wash with plenty of water and soap

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

Take off all contaminated clothing and wash it before reuse

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: Allergic reactions (sensitiser). Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain, or flushing.

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

| Chemical name | Weight-% | CAS No |
|---|--------------|------------|
| Water | 50 - 100 | 7732-18-5 |
| Sodium chloride | 5 - 10 | 7647-14-5 |
| Albumins, beef serum | 1 - 2.5 | 94349-60-7 |
| Dipotassium phosphate | 0.1 - 0.299 | 7758-11-4 |
| C.I. Food Green 3 | 0.01 - 0.099 | 2353-45-9 |
| Phosphoric acid, potassium salt (1:1) | 0.01 - 0.099 | 7778-77-0 |
| Magnesium nitrate | 0.01 - 0.099 | 10377-60-3 |
| 3(2H)-Isothiazolone, 2-methyl- | 0.001 - 0.01 | 2682-20-4 |
| Chlorhexidine diacetate | 0.001 - 0.01 | 56-95-1 |
| 5-Chloro-2-methyl-3(2H)-isothiazolone, mixture with 2-methyl-3(2H)-isothiazolone | 0.001 - 0.01 | 55965-84-9 |
| Magnesium chloride | 0.001 - 0.01 | 7786-30-3 |

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 with soap and water. May cause an allergic skin reaction. In the case of skin irritation or allergic reactions see a doctor. |
| Ingestion | Rinse mouth thoroughly with water. |
| <u>Most important symptoms and effects, both acute and delayed</u> | Itching. Rashes. Hives. |
| <u>For emergency responders</u> | No information available. |
| <u>Note to doctors</u> | May cause sensitisation in susceptible persons. 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. |
| <u>Specific hazards arising from the chemical</u> | Product is or contains a sensitiser. May cause sensitisation by skin contact. |
| <u>Special protective actions for fire-fighters</u> | 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. |
| <u>Environmental precautions</u> | See Section 12 for additional Ecological Information. |
| <u>Methods and material for containment and cleaning up</u> | Prevent further leakage or spillage if safe to do so. Pick up and transfer to properly labelled containers. |
| <u>Precautions to prevent secondary hazards</u> | 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. 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 it before reuse. See Section 8 for information on appropriate personal protective equipment. |
| <u>Conditions for safe storage, including any incompatibilities</u> | Keep containers tightly closed in a dry, cool and well-ventilated place. Store locked up. Keep out of the reach of children. 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.

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.

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

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 | green |
| Physical state | Liquid |
| Odour | Odourless |
| Odour threshold | No information available |

| <u>Property</u> | <u>Values</u> | <u>Remarks • Method</u> |
|---|-------------------|-------------------------|
| pH | 7.3 | |
| Melting point / freezing point | No data available | None known |
| Initial boiling point and boiling range | > 100 °C | |
| 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 | 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

Stability Stable under normal conditions.

Possibility of hazardous reactions None under normal processing.

Sensitivity to mechanical impact None.

Sensitivity to static discharge None.

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**

No information available

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

ATEmix (oral) 42,808.20 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 |
| Dipotassium phosphate | - | > 5000 mg/kg (Rabbit) | - |
| C.I. Food Green 3 | > 2 g/kg (Rat) | - | - |
| Phosphoric acid, potassium salt (1:1) | = 3200 mg/kg (Rat) | - | > 0.83 mg/L (Rat) 4 h |
| Magnesium nitrate | = 5440 mg/kg (Rat) | - | - |
| 3(2H)-Isothiazolone, 2-methyl- | 232 - 249 mg/kg (Rat) = 120 mg/kg (Rat) | = 200 mg/kg (Rabbit) | = 0.11 mg/L (Rat) 4 h |
| Chlorhexidine diacetate | = 1180 mg/kg (Rat) | - | - |
| 5-Chloro-2-methyl-3(2H)-isothiazolone, mixture with 2-methyl-3(2H)-isothiazolone | = 53 mg/kg (Rat) | = 87.12 mg/kg (Rabbit) | - |
| Magnesium chloride | = 2800 mg/kg (Rat) | > 2000 mg/kg (Rat) | - |

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 May cause sensitisation 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.

| Chemical name | China | IARC |
|-------------------|-------|----------|
| C.I. Food Green 3 | - | Group 3 |
| Magnesium nitrate | - | Group 2A |

Reproductive toxicity Based 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 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 |
|--------------------|--|---|--|
| Sodium chloride | - | LC50: 5560 - 6080mg/L (96h, <i>Lepomis macrochirus</i>) LC50: =12946mg/L (96h, <i>Lepomis macrochirus</i>) LC50: 6020 - 7070mg/L (96h, <i>Pimephales promelas</i>) LC50: =7050mg/L (96h, <i>Pimephales promelas</i>) LC50: 6420 - 6700mg/L (96h, <i>Pimephales promelas</i>) LC50: 4747 - 7824mg/L (96h, <i>Oncorhynchus mykiss</i>) | EC50: =1000mg/L (48h, <i>Daphnia magna</i>) EC50: 340.7 - 469.2mg/L (48h, <i>Daphnia magna</i>) |
| Magnesium chloride | EC50: >82.7mg/L (72h, <i>Pseudokirchneriella subcapitata</i>) | LC50: 1970 - 3880mg/L (96h, <i>Pimephales promelas</i>) | EC50: =140mg/L (48h, <i>Daphnia magna</i>) |

Persistence and degradability No information available.

Bioaccumulative potential There is no data for this product.

| Chemical name | Partition coefficient |
|--|-----------------------|
| 3(2H)-Isothiazolone, 2-methyl- | -0.26 |
| 5-Chloro-2-methyl-3(2H)-isothiazolone, mixture with 2-methyl-3(2H)-isothiazolone | 0.7 |

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 Annex II of MARPOL and the IBC Code No information available

IATA 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

Inventory of hazardous chemicals Not applicable.

| Chemical name | Inventory of hazardous chemicals |
|-------------------|----------------------------------|
| Magnesium nitrate | Listed |

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-Nov-2022

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

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

Product Name Wash Concentrate

Revision date 09-Nov-2022

Revision Number 1

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

Product identifier

Product Name Wash Concentrate

Catalogue Number(s) 4252069

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
Hercules, CA 94547
USA

Manufacturer

Bio-Rad Laboratories, Diagnostic Group
4000 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

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 In-vitro laboratory reagent or component

SECTION 2: Hazards identification

Emergency Overview

No significant adverse health effects

Appearance aqueous solution

Physical state Liquid

Odour Odourless

Classification of the substance or mixture

Not classified

Label elements

Hazard statements

Not classified

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

Not applicable

SECTION 3: Composition/information on ingredients**Substance**

Not applicable.

Mixture

Not classified.

| Chemical name | Weight-% | CAS No |
|---------------------------------------|------------|-----------|
| Water | 50 - 100 | 7732-18-5 |
| Sodium chloride | 20 - 35 | 7647-14-5 |
| Dipotassium phosphate | 2.5 - 5 | 7758-11-4 |
| Phosphoric acid, potassium salt (1:1) | 0.3 - 0.99 | 7778-77-0 |
| Polyoxyethylene sorbitan monolaurate | 0.3 - 0.99 | 9005-64-5 |

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 contactRinse 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****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

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 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.

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. |
| 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 | 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 |

| <u>Property</u> | <u>Values</u> | <u>Remarks • Method</u> |
|--|-------------------|-------------------------|
| pH | 6.2 | |
| Melting point / freezing point | No data available | None known |
| Initial boiling point and boiling range | > 100 °C | |
| 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 | 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. |
| <u>Sensitivity to mechanical impact</u> | None. |
| <u>Sensitivity to static discharge</u> | None. |
| <u>Conditions to avoid</u> | None known based on information supplied. |
| <u>Incompatible materials</u> | None known based on information supplied. |
| <u>Hazardous decomposition products</u> | None known based on information supplied. |

SECTION 11: Toxicological information

Acute toxicity

Numerical measures of toxicity

No information available

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

ATEmix (oral) 8,912.70 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 |
| Dipotassium phosphate | - | > 5000 mg/kg (Rabbit) | - |
| Phosphoric acid, potassium salt (1:1) | = 3200 mg/kg (Rat) | - | > 0.83 mg/L (Rat) 4 h |
| Polyoxyethylene sorbitan monolaurate | = 37000 mg/kg (Rat) | - | > 5.1 mg/L (Rat) 4 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.

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.

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

Persistence and degradability 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 Annex II of MARPOL and the IBC Code No information available

IATA 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

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-Nov-2022

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) (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

Disclaimer

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End of Safety Data Sheet



SAFETY DATA SHEET

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

Product Name Conjugate
Revision date 09-Nov-2022
Revision Number 1

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

Product identifier

Product Name Conjugate
Catalogue Number(s) 4252067, 4252087, 4252107

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
Hercules, CA 94547
USA

Manufacturer

Bio-Rad Laboratories, Diagnostic Group
4000 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

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 In-vitro laboratory reagent or component

SECTION 2: Hazards identification

Emergency Overview

May cause allergic skin reaction

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

Classification of the substance or mixture

Skin sensitisation Category 1A

Label elements

**Signal word**

Warning

Hazard statements

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/protective clothing/eye protection/face protection

IF ON SKIN: Wash with plenty of water and soap

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

Take off all contaminated clothing and wash it before reuse

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: Allergic reactions (sensitiser). Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain, or flushing.

Chronic effects: Not applicable.

Environmental hazards

Not applicable

Other hazards which do not result in classification

Contains animal source material

SECTION 3: Composition/information on ingredients**Substance**

Not applicable.

Mixture

| Chemical name | Weight-% | CAS No |
|--|--------------|------------|
| Water | 50 - 100 | 7732-18-5 |
| Non-hazardous ingredient | 20 - 35 | NO-CAS-6 |
| Sodium chloride | 0.3 - 0.99 | 7647-14-5 |
| Dipotassium phosphate | 0.01 - 0.099 | 7758-11-4 |
| Modified Glycol | 0.01 - 0.099 | NO-CAS-54 |
| Animal Source Antibody | 0.01 - 0.099 | NO-CAS-90 |
| 3(2H)-Isothiazolone, 2-methyl- | 0.01 - 0.099 | 2682-20-4 |
| Phosphoric acid, potassium salt (1:1) | 0.01 - 0.099 | 7778-77-0 |
| 5-Bromo-5-nitro-1,3-dioxane | 0.01 - 0.099 | 30007-47-7 |
| Isothiazolones, active | 0.001 - 0.01 | NO-CAS-109 |
| 5-Chloro-2-methyl-3(2H)-isothiazolone, mixture with 2-methyl-3(2H)-isothiazolone | < 0.001 | 55965-84-9 |
| Modified alkyl carboxylate | < 0.001 | NO-CAS-53 |
| C.I. Acid Blue 9, disodium salt | < 0.001 | 3844-45-9 |

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 with soap and water. May cause an allergic skin reaction. In the case of skin irritation or allergic reactions see a doctor. |
| Ingestion | Rinse mouth thoroughly with water. |
| <u>Most important symptoms and effects, both acute and delayed</u> | Itching. Rashes. Hives. |
| <u>For emergency responders</u> | No information available. |
| <u>Note to doctors</u> | May cause sensitisation in susceptible persons. 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. |
| <u>Specific hazards arising from the chemical</u> | Product is or contains a sensitiser. May cause sensitisation by skin contact. |
| <u>Special protective actions for fire-fighters</u> | 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. |
| <u>Environmental precautions</u> | See Section 12 for additional Ecological Information. |
| <u>Methods and material for containment and cleaning up</u> | Prevent further leakage or spillage if safe to do so. Pick up and transfer to properly labelled containers. |
| <u>Precautions to prevent secondary hazards</u> | 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. 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 it before reuse. See Section 8 for information on appropriate personal protective equipment. |
| <u>Conditions for safe storage, including any incompatibilities</u> | Keep containers tightly closed in a dry, cool and well-ventilated place. Store locked up. Keep out of the reach of children. Store according to product and label instructions. |
| <u>Incompatible materials</u> | 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.

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.

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

Individual protection measures, such as personal protective equipment

| | |
|--|--|
| <u>Eye/face protection</u> | Wear safety glasses with side shields (or goggles). |
| <u>Skin and body protection</u> | Wear suitable protective clothing. |
| <u>Hand protection</u> | Wear suitable gloves. |
| <u>Respiratory protection</u> | No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required. |
| <u>General hygiene considerations</u> | Handle in accordance with good industrial hygiene and safety practice. |

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

| | |
|-------------------------------|--------------------------|
| <u>Appearance</u> | aqueous solution |
| <u>Colour</u> | blue |
| <u>Physical state</u> | Liquid |
| <u>Odour</u> | Odourless |
| <u>Odour threshold</u> | No information available |

| <u>Property</u> | <u>Values</u> | <u>Remarks • Method</u> |
|---|----------------------|--------------------------------|
| <u>pH</u> | 7 | |
| <u>Melting point / freezing point</u> | No data available | None known |
| <u>Initial boiling point and boiling range</u> | > 100 °C | |
| <u>Flash point</u> | No data available | None known |
| <u>Evaporation rate</u> | 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 | 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

| | |
|---|---|
| Stability | Stable under normal conditions. |
| Possibility of hazardous reactions | None under normal processing. |
| Sensitivity to mechanical impact | None. |
| Sensitivity to static discharge | None. |
| 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

No information available

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 |
| Dipotassium phosphate | - | > 5000 mg/kg (Rabbit) | - |
| 3(2H)-Isothiazolone, 2-methyl- | 232 - 249 mg/kg (Rat) = 120 mg/kg (Rat) | = 200 mg/kg (Rabbit) | = 0.11 mg/L (Rat) 4 h |
| Phosphoric acid, potassium salt (1:1) | = 3200 mg/kg (Rat) | - | > 0.83 mg/L (Rat) 4 h |
| 5-Bromo-5-nitro-1,3-dioxane | = 455 mg/kg (Rat) | - | - |
| 5-Chloro-2-methyl-3(2H)-isothia | = 53 mg/kg (Rat) | = 87.12 mg/kg (Rabbit) | - |

| | | | |
|---|------------------|---|---|
| zolone, mixture with 2-methyl-3(2H)-isothiazolone | | | |
| C.I. Acid Blue 9, disodium salt | > 2 g/kg (Rat) | - | - |

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 May cause sensitisation 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.

| Chemical name | China | IARC |
|---------------------------------|-------|---------|
| C.I. Acid Blue 9, disodium salt | - | Group 3 |

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

SECTION 12: Ecological information

Ecotoxicity

Unknown aquatic toxicity 0.479 % of the mixture consists of component(s) of unknown hazards to the aquatic environment

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

Persistence and degradability No information available.

Bioaccumulative potential There is no data for this product.

| Chemical name | Partition coefficient |
|--|-----------------------|
| 3(2H)-Isothiazolone, 2-methyl- | -0.26 |
| 5-Bromo-5-nitro-1,3-dioxane | 1.6 |
| 5-Chloro-2-methyl-3(2H)-isothiazolone, mixture with 2-methyl-3(2H)-isothiazolone | 0.7 |
| C.I. Acid Blue 9, disodium salt | -6.4 |

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 Annex II of MARPOL and the IBC Code | No information available |

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

| | |
|---------------------|---------------|
| <u>China</u> | 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

| | |
|---|-----------------|
| <u>Inventory of hazardous chemicals</u> | Not applicable. |
|---|-----------------|

| | |
|---|----------------|
| <u>GB 18218-2009 Identification of major hazard installations for dangerous chemicals</u> | 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-Nov-2022

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) (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

Disclaimer

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End of Safety Data Sheet