

# KIT SAFETY DATA SHEET



**Kit Product Name** Autoimmune EIA Anti-Scl-70 Test

**Kit Catalog Number(s)** 96SC

**Revision date** 02-Apr-2024

## Kit Contents

| Catalog Number(s)                      | Product Name                                 |
|--|--|
| 200SC, 210SC                           | Anti-Scl-70 Pos. Control, Anti-Scl-70 Calib. |
| 220NC, 220ND                           | Negative Control                             |
| 220HSP, 220HAN, 220HDS, 220HCE, 220HSS | Conjugate                                    |
| 230AW                                  | Wash Concentrate                             |
| 230AD                                  | Sample Diluent                               |
| 220TM                                  | Substrate                                    |
| 220SM                                  | Stop Solution                                |

# SAFETY DATA SHEET



Revision date 02-Apr-2024

Revision Number 1.1

## 1. Identification

### Product identifier

**Product Name** Anti-Scl-70 Pos. Control, Anti-Scl-70 Calib.

### Other means of identification

**Catalog Number(s)** 200SC, 210SC

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

**Recommended use** In-vitro laboratory reagent or component

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

#### Corporate Headquarters

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

#### Manufacturer Address

Bio-Rad Laboratories, Diagnostic Group  
4000 Alfred Nobel Drive  
Hercules, California 94547  
USA

#### Legal Entity / Contact Address

Bio-Rad Laboratories  
Clinical Diagnostics  
4000 Alfred Nobel Drive  
Hercules, California 94547  
USA

**Technical Service** 1-800-224-6723  
TechSupport.USSD@bio-rad.com

### Emergency telephone number

**24 Hour Emergency Phone Number** CHEMTREC USA: 1 (800) 424-9300

## 2. Hazard(s) identification

### Classification

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

### Hazards not otherwise classified (HNOC)

Not applicable

### Label elements

#### Hazard statements

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

The product contains no substances which at their given concentration, are considered to be hazardous to health.

**Appearance** aqueous solution      **Physical state** Liquid      **Odor** Odorless

### **Precautionary Statements - Disposal**

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

**Other information**

Harmful to aquatic life. Contains animal source material. (Goat).

Contains human source material and / or potentially infectious components

**3. Composition/information on ingredients****Substance**

Not applicable.

**Mixture**

| Chemical name      | CAS No  | Weight-% | Trade secret |
|--------------------|---------|----------|--------------|
| 1,2,3-Propanetriol | 56-81-5 | 50 - 100 | *            |

\*The exact percentage (concentration) of composition has been withheld as a trade secret.

**4. First-aid measures****Description of first aid measures**

|              |   |
|--------------|---|
| Inhalation   | Remove to fresh air.  |
| Eye contact  | Contains human source material and / or potentially infectious components. Call a physician. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. |
| Skin contact | Wash with soap and water.   |
| Ingestion    | Contains human source material and / or potentially infectious components. Call a physician.  |

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

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

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

|                    |  |
|--------------------|--|
| Note to physicians | Contains human source material and / or potentially infectious components. |
|--------------------|--|

**5. Fire-fighting measures**

|  |  |
|--|--|
| Suitable Extinguishing Media                                   | Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.                            |
| Specific hazards arising from the chemical                     | No information available.  |
| Explosion data   |  |
| Sensitivity to mechanical impact                               | None.  |
| Sensitivity to static discharge                                | None.  |
| Special protective equipment and precautions for fire-fighters | Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment. |

## 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

**Personal precautions** Ensure adequate ventilation.

### Methods and material for containment and cleaning up

**Methods for containment** Do not allow into any sewer, on the ground or into any body of water.

**Methods for cleaning up** Use: Disinfectant. Clean contaminated surface thoroughly.

## 7. Handling and storage

### Precautions for safe handling

**Advice on safe handling** Handle in accordance with good industrial hygiene and safety practice.

### Conditions for safe storage, including any incompatibilities

**Storage Conditions** Store according to product and label instructions.

## 8. Exposure controls/personal protection

### Control parameters

#### Exposure Limits

| Chemical name                 | ACGIH TLV | OSHA PEL   | NIOSH |
|-------------------------------|-----------|--|-------|
| 1,2,3-Propanetriol<br>56-81-5 | -         | TWA: 15 mg/m <sup>3</sup> mist, total particulate<br>TWA: 5 mg/m <sup>3</sup> mist, respirable fraction<br>(vacated) TWA: 10 mg/m <sup>3</sup> mist, total particulate<br>(vacated) TWA: 5 mg/m <sup>3</sup> mist, respirable fraction | -     |

### Appropriate engineering controls

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

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

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

**Hand protection** Wear suitable gloves.

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

**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.

## 9. Physical and chemical properties

### Information on basic physical and chemical properties

|                       |                          |
|-----------------------|--------------------------|
| <b>Physical state</b> | Liquid                   |
| <b>Appearance</b>     | aqueous solution         |
| <b>Color</b>          | white                    |
| <b>Odor</b>           | Odorless                 |
| <b>Odor threshold</b> | No information available |

| <u>Property</u>                                | <u>Values</u>     | <u>Remarks • Method</u> |
|--|-------------------|-------------------------|
| <b>pH</b>                                      |                   | None known              |
| <b>Melting point / freezing point</b>          | No data available | None known              |
| <b>Initial boiling point and boiling range</b> | > 100 °C / 212 °F |                         |
| <b>Flash point</b>                             | > 160 °C / 320 °F |                         |
| <b>Evaporation rate</b>                        | No data available | None known              |
| <b>Flammability</b>                            | No data available | None known              |
| <b>Flammability Limit in Air</b>               |                   | None known              |
| <b>Upper flammability or explosive limits</b>  | No data available |                         |
| <b>Lower flammability or explosive limits</b>  | No data available |                         |
| <b>Vapor pressure</b>                          | No data available | None known              |
| <b>Relative vapor density</b>                  | No data available | None known              |
| <b>Relative density</b>                        | No data available | None known              |
| <b>Water solubility</b>                        | Miscible in water |                         |
| <b>Solubility(ies)</b>                         | No data available | None known              |
| <b>Partition coefficient</b>                   | No data available | None known              |
| <b>Autoignition temperature</b>                | No data available |                         |
| <b>Decomposition temperature</b>               | No data available | None known              |
| <b>Kinematic viscosity</b>                     | No data available | None known              |
| <b>Dynamic viscosity</b>                       | No data available | None known              |

### Other information

|                             |                          |
|-----------------------------|--------------------------|
| <b>Explosive properties</b> | No information available |
| <b>Oxidizing properties</b> | No information available |
| <b>Softening point</b>      | No information available |
| <b>Molecular weight</b>     | No information available |
| <b>VOC content</b>          | No information available |
| <b>Liquid Density</b>       | No information available |
| <b>Bulk density</b>         | No information available |

## 10. Stability and reactivity

|   |   |
|---|---|
| <b>Reactivity</b>                         | No information available.   |
| <b>Chemical stability</b>                 | Stable under normal conditions.   |
| <b>Possibility of hazardous reactions</b> | 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. |
| <b>Conditions to avoid</b>                | None known based on information supplied.   |
| <b>Incompatible materials</b>             | Metals.   |
| <b>Hazardous decomposition products</b>   | None known based on information supplied.   |

## 11. Toxicological information

**Information on likely routes of exposure**

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

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

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

**Acute toxicity****Numerical measures of toxicity****Component Information**

| Chemical name                 | Oral LD50             | Dermal LD50          | Inhalation LC50         |
|-------------------------------|-----------------------|----------------------|-------------------------|
| 1,2,3-Propanetriol<br>56-81-5 | = 12600 mg/kg ( Rat ) | > 10 g/kg ( Rabbit ) | > 2.75 mg/L ( Rat ) 4 h |

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

|                                   |   |
|-----------------------------------|---|
| Skin corrosion/irritation         | No information available.               |
| Serious eye damage/eye irritation | No information available.               |
| Respiratory or skin sensitization | No information available.               |
| Germ cell mutagenicity            | No information available.               |
| Carcinogenicity                   | No information available.               |
| Reproductive toxicity             | No information available.               |
| STOT - single exposure            | No information available.               |
| STOT - repeated exposure          | No information available.               |
| Target organ effects              | Kidney, Respiratory system, Eyes, Skin. |
| Aspiration hazard                 | No information available.               |
| Other adverse effects             | No information available.               |
| Interactive effects               | No information available.               |

**12. Ecological information**

**Ecotoxicity** Harmful to aquatic life.

| Chemical name                 | Algae/aquatic plants | Fish  | Toxicity to microorganisms | Crustacea |
|-------------------------------|----------------------|---|----------------------------|-----------|
| 1,2,3-Propanetriol<br>56-81-5 | -                    | LC50: 51 - 57mL/L (96h,<br>Oncorhynchus mykiss) | -                          | -         |

**Persistence and degradability** No information available.

#### Bioaccumulation

##### Component Information

| Chemical name                 | Partition coefficient |
|-------------------------------|-----------------------|
| 1,2,3-Propanetriol<br>56-81-5 | -1.75                 |

**Other adverse effects** No information available.

### 13. Disposal considerations

#### Disposal methods

**Waste from residues/unused products** Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation. Flush pipes with water frequently if discarding solutions containing sodium azide into metal piping systems.

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

### 14. Transport information

**DOT** Not regulated

**TDG** Not regulated

**MEX** Not regulated

**IATA** Not regulated

**IMDG** Not regulated

### 15. Regulatory information

**International Inventories** Contact supplier for inventory compliance status

#### US Federal Regulations

##### SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

##### SARA 311/312 Hazard Categories

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

**CWA (Clean Water Act)**

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

**CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

**US State Regulations****California Proposition 65**

This product does not contain any Proposition 65 chemicals.

**U.S. State Right-to-Know Regulations**

| Chemical name                         | New Jersey | Massachusetts | Pennsylvania |
|---------------------------------------|------------|---------------|--------------|
| 1,2,3-Propanetriol<br>56-81-5         | X          | X             | X            |
| Water<br>7732-18-5                    | -          | -             | X            |
| Sodium azide<br>26628-22-8            | X          | X             | X            |
| Sodium phosphate dibasic<br>7558-79-4 | X          | X             | X            |

**U.S. EPA Label Information**

**EPA Pesticide Registration Number** Not applicable

|                              |
|------------------------------|
| <b>16. Other information</b> |
|------------------------------|

|             |                         |                       |                           |                              |
|-------------|-------------------------|-----------------------|---------------------------|------------------------------|
| <b>NFPA</b> | <b>Health hazards</b> 0 | <b>Flammability</b> 1 | <b>Instability</b> 0      | <b>Special hazards</b> -     |
| <b>HMIS</b> | <b>Health hazards</b> 0 | <b>Flammability</b> 1 | <b>Physical hazards</b> 0 | <b>Personal protection</b> X |

**Key or legend to abbreviations and acronyms used in the safety data sheet****Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

|         |                             |      |                                  |
|---------|-----------------------------|------|----------------------------------|
| TWA     | TWA (time-weighted average) | STEL | STEL (Short Term Exposure Limit) |
| Ceiling | Maximum limit value         | *    | Skin designation                 |

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

Agency for Toxic Substances and Disease Registry (ATSDR)  
 U.S. Environmental Protection Agency ChemView Database  
 European Food Safety Authority (EFSA)  
 EPA (Environmental Protection Agency)  
 Acute Exposure Guideline Level(s) (AEGL(s))  
 U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act  
 U.S. Environmental Protection Agency High Production Volume Chemicals  
 Food Research Journal  
 Hazardous Substance Database  
 International Uniform Chemical Information Database (IUCLID)  
 National Institute of Technology and Evaluation (NITE)  
 Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)  
 NIOSH (National Institute for Occupational Safety and Health)  
 National Library of Medicine's ChemID Plus (NLM CIP)  
 National Library of Medicine's PubMed database (NLM PUBMED)  
 National Toxicology Program (NTP)



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New Zealand's Chemical Classification and Information Database (CCID)  
Organization for Economic Co-operation and Development Environment, Health, and Safety Publications  
Organization for Economic Co-operation and Development High Production Volume Chemicals Program  
Organization for Economic Co-operation and Development Screening Information Data Set  
World Health Organization

**Revision date** 02-Apr-2024

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

**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



Revision date 02-Apr-2024

Revision Number 1.1

## 1. Identification

### Product identifier

**Product Name** Negative Control

### Other means of identification

**Catalog Number(s)** 220NC, 220ND

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

**Recommended use** In-vitro laboratory reagent or component

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

#### Corporate Headquarters

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

#### Manufacturer Address

Bio-Rad Laboratories, Diagnostic Group  
4000 Alfred Nobel Drive  
Hercules, California 94547  
USA

#### Legal Entity / Contact Address

Bio-Rad Laboratories  
Clinical Diagnostics  
4000 Alfred Nobel Drive  
Hercules, California 94547  
USA

**Technical Service** 1-800-224-6723  
TechSupport.USSD@bio-rad.com

### Emergency telephone number

**24 Hour Emergency Phone Number** CHEMTREC USA: 1 (800) 424-9300

## 2. Hazard(s) identification

### Classification

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

### Hazards not otherwise classified (HNOC)

Not applicable

### Label elements

#### Hazard statements

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

The product contains no substances which at their given concentration, are considered to be hazardous to health.

**Appearance** aqueous solution **Physical state** Liquid **Odor** Odorless

### **Precautionary Statements - Disposal**

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

**Other information**

Harmful to aquatic life. Contains animal source material. (Goat).

Contains human source material and / or potentially infectious components

**3. Composition/information on ingredients****Substance**

Not applicable.

**Mixture**

| Chemical name      | CAS No  | Weight-% | Trade secret |
|--------------------|---------|----------|--------------|
| 1,2,3-Propanetriol | 56-81-5 | 20 - 35  | *            |

\*The exact percentage (concentration) of composition has been withheld as a trade secret.

**4. First-aid measures****Description of first aid measures**

|              |   |
|--------------|---|
| Inhalation   | Remove to fresh air.  |
| Eye contact  | Contains human source material and / or potentially infectious components. Call a physician. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. |
| Skin contact | Wash with soap and water.   |
| Ingestion    | Contains human source material and / or potentially infectious components. Call a physician.  |

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

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

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

|                    |  |
|--------------------|--|
| Note to physicians | Contains human source material and / or potentially infectious components. |
|--------------------|--|

**5. Fire-fighting measures**

|  |  |
|--|--|
| Suitable Extinguishing Media                                   | Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.                            |
| Specific hazards arising from the chemical                     | No information available.  |
| Explosion data   |  |
| Sensitivity to mechanical impact                               | None.  |
| Sensitivity to static discharge                                | None.  |
| Special protective equipment and precautions for fire-fighters | Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment. |

## 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

**Personal precautions** Ensure adequate ventilation.

### Methods and material for containment and cleaning up

**Methods for containment** Do not allow into any sewer, on the ground or into any body of water.

**Methods for cleaning up** Use: Disinfectant. Clean contaminated surface thoroughly.

## 7. Handling and storage

### Precautions for safe handling

**Advice on safe handling** Handle in accordance with good industrial hygiene and safety practice.

### Conditions for safe storage, including any incompatibilities

**Storage Conditions** Store according to product and label instructions.

## 8. Exposure controls/personal protection

### Control parameters

#### Exposure Limits

| Chemical name                 | ACGIH TLV | OSHA PEL   | NIOSH |
|-------------------------------|-----------|--|-------|
| 1,2,3-Propanetriol<br>56-81-5 | -         | TWA: 15 mg/m <sup>3</sup> mist, total particulate<br>TWA: 5 mg/m <sup>3</sup> mist, respirable fraction<br>(vacated) TWA: 10 mg/m <sup>3</sup> mist, total particulate<br>(vacated) TWA: 5 mg/m <sup>3</sup> mist, respirable fraction | -     |

### Appropriate engineering controls

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

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

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

**Hand protection** Wear suitable gloves.

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

**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.

## 9. Physical and chemical properties

### Information on basic physical and chemical properties

**Physical state** Liquid  
**Appearance** aqueous solution  
**Color** white  
**Odor** Odorless  
**Odor threshold** No information available

| <u>Property</u>                                | <u>Values</u>     | <u>Remarks • Method</u> |
|--|-------------------|-------------------------|
| <b>pH</b>                                      |                   | None known              |
| <b>Melting point / freezing point</b>          | No data available | None known              |
| <b>Initial boiling point and boiling range</b> | > 100 °C / 212 °F |                         |
| <b>Flash point</b>                             | > 160 °C / 320 °F |                         |
| <b>Evaporation rate</b>                        | No data available | None known              |
| <b>Flammability</b>                            | No data available | None known              |
| <b>Flammability Limit in Air</b>               |                   | None known              |
| <b>Upper flammability or explosive limits</b>  | No data available |                         |
| <b>Lower flammability or explosive limits</b>  | No data available |                         |
| <b>Vapor pressure</b>                          | No data available | None known              |
| <b>Relative vapor density</b>                  | No data available | None known              |
| <b>Relative density</b>                        | No data available | None known              |
| <b>Water solubility</b>                        | Miscible in water |                         |
| <b>Solubility(ies)</b>                         | No data available | None known              |
| <b>Partition coefficient</b>                   | No data available | None known              |
| <b>Autoignition temperature</b>                | No data available | None known              |
| <b>Decomposition temperature</b>               | No data available | None known              |
| <b>Kinematic viscosity</b>                     | No data available | None known              |
| <b>Dynamic viscosity</b>                       | No data available | None known              |

### Other information

**Explosive properties** No information available  
**Oxidizing properties** No information available  
**Softening point** No information available  
**Molecular weight** No information available  
**VOC content** No information available  
**Liquid Density** No information available  
**Bulk density** No information available

## 10. Stability and reactivity

**Reactivity** No information available.

**Chemical stability** Stable under normal conditions.

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

**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.

## 11. Toxicological information

### Information on likely routes of exposure

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

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

Symptoms No information available.

**Acute toxicity****Numerical measures of toxicity****Component Information**

| Chemical name                 | Oral LD50             | Dermal LD50          | Inhalation LC50         |
|-------------------------------|-----------------------|----------------------|-------------------------|
| 1,2,3-Propanetriol<br>56-81-5 | = 12600 mg/kg ( Rat ) | > 10 g/kg ( Rabbit ) | > 2.75 mg/L ( Rat ) 4 h |

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

|                                   |   |
|-----------------------------------|---|
| Skin corrosion/irritation         | No information available.               |
| Serious eye damage/eye irritation | No information available.               |
| Respiratory or skin sensitization | No information available.               |
| Germ cell mutagenicity            | No information available.               |
| Carcinogenicity                   | No information available.               |
| Reproductive toxicity             | No information available.               |
| STOT - single exposure            | No information available.               |
| STOT - repeated exposure          | No information available.               |
| Target organ effects              | Kidney, Respiratory system, Eyes, Skin. |
| Aspiration hazard                 | No information available.               |
| Other adverse effects             | No information available.               |
| Interactive effects               | No information available.               |

**12. Ecological information**

Ecotoxicity Harmful to aquatic life.

| Chemical name                 | Algae/aquatic plants | Fish  | Toxicity to microorganisms | Crustacea |
|-------------------------------|----------------------|---|----------------------------|-----------|
| 1,2,3-Propanetriol<br>56-81-5 | -                    | LC50: 51 - 57mL/L (96h,<br>Oncorhynchus mykiss) | -                          | -         |

**Persistence and degradability** No information available.

#### Bioaccumulation

##### Component Information

| Chemical name                 | Partition coefficient |
|-------------------------------|-----------------------|
| 1,2,3-Propanetriol<br>56-81-5 | -1.75                 |

**Other adverse effects** No information available.

### 13. Disposal considerations

#### Disposal methods

**Waste from residues/unused products**

Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

**Contaminated packaging**

Do not reuse empty containers.

### 14. Transport information

**DOT** Not regulated

**TDG** Not regulated

**MEX** Not regulated

**IATA** Not regulated

**IMDG** Not regulated

### 15. Regulatory information

**International Inventories**

Contact supplier for inventory compliance status

#### **US Federal Regulations**

**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

**SARA 311/312 Hazard Categories**

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

**CWA (Clean Water Act)**

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and

40 CFR 122.42).

**CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

**US State Regulations****California Proposition 65**

This product does not contain any Proposition 65 chemicals.

**U.S. State Right-to-Know Regulations**

| Chemical name                         | New Jersey | Massachusetts | Pennsylvania |
|---------------------------------------|------------|---------------|--------------|
| 1,2,3-Propanetriol<br>56-81-5         | X          | X             | X            |
| Water<br>7732-18-5                    | -          | -             | X            |
| Sodium phosphate dibasic<br>7558-79-4 | X          | X             | X            |

**U.S. EPA Label Information**

**EPA Pesticide Registration Number** Not applicable

|                              |
|------------------------------|
| <b>16. Other information</b> |
|------------------------------|

|             |                         |                       |                           |                              |
|-------------|-------------------------|-----------------------|---------------------------|------------------------------|
| <b>NFPA</b> | <b>Health hazards</b> 0 | <b>Flammability</b> 1 | <b>Instability</b> 0      | <b>Special hazards</b> -     |
| <b>HMIS</b> | <b>Health hazards</b> 0 | <b>Flammability</b> 1 | <b>Physical hazards</b> 0 | <b>Personal protection</b> X |

**Key or legend to abbreviations and acronyms used in the safety data sheet****Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

|         |                             |      |                                  |
|---------|-----------------------------|------|----------------------------------|
| TWA     | TWA (time-weighted average) | STEL | STEL (Short Term Exposure Limit) |
| Ceiling | Maximum limit value         | *    | Skin designation                 |

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

Agency for Toxic Substances and Disease Registry (ATSDR)  
 U.S. Environmental Protection Agency ChemView Database  
 European Food Safety Authority (EFSA)  
 EPA (Environmental Protection Agency)  
 Acute Exposure Guideline Level(s) (AEGL(s))  
 U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act  
 U.S. Environmental Protection Agency High Production Volume Chemicals  
 Food Research Journal  
 Hazardous Substance Database  
 International Uniform Chemical Information Database (IUCLID)  
 National Institute of Technology and Evaluation (NITE)  
 Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)  
 NIOSH (National Institute for Occupational Safety and Health)  
 National Library of Medicine's ChemID Plus (NLM CIP)  
 National Library of Medicine's PubMed database (NLM PUBMED)  
 National Toxicology Program (NTP)  
 New Zealand's Chemical Classification and Information Database (CCID)  
 Organization for Economic Co-operation and Development Environment, Health, and Safety Publications  
 Organization for Economic Co-operation and Development High Production Volume Chemicals Program  
 Organization for Economic Co-operation and Development Screening Information Data Set  
 World Health Organization



**Revision date** 02-Apr-2024**Revision Note** Reformatted and updated existing information.**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



Revision date 13-Nov-2023

Revision Number 1.3

## 1. Identification

### Product identifier

**Product Name** Conjugate

### Other means of identification

**Catalog Number(s)** 220HSP, 220HAN, 220HDS, 220HCE, 220HSS

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

**Recommended use** In-vitro laboratory reagent or component

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

#### Corporate Headquarters

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

#### Manufacturer Address

Bio-Rad Laboratories, Diagnostic Group  
4000 Alfred Nobel Drive  
Hercules, California 94547  
USA

#### Legal Entity / Contact Address

Bio-Rad Laboratories  
Clinical Diagnostics  
4000 Alfred Nobel Drive  
Hercules, California 94547  
USA

**Technical Service** 1-800-224-6723  
TechSupport.USSD@bio-rad.com

### Emergency telephone number

**24 Hour Emergency Phone Number** CHEMTREC USA: 1 (800) 424-9300

## 2. Hazard(s) identification

### Classification

|                    |             |
|--------------------|-------------|
| Skin sensitization | Category 1A |
|--------------------|-------------|

### Hazards not otherwise classified (HNOC)

Not applicable

### Label elements

#### Warning

#### Hazard statements

May cause an allergic skin reaction



|                                    |                              |                      |
|------------------------------------|------------------------------|----------------------|
| <b>Appearance</b> aqueous solution | <b>Physical state</b> Liquid | <b>Odor</b> Odorless |
|------------------------------------|------------------------------|----------------------|

**Precautionary Statements - Prevention**

Contaminated work clothing must not be allowed out of the workplace  
Wear protective gloves/protective clothing/eye protection/face protection

**Precautionary Statements - Response**

IF ON SKIN: Wash with plenty of water and soap  
If skin irritation or rash occurs: Get medical advice/attention  
Wash contaminated clothing before reuse

**Precautionary Statements - Disposal**

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

**Other information**

Contains animal source material. (Goat).

**3. Composition/information on ingredients****Substance**

Not applicable.

**Mixture**

| Chemical name | CAS No       | Weight-%     | Trade secret |
|---------------|--------------|--------------|--------------|
| Trade secret  | Trade secret | 0.01 - 0.099 | *            |

\*The exact percentage (concentration) of composition has been withheld as a trade secret.

**4. First-aid measures****Description of first aid measures**

|                       |  |
|-----------------------|--|
| <b>General advice</b> | Show this safety data sheet to the doctor in attendance.   |
| <b>Inhalation</b>     | Remove to fresh air.   |
| <b>Eye contact</b>    | Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids.<br>Consult a physician.              |
| <b>Skin contact</b>   | Wash with soap and water. May cause an allergic skin reaction. In the case of skin irritation or allergic reactions see a physician. |
| <b>Ingestion</b>      | Rinse mouth.   |

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

|                 |                         |
|-----------------|-------------------------|
| <b>Symptoms</b> | Itching. Rashes. Hives. |
|-----------------|-------------------------|

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

|                           |  |
|---------------------------|--|
| <b>Note to physicians</b> | May cause sensitization in susceptible persons. Treat symptomatically. |
|---------------------------|--|

**5. Fire-fighting measures**

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

|   |  |
|---|--|
| <b>Specific hazards arising from the chemical</b>                     | Product is or contains a sensitizer. May cause sensitization by skin contact.  |
| <b>Explosion data</b>   |  |
| <b>Sensitivity to mechanical impact</b>                               | None.  |
| <b>Sensitivity to static discharge</b>                                | None.  |
| <b>Special protective equipment and precautions for fire-fighters</b> | Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment. |

## 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

|                             |  |
|-----------------------------|--|
| <b>Personal precautions</b> | Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal protective equipment as required. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. |
|-----------------------------|--|

### Methods and material for containment and cleaning up

|                                |   |
|--------------------------------|---|
| <b>Methods for containment</b> | Prevent further leakage or spillage if safe to do so. |
| <b>Methods for cleaning up</b> | Pick up and transfer to properly labeled containers.  |

## 7. Handling and storage

### Precautions for safe handling

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

### Conditions for safe storage, including any incompatibilities

|                           |   |
|---------------------------|---|
| <b>Storage Conditions</b> | Keep containers tightly closed in a dry, cool and well-ventilated place. Store according to product and label instructions. |
|---------------------------|---|

## 8. Exposure controls/personal protection

### Control parameters

|                        |  |
|------------------------|--|
| <b>Exposure Limits</b> | The following ingredients are the only ingredients of the product above the cut-off level (or level that contributes to the hazard classification of the mixture) which have an exposure limit applicable in the region for which this safety data sheet is intended or other recommended limit. At this time, the other relevant constituents have no known exposure limits from the sources listed here. |
|------------------------|--|

### Appropriate engineering controls

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

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

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

**9. Physical and chemical properties****Information on basic physical and chemical properties**

|                       |                          |
|-----------------------|--------------------------|
| <b>Physical state</b> | Liquid                   |
| <b>Appearance</b>     | aqueous solution         |
| <b>Color</b>          | amber                    |
| <b>Odor</b>           | Odorless                 |
| <b>Odor threshold</b> | No information available |

| <b>Property</b>                                | <b>Values</b>     | <b>Remarks • Method</b> |
|--|-------------------|-------------------------|
| <b>pH</b>                                      | 7.2               |                         |
| <b>Melting point / freezing point</b>          | No data available | None known              |
| <b>Initial boiling point and boiling range</b> | 100 °C / 212 °F   |                         |
| <b>Flash point</b>                             | No data available | None known              |
| <b>Evaporation rate</b>                        | No data available | None known              |
| <b>Flammability</b>                            | No data available | None known              |
| <b>Flammability Limit in Air</b>               |                   | None known              |
| <b>Upper flammability or explosive limits</b>  | No data available |                         |
| <b>Lower flammability or explosive limits</b>  | No data available |                         |
| <b>Vapor pressure</b>                          | No data available | None known              |
| <b>Relative vapor density</b>                  | No data available | None known              |
| <b>Relative density</b>                        | No data available | None known              |
| <b>Water solubility</b>                        | Miscible in water |                         |
| <b>Solubility(ies)</b>                         | No data available | None known              |
| <b>Partition coefficient</b>                   | No data available | None known              |
| <b>Autoignition temperature</b>                | No data available |                         |
| <b>Decomposition temperature</b>               | No data available | None known              |
| <b>Kinematic viscosity</b>                     | No data available | None known              |
| <b>Dynamic viscosity</b>                       | No data available | None known              |

**Other information**

|                             |                          |
|-----------------------------|--------------------------|
| <b>Explosive properties</b> | No information available |
| <b>Oxidizing properties</b> | No information available |
| <b>Softening point</b>      | No information available |
| <b>Molecular weight</b>     | No information available |
| <b>VOC content</b>          | No information available |
| <b>Liquid Density</b>       | No information available |
| <b>Bulk density</b>         | No information available |

**10. Stability and reactivity**

|   |                                 |
|---|---------------------------------|
| <b>Reactivity</b>                         | No information available.       |
| <b>Chemical stability</b>                 | Stable under normal conditions. |
| <b>Possibility of hazardous reactions</b> | None under normal processing.   |

**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.

## 11. Toxicological information

### Information on likely routes of exposure

#### Product Information

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

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

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

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

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

**Symptoms** Itching. Rashes. Hives.

### Acute toxicity

#### Numerical measures of toxicity

#### Component Information

| Chemical name | Oral LD50                                      | Dermal LD50            | Inhalation LC50         |
|---------------|--|------------------------|-------------------------|
| Trade secret  | 232 - 249 mg/kg ( Rat )<br>= 120 mg/kg ( Rat ) | = 200 mg/kg ( Rabbit ) | = 0.11 mg/L ( Rat ) 4 h |

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

**Skin corrosion/irritation** No information available.

**Serious eye damage/eye irritation** No information available.

**Respiratory or skin sensitization** May cause an allergic skin reaction.

**Germ cell mutagenicity** No information available.

**Carcinogenicity** No information available.

**Reproductive toxicity** No information available.

**STOT - single exposure** No information available.

**STOT - repeated exposure** No information available.

**Aspiration hazard** No information available.

**Other adverse effects** No information available.

**Interactive effects** No information available.

## 12. Ecological information

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

**Persistence and degradability** No information available.

### Bioaccumulation

#### Component Information

| Chemical name | Partition coefficient |
|---------------|-----------------------|
| Trade secret  | -0.26                 |

**Other adverse effects** No information available.

## 13. Disposal considerations

### Disposal methods

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

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

## 14. Transport information

**DOT** Not regulated

**TDG** Not regulated

**MEX** Not regulated

**IATA** Not regulated

**IMDG** Not regulated

## 15. Regulatory information

**International Inventories** Contact supplier for inventory compliance status

**US Federal Regulations**

**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

**SARA 311/312 Hazard Categories**

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

**CWA (Clean Water Act)**

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

**CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

**US State Regulations****California Proposition 65**

This product does not contain any Proposition 65 chemicals.

**U.S. State Right-to-Know Regulations**

| Chemical name                         | New Jersey | Massachusetts | Pennsylvania |
|---------------------------------------|------------|---------------|--------------|
| Water<br>7732-18-5                    | -          | -             | X            |
| 1,2,3-Propanetriol<br>56-81-5         | X          | X             | X            |
| Sodium phosphate dibasic<br>7558-79-4 | X          | X             | X            |

**U.S. EPA Label Information**

**EPA Pesticide Registration Number** Not applicable

## 16. Other information

|             |                         |                       |                           |                              |
|-------------|-------------------------|-----------------------|---------------------------|------------------------------|
| <b>NFPA</b> | <b>Health hazards</b> 2 | <b>Flammability</b> 0 | <b>Instability</b> 0      | <b>Special hazards</b> -     |
| <b>HMIS</b> | <b>Health hazards</b> 2 | <b>Flammability</b> 0 | <b>Physical hazards</b> 0 | <b>Personal protection</b> X |

**Key or legend to abbreviations and acronyms used in the safety data sheet****Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

|         |                             |      |                                  |
|---------|-----------------------------|------|----------------------------------|
| TWA     | TWA (time-weighted average) | STEL | STEL (Short Term Exposure Limit) |
| Ceiling | Maximum limit value         | *    | Skin designation                 |

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

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



National Institute of Technology and Evaluation (NITE)  
Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)  
NIOSH (National Institute for Occupational Safety and Health)  
National Library of Medicine's ChemID Plus (NLM CIP)  
National Library of Medicine's PubMed database (NLM PUBMED)  
National Toxicology Program (NTP)  
New Zealand's Chemical Classification and Information Database (CCID)  
Organization for Economic Co-operation and Development Environment, Health, and Safety Publications  
Organization for Economic Co-operation and Development High Production Volume Chemicals Program  
Organization for Economic Co-operation and Development Screening Information Data Set  
World Health Organization

**Revision date** 13-Nov-2023

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

**Disclaimer**

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**End of Safety Data Sheet**

# SAFETY DATA SHEET



Revision date 02-Apr-2024

Revision Number 1.2

## 1. Identification

### Product identifier

**Product Name** Wash Concentrate

### Other means of identification

**Catalog Number(s)** 230AW

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

**Recommended use** In-vitro laboratory reagent or component

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

#### Corporate Headquarters

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

#### Manufacturer Address

Bio-Rad Laboratories, Diagnostic Group  
4000 Alfred Nobel Drive  
Hercules, California 94547  
USA

#### Legal Entity / Contact Address

Bio-Rad Laboratories  
Clinical Diagnostics  
4000 Alfred Nobel Drive  
Hercules, California 94547  
USA

**Technical Service** 1-800-224-6723  
TechSupport.USSD@bio-rad.com

### Emergency telephone number

**24 Hour Emergency Phone Number** CHEMTREC USA: 1 (800) 424-9300

## 2. Hazard(s) identification

### Classification

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

### Hazards not otherwise classified (HNOC)

Not applicable

### Label elements

#### Hazard statements

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

The product contains no substances which at their given concentration, are considered to be hazardous to health.

**Appearance** aqueous solution **Physical state** Liquid **Odor** Odorless

### Other information

No information available.

### 3. Composition/information on ingredients

**Substance**

Not applicable.

**Mixture**

| Chemical name   | CAS No    | Weight-% | Trade secret |
|-----------------|-----------|----------|--------------|
| Sodium chloride | 7647-14-5 | 10 - 20  | *            |

\*The exact percentage (concentration) of composition has been withheld as a trade secret.

### 4. First-aid measures

**Description of 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.<br>Consult a physician. |
| Skin contact | Wash skin with soap and water.  |
| Ingestion    | Rinse mouth.  |

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

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

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

|                    |                        |
|--------------------|------------------------|
| Note to physicians | Treat symptomatically. |
|--------------------|------------------------|

### 5. Fire-fighting measures

|  |   |
|--|---|
| Suitable Extinguishing Media                                   | Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.                               |
| Specific hazards arising from the chemical                     | No information available.   |
| Explosion data   |   |
| Sensitivity to mechanical impact                               | None.   |
| Sensitivity to static discharge                                | None.   |
| Special protective equipment and precautions for fire-fighters | Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear.<br>Use personal protection equipment. |

### 6. Accidental release measures

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

|                      |                              |
|----------------------|------------------------------|
| Personal precautions | Ensure adequate ventilation. |
|----------------------|------------------------------|

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

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

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

**7. Handling and storage****Precautions for safe handling**

**Advice on safe handling** Handle in accordance with good industrial hygiene and safety practice.

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

**Storage Conditions** Store according to product and label instructions.

**8. Exposure controls/personal protection****Control parameters**

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

**Appropriate engineering controls**

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

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

**Eye/face protection** No special protective equipment required.

**Skin and body protection** No special protective equipment required.

**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.

**9. Physical and chemical properties****Information on basic physical and chemical properties**

**Physical state** Liquid  
**Appearance** aqueous solution  
**Color** white  
**Odor** Odorless  
**Odor threshold** No information available

| <b><u>Property</u></b> | <b><u>Values</u></b> | <b><u>Remarks • Method</u></b> |
|------------------------|----------------------|--------------------------------|
| pH                     | 7.3                  |                                |

|   |                          |            |
|---|--------------------------|------------|
| Melting point / freezing point          | No data available        | None known |
| Initial boiling point and boiling range | > 100 °C / 212 °F        |            |
| 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        |            |
| Vapor pressure                          | No data available        | None known |
| Relative vapor 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 |
| <b>Other information</b>                |                          |            |
| Explosive properties                    | No information available |            |
| Oxidizing properties                    | No information available |            |
| Softening point                         | No information available |            |
| Molecular weight                        | No information available |            |
| VOC content                             | No information available |            |
| Liquid Density                          | No information available |            |
| Bulk density                            | No information available |            |

## 10. Stability and reactivity

|                                    |   |
|------------------------------------|---|
| Reactivity                         | No information available.                 |
| Chemical stability                 | Stable under normal conditions.           |
| Possibility of hazardous reactions | None under normal processing.             |
| 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. |

## 11. Toxicological information

### Information on likely routes of exposure

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

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

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

### Acute toxicity

## Numerical measures of toxicity

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

ATEmix (oral) 25,431.70 mg/kg

## Component Information

| Chemical name                | Oral LD50            | Dermal LD50              | Inhalation LC50       |
|------------------------------|----------------------|--------------------------|-----------------------|
| Sodium chloride<br>7647-14-5 | = 3550 mg/kg ( Rat ) | > 10000 mg/kg ( Rabbit ) | > 42 mg/L ( Rat ) 1 h |

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

Skin corrosion/irritation No information available.

Serious eye damage/eye irritation No information available.

Respiratory or skin sensitization No information available.

Germ cell mutagenicity No information available.

Carcinogenicity No information available.

Reproductive toxicity No information available.

STOT - single exposure No information available.

STOT - repeated exposure No information available.

Aspiration hazard No information available.

Other adverse effects No information available.

Interactive effects No information available.

**12. Ecological information**

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

| Chemical name                | Algae/aquatic plants | Fish   | Toxicity to microorganisms | Crustacea  |
|------------------------------|----------------------|--|----------------------------|--|
| Sodium chloride<br>7647-14-5 | -                    | LC50: 5560 - 6080mg/L (96h, Lepomis macrochirus)<br>LC50: =12946mg/L (96h, Lepomis macrochirus)<br>LC50: 6020 - 7070mg/L (96h, Pimephales promelas)<br>LC50: =7050mg/L (96h, Pimephales promelas)<br>LC50: 6420 - 6700mg/L | -                          | EC50: =1000mg/L (48h, Daphnia magna)<br>EC50: 340.7 - 469.2mg/L (48h, Daphnia magna) |

|  |  |   |  |  |
|--|--|---|--|--|
|  |  | (96h, Pimephales promelas)<br>LC50: 4747 - 7824mg/L<br>(96h, Oncorhynchus mykiss) |  |  |
|--|--|---|--|--|

**Persistence and degradability** No information available.

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

**Other adverse effects** No information available.

### 13. Disposal considerations

#### Disposal methods

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

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

### 14. Transport information

**DOT** Not regulated

**TDG** Not regulated

**MEX** Not regulated

**IATA** Not regulated

**IMDG** Not regulated

### 15. Regulatory information

**International Inventories** Contact supplier for inventory compliance status

#### US Federal Regulations

##### **SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

##### **SARA 311/312 Hazard Categories**

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

##### **CWA (Clean Water Act)**

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

##### **CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive

Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

### US State Regulations

#### California Proposition 65

This product does not contain any Proposition 65 chemicals.

### U.S. State Right-to-Know Regulations

| Chemical name                         | New Jersey | Massachusetts | Pennsylvania |
|---------------------------------------|------------|---------------|--------------|
| Water<br>7732-18-5                    | -          | -             | X            |
| Sodium phosphate dibasic<br>7558-79-4 | X          | X             | X            |

### U.S. EPA Label Information

**EPA Pesticide Registration Number** Not applicable

## 16. Other information

|             |                         |                       |                           |                              |
|-------------|-------------------------|-----------------------|---------------------------|------------------------------|
| <b>NFPA</b> | <b>Health hazards</b> 0 | <b>Flammability</b> 0 | <b>Instability</b> 0      | <b>Special hazards</b> -     |
| <b>HMIS</b> | <b>Health hazards</b> 0 | <b>Flammability</b> 0 | <b>Physical hazards</b> 0 | <b>Personal protection</b> X |

### Key or legend to abbreviations and acronyms used in the safety data sheet

#### **Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

|         |                             |      |                                  |
|---------|-----------------------------|------|----------------------------------|
| TWA     | TWA (time-weighted average) | STEL | STEL (Short Term Exposure Limit) |
| Ceiling | Maximum limit value         | *    | Skin designation                 |

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

Agency for Toxic Substances and Disease Registry (ATSDR)  
U.S. Environmental Protection Agency ChemView Database  
European Food Safety Authority (EFSA)  
EPA (Environmental Protection Agency)  
Acute Exposure Guideline Level(s) (AEGL(s))  
U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act  
U.S. Environmental Protection Agency High Production Volume Chemicals  
Food Research Journal  
Hazardous Substance Database  
International Uniform Chemical Information Database (IUCLID)  
National Institute of Technology and Evaluation (NITE)  
Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)  
NIOSH (National Institute for Occupational Safety and Health)  
National Library of Medicine's ChemID Plus (NLM CIP)  
National Library of Medicine's PubMed database (NLM PUBMED)  
National Toxicology Program (NTP)  
New Zealand's Chemical Classification and Information Database (CCID)  
Organization for Economic Co-operation and Development Environment, Health, and Safety Publications  
Organization for Economic Co-operation and Development High Production Volume Chemicals Program  
Organization for Economic Co-operation and Development Screening Information Data Set  
World Health Organization

**Revision date** 02-Apr-2024

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

### 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



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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



Revision date 02-Apr-2024

Revision Number 1.1

## 1. Identification

### Product identifier

**Product Name** Sample Diluent

### Other means of identification

**Catalog Number(s)** 230AD

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

**Recommended use** In-vitro laboratory reagent or component

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

#### Corporate Headquarters

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

#### Manufacturer Address

Bio-Rad Laboratories, Diagnostic Group  
4000 Alfred Nobel Drive  
Hercules, California 94547  
USA

#### Legal Entity / Contact Address

Bio-Rad Laboratories  
Clinical Diagnostics  
4000 Alfred Nobel Drive  
Hercules, California 94547  
USA

**Technical Service** 1-800-224-6723  
TechSupport.USSD@bio-rad.com

### Emergency telephone number

**24 Hour Emergency Phone Number** CHEMTREC USA: 1 (800) 424-9300

## 2. Hazard(s) identification

### Classification

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

### Hazards not otherwise classified (HNOC)

Not applicable

### Label elements

#### Hazard statements

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

The product contains no substances which at their given concentration, are considered to be hazardous to health.

**Appearance** aqueous solution      **Physical state** Liquid      **Odor** Odorless

### Other information

Contains animal source material. (Goat).

### 3. Composition/information on ingredients

**Substance**

Not applicable.

**Mixture**

| Chemical name   | CAS No    | Weight-% | Trade secret |
|-----------------|-----------|----------|--------------|
| Sodium chloride | 7647-14-5 | 1 - 2.5  | *            |

\*The exact percentage (concentration) of composition has been withheld as a trade secret.

### 4. First-aid measures

**Description of 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.<br>Consult a physician. |
| Skin contact | Wash skin with soap and water.  |
| Ingestion    | Rinse mouth.  |

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

**Symptoms** No information available.

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

**Note to physicians** Treat symptomatically.

### 5. Fire-fighting measures

|   |   |
|---|---|
| <b>Suitable Extinguishing Media</b>                                   | Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.                               |
| <b>Specific hazards arising from the chemical</b>                     | No information available.   |
| <b>Explosion data</b>   |   |
| <b>Sensitivity to mechanical impact</b>                               | None.   |
| <b>Sensitivity to static discharge</b>                                | None.   |
| <b>Special protective equipment and precautions for fire-fighters</b> | Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear.<br>Use personal protection equipment. |

### 6. Accidental release measures

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

**Personal precautions** Ensure adequate ventilation.

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

|                                |   |
|--------------------------------|---|
| <b>Methods for containment</b> | Prevent further leakage or spillage if safe to do so. |
| <b>Methods for cleaning up</b> | Pick up and transfer to properly labeled containers.  |

**7. Handling and storage****Precautions for safe handling**

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

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

|                           |  |
|---------------------------|--|
| <b>Storage Conditions</b> | Store according to product and label instructions. |
|---------------------------|--|

**8. Exposure controls/personal protection****Control parameters**

|                        |  |
|------------------------|--|
| <b>Exposure Limits</b> | The following ingredients are the only ingredients of the product above the cut-off level (or level that contributes to the hazard classification of the mixture) which have an exposure limit applicable in the region for which this safety data sheet is intended or other recommended limit. At this time, the other relevant constituents have no known exposure limits from the sources listed here. |
|------------------------|--|

**Appropriate engineering controls**

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

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

|                                       |  |
|---------------------------------------|--|
| <b>Eye/face protection</b>            | No special protective equipment required.  |
| <b>Skin and body protection</b>       | No special protective equipment required.  |
| <b>Respiratory protection</b>         | No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required. |
| <b>General hygiene considerations</b> | Handle in accordance with good industrial hygiene and safety practice.   |

**9. Physical and chemical properties****Information on basic physical and chemical properties**

|                       |                          |
|-----------------------|--------------------------|
| <b>Physical state</b> | Liquid                   |
| <b>Appearance</b>     | aqueous solution         |
| <b>Color</b>          | white                    |
| <b>Odor</b>           | Odorless                 |
| <b>Odor threshold</b> | 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 / 212 °F        |                         |
| 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        |                         |
| Vapor pressure                          | No data available        | None known              |
| Relative vapor 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              |
| <u>Other information</u>                |                          |                         |
| Explosive properties                    | No information available |                         |
| Oxidizing properties                    | No information available |                         |
| Softening point                         | No information available |                         |
| Molecular weight                        | No information available |                         |
| VOC content                             | No information available |                         |
| Liquid Density                          | No information available |                         |
| Bulk density                            | No information available |                         |

## 10. Stability and reactivity

|                                    |   |
|------------------------------------|---|
| Reactivity                         | No information available.   |
| Chemical 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. |
| Conditions to avoid                | None known based on information supplied.   |
| Incompatible materials             | Metals.   |
| Hazardous decomposition products   | None known based on information supplied.   |

## 11. Toxicological information

### Information on likely routes of exposure

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

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

**Symptoms** No information available.

**Acute toxicity**

**Numerical measures of toxicity**

**Component Information**

| Chemical name                | Oral LD50            | Dermal LD50              | Inhalation LC50       |
|------------------------------|----------------------|--------------------------|-----------------------|
| Sodium chloride<br>7647-14-5 | = 3550 mg/kg ( Rat ) | > 10000 mg/kg ( Rabbit ) | > 42 mg/L ( Rat ) 1 h |

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

**Skin corrosion/irritation** No information available.

**Serious eye damage/eye irritation** No information available.

**Respiratory or skin sensitization** No information available.

**Germ cell mutagenicity** No information available.

**Carcinogenicity** No information available.

**Reproductive toxicity** No information available.

**STOT - single exposure** No information available.

**STOT - repeated exposure** No information available.

**Aspiration hazard** No information available.

**Other adverse effects** No information available.

**Interactive effects** No information available.

## 12. Ecological information

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

| Chemical name                | Algae/aquatic plants | Fish  | Toxicity to microorganisms | Crustacea  |
|------------------------------|----------------------|---|----------------------------|--|
| Sodium chloride<br>7647-14-5 | -                    | LC50: 5560 - 6080mg/L (96h, Lepomis macrochirus)<br>LC50: =12946mg/L (96h, Lepomis macrochirus)<br>LC50: 6020 - 7070mg/L (96h, Pimephales promelas) | -                          | EC50: =1000mg/L (48h, Daphnia magna)<br>EC50: 340.7 - 469.2mg/L (48h, Daphnia magna) |

|  |  |  |  |  |
|--|--|--|--|--|
|  |  | LC50: =7050mg/L (96h, Pimephales promelas)<br>LC50: 6420 - 6700mg/L (96h, Pimephales promelas)<br>LC50: 4747 - 7824mg/L (96h, Oncorhynchus mykiss) |  |  |
|--|--|--|--|--|

**Persistence and degradability** No information available.

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

**Other adverse effects** No information available.

### 13. Disposal considerations

#### Disposal methods

**Waste from residues/unused products** Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation. Flush pipes with water frequently if discarding solutions containing sodium azide into metal piping systems.

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

### 14. Transport information

DOT Not regulated

TDG Not regulated

MEX Not regulated

IATA Not regulated

IMDG Not regulated

### 15. Regulatory information

International Inventories Contact supplier for inventory compliance status

#### US Federal Regulations

##### SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

##### SARA 311/312 Hazard Categories

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

##### CWA (Clean Water Act)

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

**CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

**US State Regulations****California Proposition 65**

This product does not contain any Proposition 65 chemicals.

**U.S. State Right-to-Know Regulations**

| Chemical name                         | New Jersey | Massachusetts | Pennsylvania |
|---------------------------------------|------------|---------------|--------------|
| Water<br>7732-18-5                    | -          | -             | X            |
| Sodium azide<br>26628-22-8            | X          | X             | X            |
| Sodium phosphate dibasic<br>7558-79-4 | X          | X             | X            |

**U.S. EPA Label Information**

**EPA Pesticide Registration Number** Not applicable

**16. Other information**

|             |                         |                       |                           |                              |
|-------------|-------------------------|-----------------------|---------------------------|------------------------------|
| <b>NFPA</b> | <b>Health hazards</b> 0 | <b>Flammability</b> 0 | <b>Instability</b> 0      | <b>Special hazards</b> -     |
| <b>HMIS</b> | <b>Health hazards</b> 0 | <b>Flammability</b> 0 | <b>Physical hazards</b> 0 | <b>Personal protection</b> X |

**Key or legend to abbreviations and acronyms used in the safety data sheet****Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

|         |                             |      |                                  |
|---------|-----------------------------|------|----------------------------------|
| TWA     | TWA (time-weighted average) | STEL | STEL (Short Term Exposure Limit) |
| Ceiling | Maximum limit value         | *    | Skin designation                 |

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

Agency for Toxic Substances and Disease Registry (ATSDR)  
 U.S. Environmental Protection Agency ChemView Database  
 European Food Safety Authority (EFSA)  
 EPA (Environmental Protection Agency)  
 Acute Exposure Guideline Level(s) (AEGL(s))  
 U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act  
 U.S. Environmental Protection Agency High Production Volume Chemicals  
 Food Research Journal  
 Hazardous Substance Database  
 International Uniform Chemical Information Database (IUCLID)  
 National Institute of Technology and Evaluation (NITE)  
 Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)  
 NIOSH (National Institute for Occupational Safety and Health)  
 National Library of Medicine's ChemID Plus (NLM CIP)  
 National Library of Medicine's PubMed database (NLM PUBMED)  
 National Toxicology Program (NTP)  
 New Zealand's Chemical Classification and Information Database (CCID)  
 Organization for Economic Co-operation and Development Environment, Health, and Safety Publications  
 Organization for Economic Co-operation and Development High Production Volume Chemicals Program  
 Organization for Economic Co-operation and Development Screening Information Data Set  
 World Health Organization



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**Revision date** 02-Apr-2024**Revision Note** Reformatted and updated existing information.**Disclaimer**

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**End of Safety Data Sheet**

# SAFETY DATA SHEET



Revision date 13-Nov-2023

Revision Number 1.2

## 1. Identification

### Product identifier

Product Name Substrate

### Other means of identification

Catalog Number(s) 220TM  
UN/ID no UN1987

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

Recommended use In-vitro laboratory reagent or component

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

#### Corporate Headquarters

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

#### Manufacturer Address

Bio-Rad Laboratories, Diagnostic Group  
4000 Alfred Nobel Drive  
Hercules, California 94547  
USA

#### Legal Entity / Contact Address

Bio-Rad Laboratories  
Clinical Diagnostics  
4000 Alfred Nobel Drive  
Hercules, California 94547  
USA

Technical Service 1-800-224-6723  
TechSupport.USSD@bio-rad.com

### Emergency telephone number

24 Hour Emergency Phone Number CHEMTREC USA: 1 (800) 424-9300

## 2. Hazard(s) identification

### Classification

|  |             |
|--|-------------|
| Acute toxicity - Oral                            | Category 4  |
| Acute toxicity - Dermal                          | Category 4  |
| Acute toxicity - Inhalation (Dusts/Mists)        | Category 4  |
| Serious eye damage/eye irritation                | Category 2A |
| Specific target organ toxicity (single exposure) | Category 1  |

### Hazards not otherwise classified (HNOC)

Not applicable

### Label elements

**Danger**

#### Hazard statements

Harmful if swallowed  
Harmful in contact with skin  
Harmful if inhaled  
Causes serious eye irritation  
Causes damage to organs

**Appearance** Liquid**Physical state** Liquid**Odor** Alcohol**Precautionary Statements - Prevention**

Wash face, hands and any exposed skin thoroughly after handling  
Do not eat, drink or smoke when using this product  
Use only outdoors or in a well-ventilated area  
Wear protective gloves/protective clothing/eye protection/face protection

**Precautionary Statements - Response**

IF exposed: Call a POISON CENTER or doctor  
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  
IF ON SKIN: Wash with plenty of water and soap  
Call a POISON CENTER or doctor if you feel unwell  
Take off contaminated clothing and wash it before reuse  
IF INHALED: Remove person to fresh air and keep comfortable for breathing  
Call a POISON CENTER or doctor if you feel unwell  
IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell  
Rinse mouth

**Precautionary Statements - Storage**

Store locked up

**Precautionary Statements - Disposal**

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

**Unknown acute toxicity**

3 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

**Other information**

No information available.

### 3. Composition/information on ingredients

**Substance**

Not applicable.

**Mixture**

| Chemical name | CAS No  | Weight-% | Trade secret |
|---------------|---------|----------|--------------|
| Methanol      | 67-56-1 | 10 - 20  | *            |
| Acetone       | 67-64-1 | 10 - 20  | *            |

\*The exact percentage (concentration) of composition has been withheld as a trade secret.

### 4. First-aid measures

**Description of first aid measures****General advice**

Show this safety data sheet to the doctor in attendance.

|   |  |
|---|--|
| <b>Inhalation</b>                         | Remove to fresh air. IF exposed or concerned: Get medical advice/attention. If symptoms persist, call a physician. If breathing has stopped, give artificial respiration. Get medical attention immediately.   |
| <b>Eye contact</b>                        | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If symptoms persist, call a physician. 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. |
| <b>Skin contact</b>                       | Wash off immediately with plenty of water for at least 15 minutes. If symptoms persist, call a physician.  |
| <b>Ingestion</b>                          | Do NOT induce vomiting. Rinse mouth. Never give anything by mouth to an unconscious person. Get medical attention.   |
| <b>Self-protection of the first aider</b> | Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Avoid contact with skin, eyes or clothing. Avoid breathing vapors or mists. Use personal protective equipment as required. See section 8 for more information.            |

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

|                 |   |
|-----------------|---|
| <b>Symptoms</b> | May cause redness and tearing of the eyes. Burning sensation. Coughing and/ or wheezing. Difficulty in breathing. |
|-----------------|---|

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

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

## 5. Fire-fighting measures

|   |  |
|---|--|
| <b>Suitable Extinguishing Media</b>                                   | Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.                            |
| <b>Specific hazards arising from the chemical</b>                     | No information available.  |
| <b>Explosion data</b>   |  |
| <b>Sensitivity to mechanical impact</b>                               | None.  |
| <b>Sensitivity to static discharge</b>                                | None.  |
| <b>Special protective equipment and precautions for fire-fighters</b> | Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment. |

## 6. Accidental release measures

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

|                             |   |
|-----------------------------|---|
| <b>Personal precautions</b> | Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal protective equipment as required. Evacuate personnel to safe areas. Avoid breathing vapors or mists. |
| <b>Other information</b>    | Refer to protective measures listed in Sections 7 and 8.  |

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

|                                |   |
|--------------------------------|---|
| <b>Methods for containment</b> | Prevent further leakage or spillage if safe to do so. |
| <b>Methods for cleaning up</b> | Pick up and transfer to properly labeled containers.  |

## 7. Handling and storage

### Precautions for safe handling

#### Advice on safe handling

Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Do not eat, drink or smoke when using this product. Avoid breathing vapors or mists. In case of insufficient ventilation, wear suitable respiratory equipment.

### Conditions for safe storage, including any incompatibilities

#### Storage Conditions

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

## 8. Exposure controls/personal protection

### Control parameters

#### Exposure Limits

| Chemical name       | ACGIH TLV                           | OSHA PEL   | NIOSH  |
|---------------------|-------------------------------------|--|--|
| Methanol<br>67-56-1 | STEL: 250 ppm<br>TWA: 200 ppm<br>S* | TWA: 200 ppm<br>TWA: 260 mg/m <sup>3</sup><br>(vacated) TWA: 200 ppm<br>(vacated) TWA: 260 mg/m <sup>3</sup><br>(vacated) STEL: 250 ppm<br>(vacated) STEL: 325 mg/m <sup>3</sup><br>(vacated) S*   | IDLH: 6000 ppm<br>TWA: 200 ppm<br>TWA: 260 mg/m <sup>3</sup><br>STEL: 250 ppm<br>STEL: 325 mg/m <sup>3</sup> |
| Acetone<br>67-64-1  | STEL: 500 ppm<br>TWA: 250 ppm       | TWA: 1000 ppm<br>TWA: 2400 mg/m <sup>3</sup><br>(vacated) TWA: 750 ppm<br>(vacated) TWA: 1800 mg/m <sup>3</sup><br>(vacated) STEL: 2400 mg/m <sup>3</sup><br>The acetone STEL does not apply to the cellulose acetate fiber industry. It is in effect for all other sectors.<br>(vacated) STEL: 1000 ppm | IDLH: 2500 ppm<br>TWA: 250 ppm<br>TWA: 590 mg/m <sup>3</sup>   |

#### Biological occupational exposure limits

| Chemical name       | ACGIH                                     |
|---------------------|---|
| Methanol<br>67-56-1 | 15 mg/L - urine (Methanol) - end of shift |
| Acetone<br>67-64-1  | 25 mg/L - urine (Acetone) - end of shift  |

### Appropriate engineering controls

#### Engineering controls

Showers  
Eyewash stations  
Ventilation systems.

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

#### Eye/face protection

Wear safety glasses with side shields (or goggles).

#### Hand protection

Wear suitable gloves.

|                                       |  |
|---------------------------------------|--|
| <b>Skin and body protection</b>       | Wear suitable protective clothing. Long sleeved clothing.  |
| <b>Respiratory protection</b>         | No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required. |
| <b>General hygiene considerations</b> | Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product.                             |

## 9. Physical and chemical properties

### Information on basic physical and chemical properties

|                       |                          |
|-----------------------|--------------------------|
| <b>Physical state</b> | Liquid                   |
| <b>Appearance</b>     | Liquid                   |
| <b>Color</b>          | white                    |
| <b>Odor</b>           | Alcohol                  |
| <b>Odor threshold</b> | No information available |

| <u>Property</u>                                | <u>Values</u>     | <u>Remarks • Method</u> |
|--|-------------------|-------------------------|
| <b>pH</b>                                      |                   | None known              |
| <b>Melting point / freezing point</b>          | No data available | None known              |
| <b>Initial boiling point and boiling range</b> | 55.8-56.6         |                         |
| <b>Flash point</b>                             | 16 °C / 60.8 °F   |                         |
| <b>Evaporation rate</b>                        | No data available | None known              |
| <b>Flammability</b>                            | No data available | None known              |
| <b>Flammability Limit in Air</b>               |                   | None known              |
| <b>Upper flammability or explosive limits</b>  | No data available |                         |
| <b>Lower flammability or explosive limits</b>  | No data available |                         |
| <b>Vapor pressure</b>                          | No data available | None known              |
| <b>Relative vapor density</b>                  | No data available | None known              |
| <b>Relative density</b>                        | No data available | None known              |
| <b>Water solubility</b>                        | Miscible in water |                         |
| <b>Solubility(ies)</b>                         | No data available | None known              |
| <b>Partition coefficient</b>                   | No data available | None known              |
| <b>Autoignition temperature</b>                | No data available |                         |
| <b>Decomposition temperature</b>               | No data available | None known              |
| <b>Kinematic viscosity</b>                     | No data available | None known              |
| <b>Dynamic viscosity</b>                       | No data available | None known              |

### Other information

|                             |                          |
|-----------------------------|--------------------------|
| <b>Explosive properties</b> | No information available |
| <b>Oxidizing properties</b> | No information available |
| <b>Softening point</b>      | No information available |
| <b>Molecular weight</b>     | No information available |
| <b>VOC content</b>          | No information available |
| <b>Liquid Density</b>       | 0.93909                  |
| <b>Bulk density</b>         | No information available |

## 10. Stability and reactivity

|   |   |
|---|---|
| <b>Reactivity</b>                         | No information available.                 |
| <b>Chemical stability</b>                 | Stable under normal conditions.           |
| <b>Possibility of hazardous reactions</b> | None under normal processing.             |
| <b>Conditions to avoid</b>                | Excessive heat.                           |
| <b>Incompatible materials</b>             | None known based on information supplied. |

**Hazardous decomposition products** None known based on information supplied.

## 11. Toxicological information

### Information on likely routes of exposure

#### Product Information

|                     |  |
|---------------------|--|
| <b>Inhalation</b>   | Specific test data for the substance or mixture is not available. May cause irritation of respiratory tract. Harmful by inhalation (based on components).  |
| <b>Eye contact</b>  | Specific test data for the substance or mixture is not available. Causes serious eye irritation (based on components). May cause redness, itching, and pain.   |
| <b>Skin contact</b> | Specific test data for the substance or mixture is not available. May cause irritation. Prolonged contact may cause redness and irritation. May be absorbed through the skin in harmful amounts. Harmful in contact with skin (based on components). |
| <b>Ingestion</b>    | Specific test data for the substance or mixture is not available. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Harmful if swallowed (based on components).  |

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

**Symptoms** May cause redness and tearing of the eyes. Coughing and/ or wheezing.

### Acute toxicity

#### Numerical measures of toxicity

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

|                                      |                |
|--------------------------------------|----------------|
| <b>ATEmix (oral)</b>                 | 665.70 mg/kg   |
| <b>ATEmix (dermal)</b>               | 1,997.00 mg/kg |
| <b>ATEmix (inhalation-dust/mist)</b> | 3.34 mg/l      |
| <b>ATEmix (inhalation-vapor)</b>     | 241.80 mg/l    |

#### Unknown acute toxicity

3 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

#### Component Information

| Chemical name       | Oral LD50            | Dermal LD50              | Inhalation LC50                       |
|---------------------|----------------------|--------------------------|---------------------------------------|
| Methanol<br>67-56-1 | = 6200 mg/kg ( Rat ) | = 15840 mg/kg ( Rabbit ) | = 22500 ppm ( Rat ) 8 h               |
| Acetone<br>67-64-1  | = 5800 mg/kg ( Rat ) | > 15700 mg/kg ( Rabbit ) | = 50100 mg/m <sup>3</sup> ( Rat ) 8 h |

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

|  |  |
|--|--|
| <b>Skin corrosion/irritation</b>         | No information available.  |
| <b>Serious eye damage/eye irritation</b> | Classification based on data available for ingredients. Causes serious eye irritation. |
| <b>Respiratory or skin sensitization</b> | No information available.  |
| <b>Germ cell mutagenicity</b>            | No information available.  |
| <b>Carcinogenicity</b>                   | No information available.  |

**Reproductive toxicity** No information available.

**STOT - single exposure** Based on the classification criteria of the Globally Harmonized System as adopted in the country or region with which this safety data sheet complies, this product has been determined to cause systemic target organ toxicity from acute exposure. (STOT SE). Causes damage to organs if swallowed. Causes damage to organs in contact with skin.

**STOT - repeated exposure** No information available.

**Target organ effects** Respiratory system, Eyes, Skin, Central nervous system, Gastrointestinal tract (GI).

**Aspiration hazard** No information available.

**Other adverse effects** No information available.

**Interactive effects** No information available.

## 12. Ecological information

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

| Chemical name       | Algae/aquatic plants | Fish   | Toxicity to microorganisms | Crustacea  |
|---------------------|----------------------|--|----------------------------|--|
| Methanol<br>67-56-1 | -                    | LC50: =28200mg/L (96h, Pimephales promelas)<br>LC50: >100mg/L (96h, Pimephales promelas)<br>LC50: 19500 - 20700mg/L (96h, Oncorhynchus mykiss)<br>LC50: 18 - 20mL/L (96h, Oncorhynchus mykiss)<br>LC50: 13500 - 17600mg/L (96h, Lepomis macrochirus) | -                          | -  |
| Acetone<br>67-64-1  | -                    | LC50: 4.74 - 6.33mL/L (96h, Oncorhynchus mykiss)<br>LC50: 6210 - 8120mg/L (96h, Pimephales promelas)<br>LC50: =8300mg/L (96h, Lepomis macrochirus)   | -                          | EC50: 10294 - 17704mg/L (48h, Daphnia magna)<br>EC50: 12600 - 12700mg/L (48h, Daphnia magna) |

**Persistence and degradability** No information available.

### Bioaccumulation

#### Component Information

| Chemical name       | Partition coefficient |
|---------------------|-----------------------|
| Methanol<br>67-56-1 | -0.77                 |
| Acetone<br>67-64-1  | -0.24                 |



Other adverse effects No information available.

### 13. Disposal considerations

#### Disposal methods

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

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

**California Hazardous Waste Status** This product contains one or more substances that are listed with the State of California as a hazardous waste.

### 14. Transport information

#### DOT

**UN/ID no** UN1987  
**Proper shipping name** ALCOHOLS, N.O.S.  
**Transport hazard class(es)** 3  
**Packing group** II  
**Reportable Quantity (RQ)** (Methanol: RQ (kg)= 2270.00, Acetone: RQ (kg)= 2270.00) Methanol: RQ (lb)= 5000.00, Acetone: RQ (lb)= 5000.00  
**Reportable quantity kg (calculated)** Methanol: RQ (kg)= 15133.00, Acetone: RQ (kg)= 22700.00  
**Special Provisions** 172, IB2, T7, TP1, TP8, TP28  
**DOT Marine Pollutant** NP  
**Description** UN1987, ALCOHOLS, N.O.S., 3, II  
**Emergency Response Guide Number** 127

#### TDG

**UN/ID no** UN1987  
**Proper shipping name** ALCOHOLS, N.O.S.  
**Transport hazard class(es)** 3  
**Packing group** II  
**Special Provisions** 16, 150  
**Description** UN1987, ALCOHOLS, N.O.S. (Methanol Solution, Acetone), 3, II

#### MEX

**UN/ID no** UN1987  
**Proper shipping name** ALCOHOLS, N.O.S.  
**Transport hazard class(es)** 3  
**Packing group** II  
**MEX Technical Name** Methanol Solution, Acetone  
**Description** UN1987, ALCOHOLS, N.O.S. (Methanol Solution, Acetone), 3, II  
**Special Provisions** 274

#### IATA

**UN number or ID number** UN1987  
**UN proper shipping name** Alcohols, n.o.s.  
**Transport hazard class(es)** 3  
**Packing group** II  
**IATA Technical Name** Methanol Solution, Acetone  
**Description** UN1987, Alcohols, n.o.s. (Methanol Solution, Acetone), 3, II  
**Special Provisions** A3, A180

#### IMDG

**UN number or ID number** UN1987  
**UN proper shipping name** ALCOHOLS, N.O.S.  
**Transport hazard class(es)** 3  
**Packing group** II

|                    |   |
|--------------------|---|
| EmS-No             | F-E, S-D  |
| Special Provisions | 274   |
| Marine pollutant   | NP  |
| Description        | UN1987, ALCOHOLS, N.O.S. (Methanol Solution, Acetone), 3, II, (16°C C.C.) |

## 15. Regulatory information

### International Inventories

Contact supplier for inventory compliance status

### US Federal Regulations

#### **SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

| Chemical name      | SARA 313 - Threshold Values % |
|--------------------|-------------------------------|
| Methanol - 67-56-1 | 1.0                           |

#### **SARA 311/312 Hazard Categories**

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

#### **CWA (Clean Water Act)**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

#### **CERCLA**

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302).

| Chemical name       | Hazardous Substances RQs | Extremely Hazardous Substances RQs | Reportable Quantity (RQ)                   |
|---------------------|--------------------------|------------------------------------|--|
| Methanol<br>67-56-1 | 5000 lb                  | -                                  | RQ 5000 lb final RQ<br>RQ 2270 kg final RQ |
| Acetone<br>67-64-1  | 5000 lb                  | -                                  | RQ 5000 lb final RQ<br>RQ 2270 kg final RQ |

### US State Regulations

#### **California Proposition 65**

This product contains the following Proposition 65 chemicals:.

| Chemical name      | California Proposition 65 |
|--------------------|---------------------------|
| Methanol - 67-56-1 | Developmental             |

### U.S. State Right-to-Know Regulations

| Chemical name                  | New Jersey | Massachusetts | Pennsylvania |
|--------------------------------|------------|---------------|--------------|
| Water<br>7732-18-5             | -          | -             | X            |
| Methanol<br>67-56-1            | X          | X             | X            |
| Acetone<br>67-64-1             | X          | X             | X            |
| Dimethyl sulfoxide<br>67-68-5  | X          | -             | -            |
| Hydrogen peroxide<br>7722-84-1 | X          | X             | X            |

### U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

## 16. Other information

|                                   |                           |                       |                           |                              |
|-----------------------------------|---------------------------|-----------------------|---------------------------|------------------------------|
| <b>NFPA</b>                       | <b>Health hazards</b> 3   | <b>Flammability</b> 0 | <b>Instability</b> 0      | <b>Special hazards</b> -     |
| <b>HMIS</b>                       | <b>Health hazards</b> 3 * | <b>Flammability</b> 0 | <b>Physical hazards</b> 0 | <b>Personal protection</b> X |
| <i>Chronic Hazard Star Legend</i> | * = Chronic Health Hazard |                       |                           |                              |

### Key or legend to abbreviations and acronyms used in the safety data sheet

#### Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

|         |                             |      |                                  |
|---------|-----------------------------|------|----------------------------------|
| TWA     | TWA (time-weighted average) | STEL | STEL (Short Term Exposure Limit) |
| Ceiling | Maximum limit value         | *    | Skin designation                 |

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

Agency for Toxic Substances and Disease Registry (ATSDR)  
 U.S. Environmental Protection Agency ChemView Database  
 European Food Safety Authority (EFSA)  
 EPA (Environmental Protection Agency)  
 Acute Exposure Guideline Level(s) (AEGl(s))  
 U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act  
 U.S. Environmental Protection Agency High Production Volume Chemicals  
 Food Research Journal  
 Hazardous Substance Database  
 International Uniform Chemical Information Database (IUCLID)  
 National Institute of Technology and Evaluation (NITE)  
 Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)  
 NIOSH (National Institute for Occupational Safety and Health)  
 National Library of Medicine's ChemID Plus (NLM CIP)  
 National Library of Medicine's PubMed database (NLM PUBMED)  
 National Toxicology Program (NTP)  
 New Zealand's Chemical Classification and Information Database (CCID)  
 Organization for Economic Co-operation and Development Environment, Health, and Safety Publications  
 Organization for Economic Co-operation and Development High Production Volume Chemicals Program  
 Organization for Economic Co-operation and Development Screening Information Data Set  
 World Health Organization

Revision date 13-Nov-2023

Revision Note Reformatted and updated existing information.

### 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



Revision date 29-Mar-2024

Revision Number 1.2

## 1. Identification

### Product identifier

**Product Name** Stop Solution

### Other means of identification

**Catalog Number(s)** 220SM  
**UN/ID no** UN3264

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

**Recommended use** In-vitro laboratory reagent or component

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

#### Corporate Headquarters

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

#### Manufacturer Address

Bio-Rad Laboratories, Diagnostic Group  
4000 Alfred Nobel Drive  
Hercules, California 94547  
USA

#### Legal Entity / Contact Address

Bio-Rad Laboratories  
Clinical Diagnostics  
4000 Alfred Nobel Drive  
Hercules, California 94547  
USA

**Technical Service** 1-800-224-6723  
TechSupport.USSD@bio-rad.com

### Emergency telephone number

**24 Hour Emergency Phone Number** CHEMTREC USA: 1 (800) 424-9300

## 2. Hazard(s) identification

### Classification

|                     |            |
|---------------------|------------|
| Corrosive to metals | Category 1 |
|---------------------|------------|

### Hazards not otherwise classified (HNOC)

Not applicable

### Label elements

#### Warning

#### Hazard statements

May be corrosive to metals



**Appearance** clear liquid**Physical state** Liquid**Odor** Odorless**Precautionary Statements - Prevention**

Keep only in original container

**Precautionary Statements - Response**

Absorb spillage to prevent material damage

**Other information**

No information available.

**3. Composition/information on ingredients****Substance**

Not applicable.

**Mixture**

| Chemical name     | CAS No    | Weight-% | Trade secret |
|-------------------|-----------|----------|--------------|
| Sulfuric acid     | 7664-93-9 | 1 - 2.5  | *            |
| Hydrochloric acid | 7647-01-0 | 1 - 2.5  | *            |

\*The exact percentage (concentration) of composition has been withheld as a trade secret.

**4. First-aid measures****Description of first aid measures**

|   |   |
|---|---|
| <b>General advice</b>                     | Show this safety data sheet to the doctor in attendance.  |
| <b>Inhalation</b>                         | Remove to fresh air. Get medical attention immediately if symptoms occur.   |
| <b>Eye contact</b>                        | 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. |
| <b>Skin contact</b>                       | Wash off immediately with soap and plenty of water for at least 15 minutes. Get medical attention if irritation develops and persists.  |
| <b>Ingestion</b>                          | Rinse mouth. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Call a physician.   |
| <b>Self-protection of the first aider</b> | Avoid contact with skin, eyes or clothing. Wear personal protective clothing (see section 8).   |

**Most important symptoms and effects, both acute and delayed****Symptoms** No information available.**Indication of any immediate medical attention and special treatment needed****Note to physicians** Treat symptomatically.**5. Fire-fighting measures**

|   |  |
|---|--|
| <b>Suitable Extinguishing Media</b>                                   | Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.                            |
| <b>Specific hazards arising from the chemical</b>                     | No information available.  |
| <b>Explosion data</b>   |  |
| <b>Sensitivity to mechanical impact</b>                               | None.  |
| <b>Sensitivity to static discharge</b>                                | None.  |
| <b>Special protective equipment and precautions for fire-fighters</b> | Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment. |

## 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

|                             |  |
|-----------------------------|--|
| <b>Personal precautions</b> | Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal protective equipment as required. |
| <b>Other information</b>    | Refer to protective measures listed in Sections 7 and 8.   |

### Methods and material for containment and cleaning up

|                                |   |
|--------------------------------|---|
| <b>Methods for containment</b> | Prevent further leakage or spillage if safe to do so. |
| <b>Methods for cleaning up</b> | Pick up and transfer to properly labeled containers.  |

## 7. Handling and storage

### Precautions for safe handling

|                                |  |
|--------------------------------|--|
| <b>Advice on safe handling</b> | Handle in accordance with good industrial hygiene and safety practice. Do not breathe dust/fume/gas/mist/vapors/spray. |
|--------------------------------|--|

### Conditions for safe storage, including any incompatibilities

|                           |   |
|---------------------------|---|
| <b>Storage Conditions</b> | 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. |
|---------------------------|---|

## 8. Exposure controls/personal protection

### Control parameters

#### Exposure Limits

| Chemical name                  | ACGIH TLV  | OSHA PEL   | NIOSH  |
|--------------------------------|--|--|--|
| Sulfuric acid<br>7664-93-9     | TWA: 0.2 mg/m <sup>3</sup> thoracic particulate matter | TWA: 1 mg/m <sup>3</sup><br>(vacated) TWA: 1 mg/m <sup>3</sup>   | IDLH: 15 mg/m <sup>3</sup><br>TWA: 1 mg/m <sup>3</sup>         |
| Hydrochloric acid<br>7647-01-0 | Ceiling: 2 ppm   | (vacated) Ceiling: 5 ppm<br>(vacated) Ceiling: 7 mg/m <sup>3</sup><br>Ceiling: 5 ppm<br>Ceiling: 7 mg/m <sup>3</sup> | IDLH: 50 ppm<br>Ceiling: 5 ppm<br>Ceiling: 7 mg/m <sup>3</sup> |

**Appropriate engineering controls**

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

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

**Eye/face protection**                      No special protective equipment required.

**Skin and body protection**                      No special protective equipment required.

**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.

**9. Physical and chemical properties****Information on basic physical and chemical properties**

**Physical state**                      Liquid  
**Appearance**                      clear liquid  
**Color**                                  colorless  
**Odor**                                  Odorless  
**Odor threshold**                      No information available

| <b><u>Property</u></b>                         | <b><u>Values</u></b> | <b><u>Remarks • Method</u></b> |
|--|----------------------|--------------------------------|
| <b>pH</b>                                      |                      |                                |
| <b>Melting point / freezing point</b>          | 0 °C / 32 °F         |                                |
| <b>Initial boiling point and boiling range</b> | 100 °C / 212 °F      |                                |
| <b>Flash point</b>                             | No data available    | None known                     |
| <b>Evaporation rate</b>                        | No data available    | None known                     |
| <b>Flammability</b>                            | No data available    | None known                     |
| <b>Flammability Limit in Air</b>               |                      | None known                     |
| <b>Upper flammability or explosive limits</b>  | No data available    |                                |
| <b>Lower flammability or explosive limits</b>  | No data available    |                                |
| <b>Vapor pressure</b>                          | No data available    | None known                     |
| <b>Relative vapor density</b>                  | No data available    | None known                     |
| <b>Relative density</b>                        | No data available    | None known                     |
| <b>Water solubility</b>                        | Miscible in water    |                                |
| <b>Solubility(ies)</b>                         | No data available    | None known                     |
| <b>Partition coefficient</b>                   | No data available    | None known                     |
| <b>Autoignition temperature</b>                | No data available    | None known                     |
| <b>Decomposition temperature</b>               | No data available    | None known                     |
| <b>Kinematic viscosity</b>                     | No data available    | None known                     |
| <b>Dynamic viscosity</b>                       | No data available    | None known                     |

**Other information**

**Explosive properties**                      No information available  
**Oxidizing properties**                      No information available  
**Softening point**                      No information available  
**Molecular weight**                      No information available  
**VOC content**                      No information available  
**Liquid Density**                      No information available  
**Bulk density**                      No information available

**10. Stability and reactivity**

|                                    |   |
|------------------------------------|---|
| Reactivity                         | No information available.                           |
| Chemical stability                 | Stable under normal conditions.                     |
| Possibility of hazardous reactions | None under normal processing.                       |
| Conditions to avoid                | Exposure to air or moisture over prolonged periods. |
| Incompatible materials             | Oxidizing agent.                                    |
| Hazardous decomposition products   | None known based on information supplied.           |

**11. Toxicological information****Information on likely routes of exposure****Product Information**

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

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

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

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

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

**Component Information**

| Chemical name                  | Oral LD50               | Dermal LD50             | Inhalation LC50          |
|--------------------------------|-------------------------|-------------------------|--------------------------|
| Sulfuric acid<br>7664-93-9     | = 2140 mg/kg ( Rat )    | -                       | = 0.375 mg/L ( Rat ) 4 h |
| Hydrochloric acid<br>7647-01-0 | 238 - 277 mg/kg ( Rat ) | > 5010 mg/kg ( Rabbit ) | = 1.68 mg/L ( Rat ) 1 h  |

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

|                                   |                           |
|-----------------------------------|---------------------------|
| Skin corrosion/irritation         | No information available. |
| Serious eye damage/eye irritation | No information available. |
| Respiratory or skin sensitization | No information available. |
| Germ cell mutagenicity            | No information available. |

|  |                           |
|--|---------------------------|
| Carcinogenicity  | No information available. |
| The table below indicates whether each agency has listed any ingredient as a carcinogen. |                           |



| Chemical name                  | ACGIH | IARC    | NTP   | OSHA |
|--------------------------------|-------|---------|-------|------|
| Sulfuric acid<br>7664-93-9     | A2    | Group 1 | Known | X    |
| Hydrochloric acid<br>7647-01-0 | -     | Group 3 | -     | X    |

**Legend****ACGIH (American Conference of Governmental Industrial Hygienists)**

A2 - Suspected Human Carcinogen

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

Group 1 - Carcinogenic to Humans

Group 3 - Not Classifiable as to Carcinogenicity in Humans

**NTP (National Toxicology Program)**

Known - Known Carcinogen

**OSHA (Occupational Safety and Health Administration of the US Department of Labor)**

X - Present

**Reproductive toxicity** No information available.**STOT - single exposure** No information available.**STOT - repeated exposure** No information available.**Target organ effects** Respiratory system, Eyes, Skin, Teeth.**Aspiration hazard** No information available.**Other adverse effects** No information available.**Interactive effects** No information available.**12. Ecological information****Ecotoxicity** The environmental impact of this product has not been fully investigated.

| Chemical name              | Algae/aquatic plants | Fish                                    | Toxicity to microorganisms | Crustacea |
|----------------------------|----------------------|---|----------------------------|-----------|
| Sulfuric acid<br>7664-93-9 | -                    | LC50: >500mg/L (96h, Brachydanio rerio) | -                          | -         |

**Persistence and degradability** No information available.**Bioaccumulation** There is no data for this product.**Other adverse effects** No information available.**13. Disposal considerations****Disposal methods****Waste from residues/unused products**

Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

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

**California Hazardous Waste Status** This product contains one or more substances that are listed with the State of California as a hazardous waste.

## 14. Transport information

### DOT

**UN/ID no** UN3264  
**Proper shipping name** CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.  
**Transport hazard class(es)** 8  
**Packing group** III  
**Special Provisions** IB3, T7, TP1, TP28  
**DOT Marine Pollutant** NP  
**Description** UN3264, CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Sulfuric acid, Hydrochloric acid), 8, III  
**Emergency Response Guide Number** 154

### TDG

**UN/ID no** UN3264  
**Proper shipping name** CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.  
**Transport hazard class(es)** 8  
**Packing group** III  
**Special Provisions** 16  
**Description** UN3264, CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Sulfuric acid, Hydrochloric acid), 8, III

### MEX

**UN/ID no** UN3264  
**Proper shipping name** CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.  
**Transport hazard class(es)** 8  
**Packing group** III  
**MEX Technical Name** Sulfuric acid, Hydrochloric acid  
**Description** UN3264, CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Sulfuric acid, Hydrochloric acid), 8, III  
**Special Provisions** 223, 274

### IATA

**UN number or ID number** UN3264  
**UN proper shipping name** Corrosive liquid, acidic, inorganic, n.o.s.  
**Transport hazard class(es)** 8  
**Packing group** III  
**IATA Technical Name** Sulfuric acid, Hydrochloric acid  
**Description** UN3264, Corrosive liquid, acidic, inorganic, n.o.s. (Sulfuric acid, Hydrochloric acid), 8, III  
**Special Provisions** A3, A803

### IMDG

**UN number or ID number** UN3264  
**UN proper shipping name** CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.  
**Transport hazard class(es)** 8  
**Packing group** III  
**EmS-No** F-A, S-B  
**Special Provisions** 223, 274  
**Marine pollutant** NP  
**Description** UN3264, CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Sulfuric acid, Hydrochloric acid), 8, III

## 15. Regulatory information

**International Inventories** Contact supplier for inventory compliance status

**US Federal Regulations****SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

| Chemical name                 | SARA 313 - Threshold Values % |
|-------------------------------|-------------------------------|
| Sulfuric acid - 7664-93-9     | 1.0                           |
| Hydrochloric acid - 7647-01-0 | 1.0                           |

**SARA 311/312 Hazard Categories**

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

**CWA (Clean Water Act)**

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

| Chemical name                  | CWA - Reportable Quantities | CWA - Toxic Pollutants | CWA - Priority Pollutants | CWA - Hazardous Substances |
|--------------------------------|-----------------------------|------------------------|---------------------------|----------------------------|
| Sulfuric acid<br>7664-93-9     | 1000 lb                     | -                      | -                         | X                          |
| Hydrochloric acid<br>7647-01-0 | 5000 lb                     | -                      | -                         | X                          |

**CERCLA**

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302).

| Chemical name                  | Hazardous Substances RQs | Extremely Hazardous Substances RQs | Reportable Quantity (RQ)                   |
|--------------------------------|--------------------------|------------------------------------|--|
| Sulfuric acid<br>7664-93-9     | 1000 lb                  | 1000 lb                            | RQ 1000 lb final RQ<br>RQ 454 kg final RQ  |
| Hydrochloric acid<br>7647-01-0 | 5000 lb                  | 5000 lb                            | RQ 5000 lb final RQ<br>RQ 2270 kg final RQ |

**US State Regulations****California Proposition 65**

This product contains the following Proposition 65 chemicals:.

| Chemical name             | California Proposition 65 |
|---------------------------|---------------------------|
| Sulfuric acid - 7664-93-9 | Carcinogen                |

**U.S. State Right-to-Know Regulations**

| Chemical name                  | New Jersey | Massachusetts | Pennsylvania |
|--------------------------------|------------|---------------|--------------|
| Water<br>7732-18-5             | -          | -             | X            |
| Hydrochloric acid<br>7647-01-0 | X          | X             | X            |
| Sulfuric acid<br>7664-93-9     | X          | X             | X            |

**U.S. EPA Label Information**

**EPA Pesticide Registration Number** Not applicable

**16. Other information**

**Stop Solution**

Revision date 29-Mar-2024

|                                   |                           |                                  |                           |                              |
|-----------------------------------|---------------------------|----------------------------------|---------------------------|------------------------------|
| <b>NFPA</b>                       | <b>Health hazards</b> 3   | <b>Flammability</b> 0            | <b>Instability</b> 0      | <b>Special hazards</b> -     |
| <b>HMIS</b>                       | <b>Health hazards</b> 3 * | <b>Flammability</b> 0            | <b>Physical hazards</b> 0 | <b>Personal protection</b> X |
| <i>Chronic Hazard Star Legend</i> |                           | <i>* = Chronic Health Hazard</i> |                           |                              |

**Key or legend to abbreviations and acronyms used in the safety data sheet****Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

|         |                             |      |                                  |
|---------|-----------------------------|------|----------------------------------|
| TWA     | TWA (time-weighted average) | STEL | STEL (Short Term Exposure Limit) |
| Ceiling | Maximum limit value         | *    | Skin designation                 |

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

Agency for Toxic Substances and Disease Registry (ATSDR)  
U.S. Environmental Protection Agency ChemView Database  
European Food Safety Authority (EFSA)  
EPA (Environmental Protection Agency)  
Acute Exposure Guideline Level(s) (AEGL(s))  
U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act  
U.S. Environmental Protection Agency High Production Volume Chemicals  
Food Research Journal  
Hazardous Substance Database  
International Uniform Chemical Information Database (IUCLID)  
National Institute of Technology and Evaluation (NITE)  
Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)  
NIOSH (National Institute for Occupational Safety and Health)  
National Library of Medicine's ChemID Plus (NLM CIP)  
National Library of Medicine's PubMed database (NLM PUBMED)  
National Toxicology Program (NTP)  
New Zealand's Chemical Classification and Information Database (CCID)  
Organization for Economic Co-operation and Development Environment, Health, and Safety Publications  
Organization for Economic Co-operation and Development High Production Volume Chemicals Program  
Organization for Economic Co-operation and Development Screening Information Data Set  
World Health Organization

**Revision date** 29-Mar-2024**Revision Note** Reformatted and updated existing information.**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**