

# KIT SAFETY DATA SHEET



Kit Product Name VMA by HPLC Test Kit

Kit Catalog Number(s) 1955001

Revision date 20-Mar-2024

## Kit Contents

| Catalog Number(s) | Product Name                     |
|-------------------|----------------------------------|
| 1955006           | VMA/HVA by HPLC Urine Calibrator |
| 1955005           | VMA Disposable Columns           |

# SAFETY DATA SHEET



Revision date 19-Mar-2024

Revision Number 1

## 1. Identification

### Product identifier

**Product Name** VMA/HVA by HPLC Urine Calibrator

### Other means of identification

**Catalog Number(s)** 1955006

### 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** powder or cake, lyophilized

**Physical state** Solid

**Odor** Characteristic

### Other information

No information available.

### 3. Composition/information on ingredients

**Substance**

Not applicable.

**Mixture**

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

\*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**

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

**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> | Solid                       |
| <b>Appearance</b>     | powder or cake, lyophilized |
| <b>Color</b>          | light yellow                |
| <b>Odor</b>           | Characteristic              |
| <b>Odor threshold</b> | No information available    |

| <b><u>Property</u></b>                | <b><u>Values</u></b> | <b><u>Remarks • Method</u></b> |
|---------------------------------------|----------------------|--------------------------------|
| <b>pH</b>                             |                      | None known                     |
| <b>Melting point / freezing point</b> | No data available    | None known                     |

|  |                          |            |
|--|--------------------------|------------|
| <b>Initial boiling point and boiling range</b> | No data available        | None known |
| <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>                        | Soluble in water         | None known |
| <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 |
| <b><u>Other information</u></b>                |                          |            |
| <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.             |
| <b>Conditions to avoid</b>                | None known based on information supplied. |
| <b>Incompatible materials</b>             | None known based on information supplied. |
| <b>Hazardous decomposition products</b>   | None known based on information supplied. |

## 11. Toxicological information

### Information on likely routes of exposure

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

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

|                 |                           |
|-----------------|---------------------------|
| <b>Symptoms</b> | No information available. |
|-----------------|---------------------------|

### Acute toxicity

**Numerical measures of toxicity**

No information available

**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> | No information available. |
| <b>Respiratory or skin sensitization</b> | No information available. |
| <b>Germ cell mutagenicity</b>            | No information available. |
| <b>Carcinogenicity</b>                   | No information available. |
| <b>Reproductive toxicity</b>             | No information available. |
| <b>STOT - single exposure</b>            | No information available. |
| <b>STOT - repeated exposure</b>          | No information available. |
| <b>Aspiration hazard</b>                 | No information available. |
| <b>Other adverse effects</b>             | No information available. |
| <b>Interactive effects</b>               | No information available. |

## 12. Ecological information

|                                      |   |
|--------------------------------------|---|
| <b>Ecotoxicity</b>                   | The environmental impact of this product has not been fully investigated. |
| <b>Persistence and degradability</b> | No information available.   |
| <b>Bioaccumulation</b>               | There is no data for this product.  |
| <b>Other adverse effects</b>         | No information available.   |

## 13. Disposal considerations

**Disposal methods**

|  |   |
|--|---|
| <b>Waste from residues/unused products</b> | Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation. |
| <b>Contaminated packaging</b>              | Do not reuse empty containers.  |

**14. Transport information**

|             |               |
|-------------|---------------|
| <u>DOT</u>  | Not regulated |
| <u>TDG</u>  | Not regulated |
| <u>MEX</u>  | Not regulated |
| <u>IATA</u> | Not regulated |
| <u>IMDG</u> | 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 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, 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**

This product does not contain any substances regulated under applicable state right-to-know regulations

**U.S. EPA Label Information**

**EPA Pesticide Registration Number** Not applicable

**16. Other information**

|             |                  |                |                    |                       |
|-------------|------------------|----------------|--------------------|-----------------------|
| <u>NFPA</u> | Health hazards 0 | Flammability 0 | Instability 0      | Special hazards -     |
| <u>HMIS</u> | Health hazards 0 | Flammability 0 | Physical hazards 0 | Personal protection 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** 19-Mar-2024

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

**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 19-Mar-2024

Revision Number 1

## 1. Identification

### Product identifier

**Product Name** VMA Disposable Columns

### Other means of identification

**Catalog Number(s)** 1955005

### 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** Suspension **Physical state** Liquid **Odor** Odorless

**Other information**

No information available.

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

Not applicable.

**Mixture**

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

\*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<br>Eyewash stations<br>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     | Suspension               |
| Color          | colorless                |
| Odor           | Odorless                 |
| Odor threshold | No information available |

| <u>Property</u>                         | <u>Values</u>            | <u>Remarks • Method</u> |
|---|--------------------------|-------------------------|
| pH                                      |                          | None known              |
| Melting point / freezing point          | No data available        | None known              |
| Initial boiling point and boiling range | 100 °C / 212.0 °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                        | Partially miscible       | None known              |
| 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 | 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

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. |
| 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 | Dispose of in accordance with local regulations. Dispose of waste in accordance with |
|----------------------------|--|

|                        |                                |
|------------------------|--------------------------------|
| products               | environmental legislation.     |
| Contaminated packaging | Do not reuse empty containers. |

## 14. Transport information

|             |               |
|-------------|---------------|
| <u>DOT</u>  | Not regulated |
| <u>TDG</u>  | Not regulated |
| <u>MEX</u>  | Not regulated |
| <u>IATA</u> | Not regulated |
| <u>IMDG</u> | 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 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, 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            |

### 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** 19-Mar-2024

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

### **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**