# SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of:
Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008

**Revision date** 06-Sep-2023 **Revision Number** 1.2

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

### 1.1. Product identifier

**Product Name** Foresight Nuvia aPrime 4A (Columns, Plates, Robocolumn units)

**Catalogue Number(s)** 12007392, 12007393, 12007394, 12007395, 12007411

**Nanoforms** Not applicable

**Pure substance/mixture** Mixture

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

**Recommended use** Laboratory chemicals

**Uses advised against** No information available

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

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

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

**Legal Entity / Contact Address**
Bio-Rad Laboratories Ltd
The Junction
Station Road
Watford, WD17 1ET
UK

Bio-Rad Laboratories Pvt. Ltd.
Bio-Rad House
86-87, Udyog Vihar Phase IV Gurgaon
122005
Haryana India

Bio-Rad Laboratories (Pty) Ltd.
34 Bolton Road
Parkwood, Johannesburg 2193
South Africa

For further information, please contact

**Technical Service** 00800 00246 723
Ireland: Techsupport.UK@bio-rad.com
India: support.india@bio-rad.com
South Africa: cdg_techsupport_eemea@bio-rad.com

### 1.4. Emergency telephone number

24 Hour Emergency Phone Number CHEMTREC Ireland: 353-19014670
CHEMTREC India: 000-800-100-7141
CHEMTREC South Africa: 0-800-983-611

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

*Regulation (EC) No 1272/2008*

| | |
|---|---|
| **Flammable liquids** | Category 3 |

### 2.2. Label elements

**Signal word**
Warning

**Hazard statements**
H226 - Flammable liquid and vapour

**Precautionary Statements - EU (§28, 1272/2008)**
P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking
P233 - Keep container tightly closed
P363 - Wash contaminated clothing before reuse
P370 + P378 - In case of fire: Use dry chemical, CO2, water spray or alcohol-resistant foam to extinguish
P403 + P235 - Store in a well-ventilated place. Keep cool
P501 - Dispose of contents/container in accordance with local, regional, national, and international regulations as applicable

### 2.3. Other hazards

## SECTION 3: Composition/information on ingredients

### 3.1 Substances

Not applicable

### 3.2 Mixtures

| Chemical name | Weight-% | REACH registration number | EC No (EU Index No) | Classification according to Regulation (EC) No. 1272/2008 [CLP] | Specific concentration limit (SCL) | M-Factor | M-Factor (long-term) |
|---|---|---|---|---|---|---|---|
| Ethyl alcohol<br>64-17-5 | 10 - 20 | No data available | (603-002-00-5)<br>200-578-6 | Flam. Liq. 2 (H225) | - | - | - |

**Full text of H- and EUH-phrases: see section 16**

**Acute Toxicity Estimate**
If LD50/LC50 data is not available or does not correspond to the classification category, then the appropriate conversion value from CLP Annex I, Table 3.1.2, is used to calculate the acute toxicity estimate (ATEmix) for classifying a mixture based on its components

| Chemical name | Oral LD50 mg/kg | Dermal LD50 mg/kg | Inhalation LC50 - 4 hour - dust/mist - mg/L | Inhalation LC50 - 4 hour - vapour - mg/L | Inhalation LC50 - 4 hour - gas - ppm |
|---|---|---|---|---|---|
| Ethyl alcohol<br>64-17-5 | 7060 | No data available | Inhalation LC50 Rat 116.9 mg/L 4 h (males, vapor, Source: ECHA_API); Inhalation LC50 Rat 133.8 mg/L 4 h (females, vapor, Source: ECHA_API) | 116.9<br>133.8 | Inhalation LC50 Rat 116.9 mg/L 4 h (males, vapor, Source: ECHA_API); Inhalation LC50 Rat 133.8 mg/L 4 h (females, vapor, |

| Chemical name | Oral LD50 mg/kg | Dermal LD50 mg/kg | Inhalation LC50 - 4 hour - dust/mist - mg/L | Inhalation LC50 - 4 hour - vapour - mg/L | Inhalation LC50 - 4 hour - gas - ppm |
|---|---|---|---|---|---|
| | | | 116.9<br>133.8 | | Source: ECHA_API) |

This product does not contain candidate substances of very high concern at a concentration >=0.1% (Regulation (EC) No. 1907/2006 (REACH), Article 59)

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

**Inhalation** Remove to fresh air.

**Eye contact** Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Do not rub affected area.

**Skin contact** Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.

**Ingestion** Rinse mouth.

**Self-protection of the first aider** Remove all sources of ignition. Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Use personal protective equipment as required. See section 8 for more information.

### 4.2. Most important symptoms and effects, both acute and delayed

**Symptoms** No information available.

### 4.3. Indication of any immediate medical attention and special treatment needed

**Note to doctors** Treat symptomatically.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

**Suitable Extinguishing Media** Dry chemical. Carbon dioxide (CO2). Water spray. Alcohol resistant foam.

**Large Fire** CAUTION: Use of water spray when fighting fire may be inefficient.

**Unsuitable extinguishing media** Do not scatter spilled material with high pressure water streams.

### 5.2. Special hazards arising from the substance or mixture

**Specific hazards arising from the chemical** Risk of ignition. Keep product and empty container away from heat and sources of ignition. In the event of fire, cool tanks with water spray. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

### 5.3. Advice for firefighters

**Special protective equipment and precautions for fire-fighters** Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

**Personal precautions** Evacuate personnel to safe areas. Use personal protective equipment as required. See section 8 for more information. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Keep people away from and upwind of spill/leak. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Pay attention to flashback. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Do not touch or walk through spilled material.

**Other information** Ventilate the area.

**For emergency responders** Use personal protection recommended in Section 8.

### 6.2. Environmental precautions

**Environmental precautions** Refer to protective measures listed in Sections 7 and 8. Prevent further leakage or spillage if safe to do so. Prevent product from entering drains.

### 6.3. Methods and material for containment and cleaning up

**Methods for containment** Stop leak if you can do it without risk. Do not touch or walk through spilled material. A vapour suppressing foam may be used to reduce vapours. Dyke far ahead of spill to collect run-off water. Keep out of drains, sewers, ditches and waterways. Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal.

**Methods for cleaning up** Take precautionary measures against static discharges. Dam up. Soak up with inert absorbent material. Pick up and transfer to properly labelled containers.

**Prevention of secondary hazards** Clean contaminated objects and areas thoroughly observing environmental regulations.

### 6.4. Reference to other sections

**Reference to other sections** See section 8 for more information. See section 13 for more information.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

**Advice on safe handling** Use personal protection equipment. Avoid contact with skin and eyes. Avoid breathing vapours or mists. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use grounding and bonding connection when transferring this material to prevent static discharge, fire or explosion. Use with local exhaust ventilation. Use spark-proof tools and explosion-proof equipment. Keep in an area equipped with sprinklers. Use according to package label instructions.

**General hygiene considerations** Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product.

### 7.2. Conditions for safe storage, including any incompatibilities

**Storage Conditions** Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Keep in properly labelled containers. Do not store near combustible materials. Keep in an area equipped with sprinklers. Store in accordance with the particular national regulations. Store in accordance with local regulations. Store according to product and label instructions.

### 7.3. Specific end use(s)

**Risk Management Methods (RMM)** The information required is contained in this Safety Data Sheet.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

**Exposure Limits**

| Chemical name | European Union | Austria | Belgium | Bulgaria | Croatia |
|---|---|---|---|---|---|
| Ethyl alcohol<br>64-17-5 | - | TWA: 1000 ppm<br>TWA: 1900 mg/m³<br>STEL 2000 ppm<br>STEL 3800 mg/m³ | TWA: 1000 ppm<br>TWA: 1907 mg/m³ | TWA: 1000 mg/m³ | TWA: 1000 ppm<br>TWA: 1900 mg/m³ |

| Chemical name | Cyprus | Czech Republic | Denmark | Estonia | Finland |
|---|---|---|---|---|---|
| Ethyl alcohol<br>64-17-5 | - | TWA: 1000 mg/m³<br>Ceiling: 3000 mg/m³ | TWA: 1000 ppm<br>TWA: 1900 mg/m³<br>STEL: 2000 ppm<br>STEL: 3800 mg/m³ | TWA: 500 ppm<br>TWA: 1000 mg/m³<br>STEL: 1000 ppm<br>STEL: 1900 mg/m³ | TWA: 1000 ppm<br>TWA: 1900 mg/m³<br>STEL: 1300 ppm<br>STEL: 2500 mg/m³ |

| Chemical name | France | Germany TRGS | Germany DFG | Greece | Hungary |
|---|---|---|---|---|---|
| Ethyl alcohol<br>64-17-5 | TWA: 1000 ppm<br>TWA: 1900 mg/m³<br>STEL: 5000 ppm<br>STEL: 9500 mg/m³ | TWA: 200 ppm<br>TWA: 380 mg/m³ | TWA: 200 ppm<br>TWA: 380 mg/m³<br>Peak: 800 ppm<br>Peak: 1520 mg/m³ | TWA: 1000 ppm<br>TWA: 1900 mg/m³ | TWA: 1900 mg/m³<br>STEL: 3800 mg/m³ |

| Chemical name | Ireland | Italy MDLPS | Italy AIDII | Latvia | Lithuania |
|---|---|---|---|---|---|
| Ethyl alcohol<br>64-17-5 | STEL: 1000 ppm | - | STEL: 1000 ppm<br>STEL: 1884 mg/m³ | TWA: 1000 mg/m³ | TWA: 500 ppm<br>TWA: 1000 mg/m³<br>STEL: 1000 ppm<br>STEL: 1900 mg/m³ |

| Chemical name | Luxembourg | Malta | Netherlands | Norway | Poland |
|---|---|---|---|---|---|
| Ethyl alcohol<br>64-17-5 | - | - | TWA: 260 mg/m³<br>STEL: 1900 mg/m³<br>H* | TWA: 500 ppm<br>TWA: 950 mg/m³<br>STEL: 625 ppm<br>STEL: 1187.5 mg/m³ | TWA: 1900 mg/m³ |

| Chemical name | Portugal | Romania | Slovakia | Slovenia | Spain |
|---|---|---|---|---|---|
| Ethyl alcohol<br>64-17-5 | STEL: 1000 ppm | TWA: 1000 ppm<br>TWA: 1900 mg/m³<br>STEL: 5000 ppm<br>STEL: 9500 mg/m³ | TWA: 500 ppm<br>TWA: 960 mg/m³<br>Ceiling: 1920 mg/m³ | TWA: 960 mg/m³<br>TWA: 500 ppm<br>STEL: 1000 ppm<br>STEL: 1920 mg/m³ | STEL: 1000 ppm<br>STEL: 1910 mg/m³ |

| Chemical name | Sweden | Switzerland | United Kingdom |
|---|---|---|---|
| Ethyl alcohol<br>64-17-5 | NGV: 500 ppm<br>NGV: 1000 mg/m³<br>Vägledande KGV: 1000 ppm<br>Vägledande KGV: 1900 mg/m³ | TWA: 500 ppm<br>TWA: 960 mg/m³<br>STEL: 1000 ppm<br>STEL: 1920 mg/m³ | TWA: 1000 ppm<br>TWA: 1920 mg/m³<br>STEL: 3000 ppm<br>STEL: 5760 mg/m³ |

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

**Derived No Effect Level (DNEL)** No information available.
**Predicted No Effect Concentration (PNEC)** No information available.

### 8.2. Exposure controls

**Personal protective equipment**

**Eye/face protection** Tight sealing safety goggles.

**Hand protection** Wear suitable gloves. Impervious gloves.

| | |
|---|---|
| **Skin and body protection** | Wear suitable protective clothing. Long sleeved clothing. Chemical resistant apron. Antistatic boots. |
| **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** | Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product. |
| **Environmental exposure controls** | No information available. |

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

| | |
|---|---|
| **Physical state** | Liquid |
| **Appearance** | liquid - solid: mixture of |
| **Colour** | white |
| **Odour** | Odourless. |
| **Odour threshold** | No information available |

| **Property** | **Values** | **Remarks • Method** |
|---|---|---|
| **Melting point / freezing point** | No data available | None known |
| **Boiling point / boiling range** | 78 °C | |
| **Flammability (solid, gas)** | 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 | |
| **Flash point** | 38 °C | |
| **Autoignition temperature** | No data available | None known |
| **Decomposition temperature** | | None known |
| **pH** | 7 | |
| **pH (as aqueous solution)** | No data available | No information available |
| **Kinematic viscosity** | No data available | None known |
| **Dynamic viscosity** | No data available | None known |
| **Water solubility** | Partially miscible | |
| **Solubility(ies)** | No data available | None known |
| **Partition coefficient** | No data available | None known |
| **Vapour pressure** | No data available | None known |
| **Relative density** | No data available | None known |
| **Bulk density** | No data available | |
| **Liquid Density** | No data available | |
| **Vapour density** | No data available | None known |
| **Particle characteristics** | | |
| **Particle Size** | No information available | |
| **Particle Size Distribution** | No information available | |

### 9.2. Other information

**9.2.1. Information with regards to physical hazard classes**
Not applicable

**9.2.2. Other safety characteristics**
No information available

## SECTION 10: Stability and reactivity

**10.1. Reactivity**

**Reactivity** No information available.

**10.2. Chemical stability**

**Stability** Stable under normal conditions.

**Explosion data**
**Sensitivity to mechanical impact** None.
**Sensitivity to static discharge** Yes.

**10.3. Possibility of hazardous reactions**

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

**10.4. Conditions to avoid**

**Conditions to avoid** Heat, flames and sparks.

**10.5. Incompatible materials**

**Incompatible materials** None known based on information supplied.

**10.6. Hazardous decomposition products**

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

## SECTION 11: Toxicological information

**11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008**

**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**
**ATEmix (oral)** 36,205.10 mg/kg
**ATEmix (inhalation-dust/mist)** 599.50 mg/l
**Component Information**

| Chemical name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|---|---|---|---|
| Ethyl alcohol | = 7060 mg/kg ( Rat ) | - | = 116.9 mg/L ( Rat ) 4 h<br>= 133.8 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 sensitisation** 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.

**11.2. Information on other hazards**

**11.2.1. Endocrine disrupting properties**

**Endocrine disrupting properties** This product does not contain any known or suspected endocrine disruptors.

**11.2.2. Other information**

**Other adverse effects** No information available.

## SECTION 12: Ecological information

**12.1. Toxicity**

**Ecotoxicity** Harmful to aquatic life.

**Unknown aquatic toxicity** Contains 0 % of components with unknown hazards to the aquatic environment.

| Chemical name | Algae/aquatic plants | Fish | Toxicity to microorganisms | Crustacea |
|---|---|---|---|---|
| Ethyl alcohol | - | LC50: 12.0 - 16.0mL/L (96h, Oncorhynchus mykiss)<br>LC50: >100mg/L (96h, Pimephales promelas)<br>LC50: 13400 - 15100mg/L (96h, Pimephales promelas) | - | LC50: 9268 - 14221mg/L (48h, Daphnia magna)<br>EC50: =2mg/L (48h, Daphnia magna) |

**12.2. Persistence and degradability**

**Persistence and degradability** No information available.

**12.3. Bioaccumulative potential**

**Bioaccumulation**

**Component Information**

| Chemical name | Partition coefficient |
|---|---|
| Ethyl alcohol | -0.35 |

**12.4. Mobility in soil**

**Mobility in soil** No information available.

**12.5. Results of PBT and vPvB assessment**

**PBT and vPvB assessment**

| Chemical name | PBT and vPvB assessment |
|---|---|
| Ethyl alcohol | The substance is not PBT / vPvB |

**12.6. Endocrine disrupting properties**

**Endocrine disrupting properties** No information available.

**12.7. Other adverse effects**
No information available.

## SECTION 13: Disposal considerations

**13.1. Waste treatment methods**

**Waste from residues/unused products** Should not be released into the environment. Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation. Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

**Contaminated packaging** Empty containers pose a potential fire and explosion hazard. Do not cut, puncture or weld containers.

## SECTION 14: Transport information

**IATA**

**14.1 UN number or ID number** Not regulated
**14.2 UN proper shipping name** Not regulated
**14.3 Transport hazard class(es)** Not regulated
**14.4 Packing group** Not regulated
**14.5 Environmental hazards** Not applicable
**14.6 Special Precautions for Users**
**Special Provisions** None

**IMDG**

**14.1 UN number or ID number** Not regulated
**14.2 UN proper shipping name** Not regulated
**14.3 Transport hazard class(es)** Not regulated
**14.4 Packing group** Not regulated
**14.5 Environmental hazards** Not applicable
**14.6 Special Precautions for Users**

**Special Provisions** None

**14.7 Maritime transport in bulk according to IMO instruments** No information available

**RID**

**14.1 UN number** Not regulated
**14.2 UN proper shipping name** Not regulated
**14.3 Transport hazard class(es)** Not regulated
**14.4 Packing group** Not regulated
**14.5 Environmental hazards** Not applicable
**14.6 Special Precautions for Users**
**Special Provisions** None

**ADR**

**14.1 UN number or ID number** Not regulated
**14.2 UN proper shipping name** Not regulated
**14.3 Transport hazard class(es)** Not regulated
**14.4 Packing group** Not regulated
**14.5 Environmental hazards** Not applicable
**14.6 Special Precautions for Users**
**Special Provisions** None

## SECTION 15: Regulatory information

**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

**National regulations**

**France**
**Occupational Illnesses (R-463-3, France)**

| Chemical name | French RG number | Title |
|---|---|---|
| Ethyl alcohol<br>64-17-5 | RG 84 | - |

**Germany**
**Water hazard class (WGK)** slightly hazardous to water (WGK 1)

**Netherlands**

| Chemical name | Netherlands - List of Carcinogens | Netherlands - List of Mutagens | Netherlands - List of Reproductive Toxins |
|---|---|---|---|
| Ethyl alcohol | Present | - | Fertility Category 1A<br>Development Category 1A<br>Can be harmful via breastfeeding |

**European Union**
Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

**Authorisations and/or restrictions on use:**
This product does not contain substances subject to authorisation (Regulation (EC) No. 1907/2006 (REACH), Annex XIV) This product does not contain substances subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

**Persistent Organic Pollutants**
Not applicable

**Dangerous substance category per Seveso Directive (2012/18/EU)**

P5a - FLAMMABLE LIQUIDS
P5b - FLAMMABLE LIQUIDS
P5c - FLAMMABLE LIQUIDS

**Ozone-depleting substances (ODS) regulation (EC) 1005/2009**
Not applicable

**Biocidal Products Regulation (EU) No 528/2012 (BPR)**

| Chemical name | Biocidal Products Regulation (EU) No 528/2012 (BPR) |
|---|---|
| Ethyl alcohol - 64-17-5 | Product-type 1: Human hygiene Product-type 2: Disinfectants and algaecides not intended for direct application to humans or animals Product-type 4: Food and feed area |

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

**15.2. Chemical safety assessment**

**Chemical Safety Report** No information available

## SECTION 16: Other information

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

**Full text of H-Statements referred to under section 3**
H225 - Highly flammable liquid and vapour

**Legend**
SVHC: Substances of Very High Concern for Authorisation:

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

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

| Classification procedure | |
|---|---|
| Classification according to Regulation (EC) No. 1272/2008 [CLP] | Method Used |
| Acute oral toxicity | Calculation method |
| Acute dermal toxicity | Calculation method |
| Acute inhalation toxicity - gas | Calculation method |
| Acute inhalation toxicity - vapour | Calculation method |
| Acute inhalation toxicity - dust/mist | Calculation method |
| Skin corrosion/irritation | Calculation method |
| Serious eye damage/eye irritation | Calculation method |
| Respiratory sensitisation | Calculation method |
| Skin sensitisation | Calculation method |
| Mutagenicity | Calculation method |
| Carcinogenicity | Calculation method |
| Reproductive toxicity | Calculation method |
| STOT - single exposure | Calculation method |
| STOT - repeated exposure | Calculation method |
| Acute aquatic toxicity | Calculation method |
| Chronic aquatic toxicity | Calculation method |
| Aspiration hazard | Calculation method |
| Ozone | Calculation method |

**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)
European Chemicals Agency (ECHA) Committee for Risk Assessment (ECHA_RAC)
European Chemicals Agency (ECHA) (ECHA_API)
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)
Australian National Industrial Chemicals Notification and Assessment Scheme (NICNAS)
NIOSH (National Institute for Occupational Safety and Health)
National Library of Medicine's ChemID Plus (NLM CIP)
National Library of Medicine’s PubMed database (NLM PUBMED)
National Toxicology Program (NTP)
New Zealand's Chemical Classification and Information Database (CCID)
Organisation for Economic Co-operation and Development Environment, Health, and Safety Publications
Organisation for Economic Co-operation and Development High Production Volume Chemicals Programme
Organisation for Economic Co-operation and Development Screening Information Data Set
World Health Organization

| | |
|---|---|
| **Revision Note** | Reformatted and updated existing information |
| **Revision date** | 06-Sep-2023 |

**This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006**
**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**