



# 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 28-Feb-2023

Revision Number 4.1

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

### 1.1. Product identifier

Product Name UriSelect 4, 20 x 90 mm Plates

Catalogue Number(s) 63726

Pure substance/mixture Mixture

Contains Quartz

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

Recommended use In vitro diagnostic  
Restricted to professional users

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  
3 boulevard Raymond Poincaré  
92430 Marnes-la-Coquette  
France  
e-mail: fds-msds.fr@bio-rad.com

#### 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

|                 |                      |
|-----------------|----------------------|
| Carcinogenicity | Category 1A - (H350) |
|-----------------|----------------------|

**2.2. Label elements**

Contains Quartz

**Signal word**

Danger

**Hazard statements**

H350 - May cause cancer

**Precautionary Statements - EU (§28, 1272/2008)**

P202 - Do not handle until all safety precautions have been read and understood

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

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

**2.3. Other hazards**

Contains animal source material. This product is a gel. In the gel state users should not be exposed to the cancer-causing crystalline powder. The carcinogen risk applies to the product if it dries out, such as during desiccation, improper storage, or disposal.

## 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) |
|-------------------------------|--------------|---------------------------|---------------------|---|------------------------------------|----------|----------------------|
| Quartz<br>14808-60-7          | 1 - 2.5      | No data available         | 238-878-4           | Carc. 1A (H350)   | Carc. 1A :: C>=0.1%                | -        | -                    |
| Dimethyl sulfoxide<br>67-68-5 | 0.1 - 0.299  | No data available         | 200-664-3           | No data available   | -                                  | -        | -                    |
| L-Tryptophan<br>73-22-3       | 0.01 - 0.099 | No data available         | 200-795-6           | No data available   | -                                  | -        | -                    |

**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 |
|-------------------------------|-----------------|-------------------|---|--|--------------------------------------|
| Dimethyl sulfoxide<br>67-68-5 | 28300           | 40000             | No data available                           | No data available                        | No data available                    |
| L-Tryptophan<br>73-22-3       | 16000           | No data available | No data available                           | No data available                        | No data available                    |

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

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

|                       |   |
|-----------------------|---|
| <b>General advice</b> | IF exposed or concerned: Get medical advice/attention.  |
| <b>Inhalation</b>     | Remove to fresh air.  |
| <b>Eye contact</b>    | Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a doctor. |
| <b>Skin contact</b>   | In the case of skin irritation or allergic reactions see a doctor. Wash skin with soap and water.                 |
| <b>Ingestion</b>      | Rinse mouth.  |

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

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

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

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

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

|                                       |   |
|---------------------------------------|---|
| <b>Suitable Extinguishing Media</b>   | Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. |
| <b>Large Fire</b>                     | CAUTION: Use of water spray when fighting fire may be inefficient.                                      |
| <b>Unsuitable extinguishing media</b> | Do not scatter spilled material with high pressure water streams.                                       |

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

|   |                           |
|---|---------------------------|
| <b>Specific hazards arising from the chemical</b> | No information available. |
|---|---------------------------|

### 5.3. Advice for firefighters

|   |  |
|---|--|
| <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. |
|---|--|

## SECTION 6: Accidental release measures

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

|                                 |  |
|---------------------------------|--|
| <b>Personal precautions</b>     | Ensure adequate ventilation.                             |
| <b>Other information</b>        | Refer to protective measures listed in Sections 7 and 8. |
| <b>For emergency responders</b> | Use personal protection recommended in Section 8.        |

**6.2. Environmental precautions**

**Environmental precautions** See Section 12 for additional Ecological Information.

**6.3. 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** Take up mechanically, placing in appropriate containers for disposal.

**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** Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing.

**General hygiene considerations** Do not eat, drink or smoke when using this product. Wash hands before breaks and immediately after handling the product.

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

**Storage Conditions** 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                     |
|-------------------------------|----------------------------|---|--|---|-----------------------------|
| Quartz<br>14808-60-7          | TWA: 0.1 mg/m <sup>3</sup> | TWA: 0.05 mg/m <sup>3</sup>                     | TWA: 0.1 mg/m <sup>3</sup>                               | TWA: 0.1 mg/m <sup>3</sup>  | TWA: 0.1 mg/m <sup>3</sup>  |
| Dimethyl sulfoxide<br>67-68-5 | -                          | TWA: 50 ppm<br>TWA: 160 mg/m <sup>3</sup><br>H* | -  | -   | -                           |
| Chemical name                 | Cyprus                     | Czech Republic                                  | Denmark  | Estonia   | Finland                     |
| Quartz<br>14808-60-7          | TWA: 0.1 mg/m <sup>3</sup> | TWA: 0.1 mg/m <sup>3</sup>                      | TWA: 0.3 mg/m <sup>3</sup><br>TWA: 0.1 mg/m <sup>3</sup> | TWA: 0.1 mg/m <sup>3</sup>  | TWA: 0.05 mg/m <sup>3</sup> |
| Dimethyl sulfoxide<br>67-68-5 | -                          | -   | TWA: 50 ppm<br>TWA: 160 mg/m <sup>3</sup>                | TWA: 50 ppm<br>TWA: 150 mg/m <sup>3</sup><br>STEL: 150 ppm<br>STEL: 500 mg/m <sup>3</sup><br>A* | TWA: 50 ppm<br>iho*         |
| Chemical name                 | France                     | Germany TRGS                                    | Germany DFG  | Greece  | Hungary                     |
| Quartz<br>14808-60-7          | TWA: 0.1 mg/m <sup>3</sup> | -   | -  | TWA: 0.1 mg/m <sup>3</sup>  | TWA: 0.1 mg/m <sup>3</sup>  |
| Dimethyl sulfoxide            | -                          | TWA: 50 ppm                                     | TWA: 50 ppm  | -   | -                           |

|                               |  |                                  |   |   |  |
|-------------------------------|--|----------------------------------|---|---|--|
| 67-68-5                       |  | TWA: 160 mg/m <sup>3</sup><br>H* | TWA: 160 mg/m <sup>3</sup><br>Peak: 100 ppm<br>Peak: 320 mg/m <sup>3</sup><br>*                 |   |  |
| Chemical name                 | Ireland  | Italy MDLPS                      | Italy AIDII   | Latvia  | Lithuania  |
| Quartz<br>14808-60-7          | TWA: 0.1 mg/m <sup>3</sup><br>STEL: 0.3 mg/m <sup>3</sup>  | TWA: 0.1 mg/m <sup>3</sup>       | TWA: 0.025 mg/m <sup>3</sup>  | TWA: 0.1 mg/m <sup>3</sup>  | TWA: 0.1 mg/m <sup>3</sup>   |
| Dimethyl sulfoxide<br>67-68-5 | -  | -                                | -   | -   | *<br>TWA: 50 ppm<br>TWA: 150 mg/m <sup>3</sup><br>STEL: 150 ppm<br>STEL: 500 mg/m <sup>3</sup> |
| L-Tryptophan<br>73-22-3       | -  | -                                | -   | TWA: 2 mg/m <sup>3</sup>  | -  |
| Chemical name                 | Luxembourg   | Malta                            | Netherlands   | Norway  | Poland   |
| Quartz<br>14808-60-7          | -  | -                                | TWA: 0.075 mg/m <sup>3</sup>  | TWA: 0.05 mg/m <sup>3</sup><br>TWA: 0.1 mg/m <sup>3</sup><br>TWA: 0.3 mg/m <sup>3</sup><br>STEL: 0.9 mg/m <sup>3</sup><br>STEL: 0.15 mg/m <sup>3</sup><br>STEL: 0.3 mg/m <sup>3</sup> | TWA: 0.1 mg/m <sup>3</sup>   |
| Chemical name                 | Portugal   | Romania                          | Slovakia  | Slovenia  | Spain  |
| Quartz<br>14808-60-7          | TWA: 0.025 mg/m <sup>3</sup>   | TWA: 0.1 mg/m <sup>3</sup>       | TWA: 0.1 mg/m <sup>3</sup><br>STEL: 0.5 mg/m <sup>3</sup>                                       | TWA: 0.1 mg/m <sup>3</sup>  | TWA: 0.05 mg/m <sup>3</sup>  |
| Dimethyl sulfoxide<br>67-68-5 | -  | -                                | -   | TWA: 160 mg/m <sup>3</sup><br>TWA: 50 ppm<br>STEL: 100 ppm<br>STEL: 320 mg/m <sup>3</sup><br>*  | -  |
| Chemical name                 | Sweden   |                                  | Switzerland   |   | United Kingdom   |
| Quartz<br>14808-60-7          | NGV: 0.1 mg/m <sup>3</sup>   |                                  | TWA: 0.15 mg/m <sup>3</sup>   |   | TWA: 0.1 mg/m <sup>3</sup><br>STEL: 0.3 mg/m <sup>3</sup>                                      |
| Dimethyl sulfoxide<br>67-68-5 | NGV: 50 ppm<br>NGV: 150 mg/m <sup>3</sup><br>Vägledande KGV: 150 ppm<br>Vägledande KGV: 500 mg/m <sup>3</sup><br>* |                                  | TWA: 50 ppm<br>TWA: 160 mg/m <sup>3</sup><br>STEL: 100 ppm<br>STEL: 320 mg/m <sup>3</sup><br>H* |   | -  |

**Biological occupational exposure limits**

|                      |                |         |          |         |                |
|----------------------|----------------|---------|----------|---------|----------------|
| Chemical name        | European Union | Austria | Bulgaria | Croatia | Czech Republic |
| Quartz<br>14808-60-7 | -              | - () -  | -        | -       | -              |

**Derived No Effect Level (DNEL)** No information available.**Predicted No Effect Concentration (PNEC)****8.2. Exposure controls****Personal protective equipment****Eye/face protection** No special protective equipment required.**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.

|  |  |
|--|--|
| <b>General hygiene considerations</b>  | Do not eat, drink or smoke when using this product. Wash hands before breaks and immediately after handling the product. |
| <b>Environmental exposure controls</b> | No information available.  |

## SECTION 9: Physical and chemical properties

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

|                        |                          |
|------------------------|--------------------------|
| <b>Physical state</b>  | Solid                    |
| <b>Appearance</b>      | gel                      |
| <b>Colour</b>          | Opaque                   |
| <b>Odour</b>           | Varies.                  |
| <b>Odour threshold</b> | No information available |

| <u>Property</u>                               | <u>Values</u>            | <u>Remarks • Method</u>  |
|---|--------------------------|--------------------------|
| <b>Melting point / freezing point</b>         | No data available        | None known               |
| <b>Boiling point / boiling range</b>          | No data available        | None known               |
| <b>Flammability (solid, gas)</b>              | No data available        | None known               |
| <b>Flammability Limit in Air</b>              |                          | None known               |
| <b>Upper flammability or explosive limits</b> | No data available        |                          |
| <b>Lower flammability or explosive limits</b> | No data available        |                          |
| <b>Flash point</b>                            | No data available        | None known               |
| <b>Autoignition temperature</b>               | 215 °C                   |                          |
| <b>Decomposition temperature</b>              |                          | None known               |
| <b>pH</b>                                     |                          | None known               |
| <b>pH (as aqueous solution)</b>               | No data available        | No information available |
| <b>Kinematic viscosity</b>                    | No data available        | None known               |
| <b>Dynamic viscosity</b>                      | No data available        | None known               |
| <b>Water solubility</b>                       | No data available        | None known               |
| <b>Solubility(ies)</b>                        | No data available        | None known               |
| <b>Partition coefficient</b>                  | No data available        | None known               |
| <b>Vapour pressure</b>                        | No data available        | None known               |
| <b>Relative density</b> No data available     |                          | None known               |
| <b>Bulk density</b>                           | No data available        |                          |
| <b>Liquid Density</b>                         | No data available        |                          |
| <b>Vapour density</b>                         | No data available        | None known               |
| <b>Particle characteristics</b>               |                          |                          |
| <b>Particle Size</b>                          | No information available |                          |
| <b>Particle Size Distribution</b>             | 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

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

### 10.2. Chemical stability

|                  |                                 |
|------------------|---------------------------------|
| <b>Stability</b> | Stable under normal conditions. |
|------------------|---------------------------------|

**Explosion data****Sensitivity to mechanical impact** None.**Sensitivity to static discharge** None.**10.3. Possibility of hazardous reactions****Possibility of hazardous reactions** None under normal processing.**10.4. Conditions to avoid****Conditions to avoid** None known based on information supplied.**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****Component Information**

| Chemical name      | Oral LD50             | Dermal LD50           | Inhalation LC50         |
|--------------------|-----------------------|-----------------------|-------------------------|
| Dimethyl sulfoxide | = 28300 mg/kg ( Rat ) | = 40000 mg/kg ( Rat ) | > 5.33 mg/L ( Rat ) 4 h |
| L-Tryptophan       | > 16 g/kg ( Rat )     | -                     | > 5.75 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 sensitisation** No information available.

|                                 |   |
|---------------------------------|---|
| <b>Germ cell mutagenicity</b>   | No information available.   |
| <b>Carcinogenicity</b>          | Contains a known or suspected carcinogen. Classification based on data available for ingredients. May cause cancer. |
| <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.   |

**11.2. Information on other hazards****11.2.1. Endocrine disrupting properties**

**Endocrine disrupting properties** No information available.

**11.2.2. Other information**

**Other adverse effects** No information available.

## SECTION 12: Ecological information

**12.1. Toxicity****Ecotoxicity**

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

| Chemical name      | Algae/aquatic plants | Fish   | Toxicity to microorganisms | Crustacea |
|--------------------|----------------------|--|----------------------------|-----------|
| Dimethyl sulfoxide | -                    | LC50: =34000mg/L (96h, Pimephales promelas)<br>LC50: 33 - 37g/L (96h, Oncorhynchus mykiss)<br>LC50: >40g/L (96h, Lepomis macrochirus)<br>LC50: =41.7g/L (96h, Cyprinus carpio) | -                          | -         |

**12.2. Persistence and degradability**

**Persistence and degradability** No information available.

**12.3. Bioaccumulative potential****Bioaccumulation****Component Information**

| Chemical name      | Partition coefficient |
|--------------------|-----------------------|
| Dimethyl sulfoxide | -1.35                 |
| L-Tryptophan       | -1.06                 |



**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         |
|--------------------|---------------------------------|
| Dimethyl sulfoxide | The substance is not PBT / vPvB |
| L-Tryptophan       | 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** Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

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

## SECTION 14: Transport information

**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 |
|-------------------------------|------------------|-------|
| Quartz<br>14808-60-7          | RG 25            | -     |
| Dimethyl sulfoxide<br>67-68-5 | RG 84            | -     |

**Netherlands**

| Chemical name | Netherlands - List of Carcinogens | Netherlands - List of Mutagens | Netherlands - List of Reproductive Toxins |
|---------------|-----------------------------------|--------------------------------|---|
| Quartz        | Present                           | -                              | -   |

**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 contains one or more substance(s) subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

| Chemical name                | Restricted substance per REACH Annex XVII | Substance subject to authorisation per REACH Annex XIV |
|------------------------------|---|--|
| Dimethyl sulfoxide - 67-68-5 | 75.                                       | -  |

**Persistent Organic Pollutants**

Not applicable

**Ozone-depleting substances (ODS) regulation (EC) 1005/2009**

Not applicable

**EU - Plant Protection Products (1107/2009/EC)**

| Chemical name       | EU - Plant Protection Products (1107/2009/EC) |
|---------------------|---|
| Quartz - 14808-60-7 | Plant protection agent                        |

**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**

H350 - May cause cancer

**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

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Organisation for Economic Co-operation and Development Screening Information Data Set  
World Health Organization

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

**Revision date** 28-Feb-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**