

This safety data sheet was created pursuant to the requirements of:  
UK REACH Regulations (SI 2019/758 as amended)

Revision date 09-Aug-2024

Revision Number 1

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

### 1.1. Product identifier

**Product Code(s)** 66730  
**Safety data sheet number** 66730  
**Product Name** FUNGAMYL BREWQ  
**Pure substance/mixture** Mixture

Contains AMYLASE, alpha

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

**Recommended use** Biocatalyst  
Industrial application  
Food industry

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

#### **Supplier**

Univar Solutions UK Ltd  
Aquarius House  
6 Mid Point Business Park  
Bradford  
GBR

For further information, please contact

**E-mail address** SDS.EMEA@univarsolutions.com  
**Non-Emergency Telephone Number** +44 1274 267300 / +44 1274 267306

### 1.4. Emergency telephone number

**Emergency Telephone** SGS - +32 (0)3 575 55 55 (24h)

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

|                                  |                     |
|----------------------------------|---------------------|
| <b>Respiratory sensitisation</b> | Category 1 - (H334) |
|----------------------------------|---------------------|

### 2.2. Label elements

Contains AMYLASE, alpha

**Signal word**

Danger

**Hazard statements**

H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled

**Precautionary statements**

P261 - Avoid breathing dust/fume/gas/mist/vapours/spray

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

P284 - In case of inadequate ventilation wear respiratory protection

P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing

P342 + P311 - If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician

**Additional information**

This product requires tactile warnings if supplied to the general public.

**2.3. Other hazards**

May cause slight skin irritation. May cause slight eye irritation.

**SECTION 3: Composition/information on ingredients****3.1 Substances**

Not applicable

**3.2 Mixtures**

| Chemical name            | Weight-%  | EC No (EU Index No) | UK REACH registration number | Classification according to GB CLP (SI 2020/1567 as amended) | Specific concentration limit (SCL) | M-Factor | M-Factor (long-term) |
|--------------------------|-----------|---------------------|------------------------------|--------------------------------------------------------------|------------------------------------|----------|----------------------|
| AMYLASE, alpha 9000-90-2 | 5 - < 10% | 232-565-6           | -                            | Resp. Sens. 1 (H334)                                         | -                                  | -        | -                    |

**Full text of H- and EUH-phrases: see section 16**This product does not contain candidate substances of very high concern at a concentration  $\geq 0.1\%$  (UK REACH Article 59)**SECTION 4: First aid measures****4.1. Description of first aid measures****General advice**

Show this safety data sheet to the doctor in attendance.

**Inhalation**

May cause allergic respiratory reaction. If breathing has stopped, give artificial respiration.

|                                           |                                                                                                                                                                                                                                                                                                                                                                  |
|-------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                           | Get medical attention immediately. Remove to fresh air. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation.                                                                                                                                                                                                                        |
| <b>Eye contact</b>                        | Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a doctor. Remove contact lenses, if present and easy to do. Continue rinsing.                                                                                                                                                                            |
| <b>Skin contact</b>                       | Take off contaminated clothing and wash it before reuse. Wash with soap and water. May cause an allergic skin reaction. In the case of skin irritation or allergic reactions see a doctor.                                                                                                                                                                       |
| <b>Ingestion</b>                          | May produce an allergic reaction. Do NOT induce vomiting. Rinse mouth. Never give anything by mouth to an unconscious person. Get immediate medical attention.                                                                                                                                                                                                   |
| <b>Self-protection of the first aider</b> | Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Avoid contact with skin, eyes or clothing. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Use personal protective equipment as required. See section 8 for more information. |

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

|                   |                                                                                                                                                                                                                                                                                               |
|-------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Symptoms</b>   | May cause allergy or asthma symptoms or breathing difficulties if inhaled.                                                                                                                                                                                                                    |
| <b>Inhalation</b> | May cause allergy or asthma symptoms or breathing difficulties if inhaled. Coughing and/ or wheezing. Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain, or flushing. |
| <b>Eyes</b>       | May cause slight eye irritation.                                                                                                                                                                                                                                                              |
| <b>Dermal</b>     | May cause slight skin irritation.                                                                                                                                                                                                                                                             |
| <b>Ingestion</b>  | May cause irritation                                                                                                                                                                                                                                                                          |

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

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

### **SECTION 5: Firefighting measures**

#### **5.1. Extinguishing media**

|                                       |                                                                    |
|---------------------------------------|--------------------------------------------------------------------|
| <b>Suitable Extinguishing Media</b>   | Water spray. Alcohol resistant foam. Dry chemical or CO2.          |
| <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> | Product is or contains a sensitiser. May cause sensitisation by inhalation. |
| <b>Hazardous combustion products</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>     | Avoid generation of dust. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal protective equipment as required. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. |
| <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**

|                                  |                                                                         |
|----------------------------------|-------------------------------------------------------------------------|
| <b>Environmental precautions</b> | Collect spillage. Prevent further leakage or spillage if safe to do so. |
|----------------------------------|-------------------------------------------------------------------------|

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

|                                        |                                                                                                                                                                                                                     |
|----------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Methods for containment</b>         | Avoid handling which leads to dust formation. Prevent further leakage or spillage if safe to do so.                                                                                                                 |
| <b>Methods for cleaning up</b>         | Take up mechanically, placing in appropriate containers for disposal. Avoid generation of dust. Ensure adequate ventilation. Remove and wash contaminated clothing and gloves, including the inside, before re-use. |
| <b>Prevention of secondary hazards</b> | Clean contaminated objects and areas thoroughly observing environmental regulations.                                                                                                                                |

**6.4. Reference to other sections**

|                                    |                                                                          |
|------------------------------------|--------------------------------------------------------------------------|
| <b>Reference to other sections</b> | See section 8 for more information. See section 13 for more information. |
|------------------------------------|--------------------------------------------------------------------------|

**SECTION 7: Handling and storage****7.1. Precautions for safe handling**

|                                       |                                                                                                                                                                                                                                                                                                                                                                                                |
|---------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Advice on safe handling</b>        | Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Avoid handling which leads to dust formation.                                                                                                                                                                                                   |
| <b>General hygiene considerations</b> | Handle in accordance with good industrial hygiene and safety practice. Remove contaminated clothing and protective equipment before entering eating areas. Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing and gloves, including the inside, before re-use. |

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

|                           |                                                                                                                                     |
|---------------------------|-------------------------------------------------------------------------------------------------------------------------------------|
| <b>Storage Conditions</b> | Keep containers tightly closed in a dry, cool and well-ventilated place. Store locked up. Keep at temperatures between 0 and 10 °C. |
|---------------------------|-------------------------------------------------------------------------------------------------------------------------------------|

**7.3. Specific end use(s)**

**Specific use(s)**  
See section 1 for more information.

|                                      |                                                                  |
|--------------------------------------|------------------------------------------------------------------|
| <b>Risk Management Methods (RMM)</b> | The information required is contained in this Safety Data Sheet. |
|--------------------------------------|------------------------------------------------------------------|

## SECTION 8: Exposure controls/personal protection

### 8.1. 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.

**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) - Workers** No information available

**Derived No Effect Level (DNEL) - General Public** No information available.

### Predicted No Effect Concentration (PNEC)

| Chemical name               | Freshwater | Freshwater<br>(intermittent release) | Marine water | Marine water<br>(intermittent release) | Air |
|-----------------------------|------------|--------------------------------------|--------------|----------------------------------------|-----|
| AMYLASE, alpha<br>9000-90-2 | 5.2 µg/L   |                                      | 0.52 µg/L    |                                        |     |

| Chemical name               | Freshwater<br>sediment | Marine sediment | Sewage treatment | Soil | Food chain |
|-----------------------------|------------------------|-----------------|------------------|------|------------|
| AMYLASE, alpha<br>9000-90-2 |                        |                 | 65000 µg/L       |      |            |

### 8.2. Exposure controls

**Engineering controls** Ensure adequate ventilation.

#### Personal protective equipment

**Eye/face protection** Use eye protection according to EN 166. Wear safety glasses with side shields (or goggles).

**Hand protection** Gloves must conform to standard EN 374. Wear suitable gloves.

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

**Respiratory protection** In case of inadequate ventilation wear respiratory protection. Use respiratory equipment with particle filter, type P3.

**General hygiene considerations** Handle in accordance with good industrial hygiene and safety practice. Remove contaminated clothing and protective equipment before entering eating areas. Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing and gloves, including the inside, before re-use.

**Environmental exposure controls** Local authorities should be advised if significant spillages cannot be contained. Ensure all

waste water is collected and treated via a waste water treatment plant.

## SECTION 9: Physical and chemical properties

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

|                 |                          |
|-----------------|--------------------------|
| Physical state  | Liquid                   |
| Appearance      | Liquid                   |
| Colour          | light To dark brown      |
| Odour           | Slight.                  |
| Odour threshold | No information available |

| Property                                | Values                   | Remarks • Method          |
|-----------------------------------------|--------------------------|---------------------------|
| Melting point / freezing point          |                          | No information available. |
| Initial boiling point and boiling range |                          | No information available. |
| Flammability                            |                          | No information available. |
| Flammability Limit in Air               |                          | No information available. |
| Upper flammability or explosive limits  |                          |                           |
| Lower flammability or explosive limits  |                          |                           |
| Flash point                             | > 100 °C                 | No information available. |
| Autoignition temperature                |                          | No information available. |
| Decomposition temperature               |                          | No information available. |
| pH                                      | 4 - 9                    | No information available. |
| pH (as aqueous solution)                |                          | No information available. |
| Kinematic viscosity                     |                          | No information available. |
| Dynamic viscosity                       |                          | No information available. |
| Water solubility                        | Soluble in water         | No information available. |
| Solubility(ies)                         |                          | No information available. |
| Partition coefficient                   |                          | No information available. |
| Vapour pressure                         |                          | No information available. |
| Relative density                        |                          | No information available. |
| Bulk density                            |                          | No information available. |
| Liquid Density                          | 1.26 g/mL                | No information available. |
| Relative vapour density                 |                          | No information available. |
| Particle characteristics                |                          | No information available. |
| Particle Size                           | No information available |                           |
| Particle Size Distribution              | No information available |                           |
| Explosive properties                    | No data available        |                           |
| Oxidising properties                    | No data available        |                           |

### 9.2. Other information

## 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  | None. |

### 10.3. Possibility of hazardous reactions

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

#### **10.4. Conditions to avoid**

**Conditions to avoid** Keep at temperatures between 0 and 10 °C.

#### **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 toxicological effects**

##### **Information on likely routes of exposure**

##### **Product Information**

|                     |                                                                                                                                                                                                                      |
|---------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Inhalation</b>   | May cause allergy or asthma symptoms or breathing difficulties if inhaled. Specific test data for the substance or mixture is not available. May cause sensitisation in susceptible persons. (based on components).  |
| <b>Eye contact</b>  | Specific test data for the substance or mixture is not available. May cause slight eye irritation.                                                                                                                   |
| <b>Skin contact</b> | May cause slight skin irritation. Specific test data for the substance or mixture is not available. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons. (based on components). |
| <b>Ingestion</b>    | May cause irritation. Specific test data for the substance or mixture is not available. May cause additional affects as listed under "Inhalation".                                                                   |

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

|                 |                                                                                                                                                                                                                                                                                               |
|-----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Symptoms</b> | May cause allergy or asthma symptoms or breathing difficulties if inhaled. Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain, or flushing. Coughing and/ or wheezing. |
|-----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

##### **Acute toxicity**

##### **Numerical measures of toxicity**

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

##### **Component Information**

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

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

AMYLASE, alpha (9000-90-2)

| Method | Species | Exposure route | Effective dose | Exposure time | Results |
|--------|---------|----------------|----------------|---------------|---------|
|--------|---------|----------------|----------------|---------------|---------|

|          |  |        |  |  |              |
|----------|--|--------|--|--|--------------|
| OECD 404 |  | Dermal |  |  | non-irritant |
|----------|--|--------|--|--|--------------|

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

AMYLASE, alpha (9000-90-2)

| Method   | Species | Exposure route | Effective dose | Exposure time | Results      |
|----------|---------|----------------|----------------|---------------|--------------|
| OECD 405 |         | eye            |                |               | non-irritant |

**Respiratory or skin sensitisation** May cause allergy or asthma symptoms or breathing difficulties if inhaled.

AMYLASE, alpha (9000-90-2)

| Method | Species        | Exposure route | Results     |
|--------|----------------|----------------|-------------|
|        | Human evidence | Inhalation     | Sensitising |

**Germ cell mutagenicity** No information available.

Component Information

AMYLASE, alpha (9000-90-2)

| Method            | Species | Results       |
|-------------------|---------|---------------|
| OECD 471 OECD 476 |         | Not mutagenic |

**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.

## SECTION 12: Ecological information

### 12.1. Toxicity

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

AMYLASE, alpha (9000-90-2)

| Method                                                    | Species       | Endpoint type | Effective dose    | Exposure time | Results |
|-----------------------------------------------------------|---------------|---------------|-------------------|---------------|---------|
| OECD Test No. 202: Daphnia sp., Acute Immobilisation Test | Daphnia magna | EC50          | 31.7 - 457 mg/L   | 48 hours      |         |
| OECD Test No. 203: Fish, Acute Toxicity Test              | Fish          | LC50          | 58.3 - 326.7 mg/L | 96 hours      |         |
| OECD Test No. 201:                                        | Algae         | ErC50         | >= 5.2 mg/L       | 72 hours      |         |



|                                                            |  |  |  |  |  |
|------------------------------------------------------------|--|--|--|--|--|
| Freshwater Algae and Cyanobacteria, Growth Inhibition Test |  |  |  |  |  |
|------------------------------------------------------------|--|--|--|--|--|

**12.2. Persistence and degradability**

**Persistence and degradability** No information available.

AMYLASE, alpha (9000-90-2)

| Method                                                                              | Exposure time | Value | Results               |
|-------------------------------------------------------------------------------------|---------------|-------|-----------------------|
| OECD Test No. 301F: Ready Biodegradability: Manometric Respirometry Test (TG 301 F) |               |       | Readily biodegradable |

**12.3. Bioaccumulative potential**

**Bioaccumulation** No information available.

**Component Information**

| Chemical name  | Partition coefficient |
|----------------|-----------------------|
| AMYLASE, alpha | < 0                   |

**12.4. Mobility in soil**

**Mobility in soil** No information available.

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

**PBT and vPvB assessment** The product does not contain any substance(s) classified as PBT or vPvB.

| Chemical name  | PBT and vPvB assessment         |
|----------------|---------------------------------|
| AMYLASE, alpha | The substance is not PBT / vPvB |

**12.6. Other adverse effects**

No information available.

**SECTION 13: Disposal considerations****13.1. Waste treatment methods**

**Waste from residues/unused products** Waste is classified as hazardous waste. Disposal to licensed waste disposal site in accordance with the local Waste Disposal Authority.

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

**SECTION 14: Transport information****IATA**

|                                          |                |
|------------------------------------------|----------------|
| <b>14.1 UN number or ID number</b>       | Not regulated  |
| <b>14.2</b>                              |                |
| <b>14.3 Transport hazard class(es)</b>   | Not regulated  |
| <b>14.4 Packing group</b>                | Not regulated  |
| <b>14.5 Environmental hazards</b>        | Not applicable |
| <b>14.6 Special precautions for user</b> |                |
| <b>Special Provisions</b>                | None           |

**IMDG**

|                                                              |                          |
|--------------------------------------------------------------|--------------------------|
| 14.1 UN number or ID number                                  | 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 user                            |                          |
| Special Provisions                                           | None                     |
| 14.7 Maritime transport in bulk according to IMO instruments | No information available |

**RID**

|                                   |                |
|-----------------------------------|----------------|
| 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 user |                |
| 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 user |                |
| Special Provisions                | None           |

**SECTION 15: Regulatory information****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****National regulations****Authorisations and/or restrictions on use:**

This product contains one or more substances subject to restriction (UK REACH - Annex XVII).

This product does not contain substances subject to authorisation (UK REACH - Annex XIV).

**Product restricted per REACH Annex XVII: 3**

**Persistent Organic Pollutants**

Not applicable

**Export Notification requirements**

Not applicable

**Named dangerous substances per COMAH Regulations 2015 (as amended)**

Not applicable

**The Ozone-Depleting Substances Regulations 2015**

Not applicable

**The Biocidal Products Regulations 2001 (as amended)**

Not applicable

**The Water Environment (Water Framework Directive) (England and Wales) Regulations 2017 (as amended)**

Not applicable

**Poisons Act 1972 (Explosive Precursors) Regulations (as Amended)**

Not applicable

#### Other Regulations

The product complies with the recommended purity specifications for food-grade enzymes given by the Joint FAO/WHO Expert Committee on Food Additives (JECFA) and the Food Chemical Codex (FCC).

#### International Inventories

|               |                                                  |
|---------------|--------------------------------------------------|
| TSCA          | Contact supplier for inventory compliance status |
| DSL/NDL       | Contact supplier for inventory compliance status |
| EINECS/ELINCS | Contact supplier for inventory compliance status |
| ENCS          | Contact supplier for inventory compliance status |
| IECSC         | Contact supplier for inventory compliance status |
| KECI          | Contact supplier for inventory compliance status |
| PICCS         | Contact supplier for inventory compliance status |
| AIIC          | Contact supplier for inventory compliance status |
| NZIoC         | Contact supplier for inventory compliance status |

#### Legend:

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory  
**DSL/NDL** - Canadian Domestic Substances List/Non-Domestic Substances List  
**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances  
**ENCS** - Japan Existing and New Chemical Substances  
**IECSC** - China Inventory of Existing Chemical Substances  
**KECL** - Korean Existing and Evaluated Chemical Substances  
**PICCS** - Philippines Inventory of Chemicals and Chemical Substances  
**AIIC** - Australian Inventory of Industrial Chemicals  
**NZIoC** - New Zealand Inventory of Chemicals

#### 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

H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled

#### 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                 |
| +             | Sensitisers                                      |      |                                  |
| Revision Note | ***Indicates updated data since last publication |      |                                  |

#### 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)  
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)  
U.S. 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

**Prepared By** N Bajaj

**Revision date** 09-Aug-2024

**This material safety data sheet complies with the requirements of UK REACH Regulations (SI 2019/758 as amended)  
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**

**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**