

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

Revision date 18-May-2026

Revision Number 1

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

### 1.1. Product identifier

Product Code(s) 128456  
Safety data sheet number 128456  
Product Name LAPOX ARD 52  
EC Number 618-939-5  
CAS No 933999-84-9  
Pure substance/mixture Substance

Contains REACTION PRODUCTS OF HEXANE-1,6-DIOL WITH 2-(CHLOROMETHYL)OXIRANE (1:2)

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

Recommended use Reactive Diluent  
Epoxy resin  
Composites

### 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

|                                   |                        |
|-----------------------------------|------------------------|
| Skin corrosion/irritation         | Category 2 - (H315)    |
| Serious eye damage/eye irritation | Category 2 - (H319)    |
| Skin sensitisation                | Category 1 - (H317)    |
| Reproductive toxicity             | Category 1B - (H360FD) |

**2.2. Label elements**

Contains REACTION PRODUCTS OF HEXANE-1,6-DIOL WITH 2-(CHLOROMETHYL)OXIRANE (1:2)

**Signal word**

Danger

**Hazard statements**

H315 - Causes skin irritation

H317 - May cause an allergic skin reaction

H319 - Causes serious eye irritation

H360FD - May damage fertility. May damage the unborn child

**Precautionary statements**

P201 - Obtain special instructions before use

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

P264 - Wash face, hands and any exposed skin thoroughly after handling

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

P308 + P313 - IF exposed or concerned: Get medical advice/attention

**2.3. Other hazards**

No information available.

## SECTION 3: Composition/information on ingredients

**3.1 Substances**

| 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) |
|----------------------------------------------------------------------------------------|-----------|---------------------|------------------------------|---------------------------------------------------------------------------------------|------------------------------------|----------|----------------------|
| REACTION PRODUCTS OF HEXANE-1,6-DIOL WITH 2-(CHLOROMETHYL)OXIRANE (1:2)<br>933999-84-9 | 99 - 100% | 618-939-5           | -                            | Eye Irrit. 2 (H319)<br>Skin Irrit. 2 (H315)<br>Skin Sens. 1 (H317)<br>Repr. 1B (H360) | -                                  | -        | -                    |

**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**

|                                           |                                                                                                                                                                                                                                                                                     |
|-------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>General advice</b>                     | Show this safety data sheet to the doctor in attendance. Remove and isolate contaminated clothing and shoes.                                                                                                                                                                        |
| <b>Inhalation</b>                         | Remove to fresh air. Get medical attention immediately if symptoms occur. Place unconscious person on the side in the recovery position and ensure breathing can take place.                                                                                                        |
| <b>Eye contact</b>                        | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open while rinsing. Do not rub affected area. Get medical attention if irritation develops and persists. |
| <b>Skin contact</b>                       | May cause an allergic skin reaction. In the case of skin irritation or allergic reactions see a doctor. Wash off immediately with soap and plenty of water for at least 15 minutes. Get medical attention if symptoms occur.                                                        |
| <b>Ingestion</b>                          | Rinse mouth. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Call a doctor.                                                                                                                                                                          |
| <b>Self-protection of the first aider</b> | Avoid contact with skin, eyes or clothing. Wear personal protective clothing (see section 8).                                                                                                                                                                                       |

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

|               |                                                                                                                                                                                                                                                                                                          |
|---------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Eyes</b>   | Burning sensation. May cause redness and tearing of the eyes.                                                                                                                                                                                                                                            |
| <b>Dermal</b> | Hives. Itching. Rashes. 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. Irritating. Erythema (skin redness). Prolonged contact may cause redness and 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>   | Dry chemical, CO2, alcohol-resistant foam or water spray.          |
| <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 skin contact. |
| <b>Hazardous combustion products</b>              | Carbon oxides.                                                                |

**5.3. Advice for firefighters**

|                                         |                                                                                                 |
|-----------------------------------------|-------------------------------------------------------------------------------------------------|
| <b>Special protective equipment and</b> | Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. |
|-----------------------------------------|-------------------------------------------------------------------------------------------------|

precautions for fire-fighters Use personal protection equipment.

## SECTION 6: Accidental release measures

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

**Personal precautions** 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.

**Other information** Refer to protective measures listed in Sections 7 and 8.

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

### 6.2. Environmental precautions

**Environmental precautions** Prevent further leakage or spillage if safe to do so. Local authorities should be advised if significant spillages cannot be contained. Do not allow runoff to sewer, waterway or ground.

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

**Methods for containment** Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal.

**Methods for cleaning up** For waste disposal, see section 13.

**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. Ensure adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash it before reuse. Remove contaminated clothing and shoes. Use personal protection recommended in Section 8.

**General hygiene considerations** Do not eat, drink or smoke when using this product. Wash hands before breaks and immediately after handling the product. Wear suitable gloves and eye/face protection. Avoid contact with skin, eyes or clothing.

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

**Storage Conditions** Keep containers tightly closed in a dry, cool and well-ventilated place. Store locked up. Keep container tightly closed in a dry and well-ventilated place. Keep at temperatures between 2 and 40 °C. Shelf life 24 months from date of manufacturing at temperature below 40 °C. Store away from incompatible materials. See section 10 for more information.

### 7.3. Specific end use(s)

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

**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** 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

| Chemical name                                                                                | Oral | Dermal                                                                                       | Inhalation                                                                                           |
|----------------------------------------------------------------------------------------------|------|----------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|
| REACTION PRODUCTS OF<br>HEXANE-1,6-DIOL WITH<br>2-(CHLOROMETHYL)OXIRANE (1:2)<br>933999-84-9 |      | 6 mg/kg bw/day [4] [6]<br>22.6 µg/cm <sup>2</sup> [5] [6]<br>22.6 µg/cm <sup>2</sup> [5] [7] | 10.57 mg/m <sup>3</sup> [4] [6]<br>10.57 mg/m <sup>3</sup> [4] [7]<br>0.44 mg/m <sup>3</sup> [5] [6] |

[4] Systemic health effects.  
[5] Local health effects.  
[6] Long term.  
[7] Short term.

### Derived No Effect Level (DNEL) - General Public

| Chemical name                                                                                | Oral                                                 | Dermal                                                                                                                     | Inhalation                                                                                         |
|----------------------------------------------------------------------------------------------|------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|
| REACTION PRODUCTS OF<br>HEXANE-1,6-DIOL WITH<br>2-(CHLOROMETHYL)OXIRANE (1:2)<br>933999-84-9 | 1.5 mg/kg bw/day [4] [6]<br>1.5 mg/kg bw/day [4] [7] | 1.7 mg/kg bw/day [4] [6]<br>1.7 mg/kg bw/day [4] [7]<br>13.6 µg/cm <sup>2</sup> [5] [6]<br>13.6 µg/cm <sup>2</sup> [5] [7] | 5.29 mg/m <sup>3</sup> [4] [6]<br>5.29 mg/m <sup>3</sup> [4] [7]<br>0.27 mg/m <sup>3</sup> [5] [6] |

[4] Systemic health effects.  
[5] Local health effects.  
[6] Long term.  
[7] Short term.

### Predicted No Effect Concentration (PNEC)

| Chemical name                                                                                       | Freshwater  | Freshwater<br>(intermittent release) | Marine water | Marine water<br>(intermittent release) | Air |
|-----------------------------------------------------------------------------------------------------|-------------|--------------------------------------|--------------|----------------------------------------|-----|
| REACTION PRODUCTS<br>OF HEXANE-1,6-DIOL<br>WITH<br>2-(CHLOROMETHYL)OXI<br>RANE (1:2)<br>933999-84-9 | 0.0115 mg/L | 0.115 mg/L                           | 0.00115 mg/L |                                        |     |

| Chemical name                                                                          | Freshwater sediment     | Marine sediment          | Sewage treatment | Soil                | Food chain |
|----------------------------------------------------------------------------------------|-------------------------|--------------------------|------------------|---------------------|------------|
| REACTION PRODUCTS OF HEXANE-1,6-DIOL WITH 2-(CHLOROMETHYL)OXIRANE (1:2)<br>933999-84-9 | 0.283 mg/kg sediment dw | 0.0283 mg/kg sediment dw | 1 mg/L           | 0.223 mg/kg soil dw |            |

## 8.2. Exposure controls

### Engineering controls

Keep away from food, drink and animal feedingstuffs. Avoid contact with skin, eyes or clothing.

### Personal protective equipment

#### Eye/face protection

Wear safety glasses with side shields (or goggles). Use eye protection according to EN ISO 16321-1.

#### Hand protection

Wear suitable gloves. Ensure that the breakthrough time of the glove material is not exceeded. Refer to glove supplier for information on breakthrough time for specific gloves. Gloves must conform to standard EN 374.

#### Skin and body protection

Wear suitable protective clothing. Long sleeved clothing.

#### Respiratory protection

No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

#### General hygiene considerations

Do not eat, drink or smoke when using this product. Wash hands before breaks and immediately after handling the product. Wear suitable gloves and eye/face protection. Avoid contact with skin, eyes or clothing.

## SECTION 9: Physical and chemical properties

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

|                 |                           |
|-----------------|---------------------------|
| Physical state  | Liquid                    |
| Appearance      | Liquid                    |
| Colour          | Colourless to pale yellow |
| Odour           | Characteristic.           |
| Odour threshold | No information available  |

#### Property

#### Values

#### Remarks • Method

|                                         |          |                           |
|-----------------------------------------|----------|---------------------------|
| Melting point / freezing point          | -23.7 °C |                           |
| Initial boiling point and boiling range | > 200 °C |                           |
| Flammability                            |          | No information available. |
| Flammability Limit in Air               |          | No information available. |
| Upper flammability or explosive limits  |          |                           |
| Lower flammability or explosive limits  |          |                           |
| Flash point                             | > 93 °C  |                           |
| Autoignition temperature                |          | No information available. |
| Decomposition temperature               | 284 °C   |                           |
| pH                                      | 7        |                           |

|                            |                          |                           |
|----------------------------|--------------------------|---------------------------|
| pH (as aqueous solution)   |                          | No information available. |
| Kinematic viscosity        |                          | No information available. |
| Dynamic viscosity          | 15 - 30 mPa s            | @ 25 °C.                  |
| Water solubility           | 11.9 g/l @ 20 °C         |                           |
| Solubility(ies)            |                          | No information available. |
| Partition coefficient      | 0.822                    | @ 20 °C.                  |
| Vapour pressure            | 0.042                    | @ 20 °C.                  |
| Relative density           | 1.063                    | 20 °C.                    |
| Bulk density               |                          | No information available  |
| Liquid Density             | 1.063 g/cm3              | @ 20 °C                   |
| 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 information available |                           |
| Oxidising properties       | No information available |                           |

## 9.2. Other information

# SECTION 10: Stability and reactivity

## 10.1. Reactivity

Reactivity Amines.

## 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 Reacts with amines with exothermic reaction liberating heat and fumes.

## 10.4. Conditions to avoid

Conditions to avoid Keep away from open flames, hot surfaces and sources of ignition.

## 10.5. Incompatible materials

Incompatible materials Strong oxidising agents. Strong bases. Alkali. Amines.

## 10.6. Hazardous decomposition products

Hazardous decomposition products Carbon oxides.

# SECTION 11: Toxicological information

## 11.1. Information on toxicological effects

### Information on likely routes of exposure

#### Product Information

**Inhalation** Specific test data for the substance or mixture is not available. May cause irritation of respiratory tract.

|                     |                                                                                                                                                                                                                                                     |
|---------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Eye contact</b>  | Specific test data for the substance or mixture is not available. Causes serious eye irritation. (based on components). May cause redness, itching, and pain.                                                                                       |
| <b>Skin contact</b> | May cause sensitisation by skin contact. Specific test data for the substance or mixture is not available. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons. (based on components). Causes skin irritation. |
| <b>Ingestion</b>    | Specific test data for the substance or mixture is not available. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea.                                                                                                  |

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

**Symptoms** Itching. Rashes. Hives. Redness. May cause redness and tearing of the eyes.

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

No information available

| Chemical name                                                                    | Oral LD50            | Dermal LD50          | Inhalation LC50 |
|----------------------------------------------------------------------------------|----------------------|----------------------|-----------------|
| REACTION PRODUCTS OF<br>HEXANE-1,6-DIOL WITH<br>2-(CHLOROMETHYL)OXIRANE<br>(1:2) | = 3010 mg/kg ( Rat ) | > 2000 mg/kg ( Rat ) | -               |

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

|                                          |                                                                                                                                                     |
|------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Skin corrosion/irritation</b>         | Classification based on data available for ingredients. Causes skin irritation.                                                                     |
| <b>Serious eye damage/eye irritation</b> | Classification based on data available for ingredients. Causes serious eye irritation.                                                              |
| <b>Respiratory or skin sensitisation</b> | May cause an allergic skin reaction.                                                                                                                |
| <b>Germ cell mutagenicity</b>            | Based on available data the classification criteria are not met.                                                                                    |
| <b>Carcinogenicity</b>                   | Based on available data the classification criteria are not met.                                                                                    |
| <b>Reproductive toxicity</b>             | Contains a known or suspected reproductive toxin. Classification based on data available for ingredients. May damage fertility or the unborn child. |
| <b>STOT - single exposure</b>            | Based on available data the classification criteria are not met.                                                                                    |
| <b>STOT - repeated exposure</b>          | Based on available data the classification criteria are not met.                                                                                    |
| <b>Aspiration hazard</b>                 | Based on available data the classification criteria are not met.                                                                                    |
| <b>Other adverse effects</b>             | No information available.                                                                                                                           |

## SECTION 12: Ecological information

### 12.1. Toxicity

**Ecotoxicity** Not considered to be harmful to aquatic life.

### 12.2. Persistence and degradability

**Persistence and degradability** No information available.

### 12.3. Bioaccumulative potential

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

#### Component Information

| Chemical name                                                              | Partition coefficient |
|----------------------------------------------------------------------------|-----------------------|
| REACTION PRODUCTS OF HEXANE-1,6-DIOL WITH<br>2-(CHLOROMETHYL)OXIRANE (1:2) | 0.822                 |

### 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         |
|----------------------------------------------------------------------------|---------------------------------|
| REACTION PRODUCTS OF HEXANE-1,6-DIOL WITH<br>2-(CHLOROMETHYL)OXIRANE (1:2) | 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** 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** No  
**14.6 Special precautions for user**  
**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                                   | No                       |
| 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        | No            |
| 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        | No            |
| 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

#### International Inventories

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

H315 - Causes skin irritation  
H317 - May cause an allergic skin reaction  
H319 - Causes serious eye irritation  
H360 - May damage fertility or the unborn child

#### **Legend**

SVHC: Substances of Very High Concern for Authorisation:

#### **Legend Section 8: Exposure controls/personal protection**

|                |                             |             |                                  |
|----------------|-----------------------------|-------------|----------------------------------|
| <b>TWA</b>     | TWA (time-weighted average) | <b>STEL</b> | STEL (Short Term Exposure Limit) |
| <b>Ceiling</b> | Maximum limit value         | *           | Skin designation                 |
| <b>+</b>       | 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 |
| 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** Amy Whitfield

**Revision date** 18-May-2026

**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**