

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

Revision date 24-Oct-2023

Revision Number 1

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

### 1.1. Product identifier

Product Code(s) 123617  
Safety data sheet number 123617  
Product Name TUTELA TRANSMISSION GEARFORCE  
  
Pure substance/mixture Mixture

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

Recommended use Gear oil

### 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

Not classified

### 2.2. Label elements

Not classified

#### **Hazard statements**

Not classified  
EUH208 - May produce an allergic reaction.

EUH210 - Safety data sheet available on request

- 0 % of the mixture consists of ingredient(s) of unknown acute oral toxicity.
- 0 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity.
- 41 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas).
- 41 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapour).
- 41 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist).

#### Unknown aquatic toxicity

### 2.3. Other hazards

No information available.

## 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) |
|----------------------------------------------------------------------------------------------|----------|--------------------------|------------------------------|-----------------------------------------------------------------------|------------------------------------|----------|----------------------|
| DISTILLATES (PETROLEUM), HYDROTREATED HEAVY PARAFFINIC 64742-54-7                            | 60 - 70% | 265-157-1 (649-467-00-8) | -                            | Asp. Tox. 1 (H304)                                                    | -                                  | -        | -                    |
| PHOSPHORODITHIOIC ACID, MIXED O,O-BIS(2-ETHYLHEXYL AND ISO-PR) ESTERS, ZINC SALTS 68909-93-3 | 0 - 10%  | 272-723-1                | -                            | Aquatic Chronic 2 (H411)<br>Skin Irrit. 2 (H315)<br>Eye Dam. 2 (H319) | -                                  | -        | -                    |

### 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>Inhalation</b>   | Move victim to fresh air. Get medical attention immediately if symptoms occur.                                    |
| <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> | Wash skin with soap and water. In the case of skin irritation or allergic reactions see a doctor.                 |

Ingestion Rinse mouth.

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

Dermal May cause allergic skin reaction.

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

Note to doctors Treat symptomatically.

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

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

**Suitable Extinguishing Media** Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

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

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

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

**Hazardous combustion products** Carbon oxides. Oxides of sulphur. Phosphorus oxides. Nitrogen oxides (NOx).

#### **5.3. Advice for firefighters**

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

### **SECTION 6: Accidental release measures**

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

**Personal precautions** Avoid contact with skin, eyes and inhalation of vapours. Ensure adequate ventilation.

**For emergency responders** 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** Collect with absorbent, non-combustible material into suitable containers. Flush area with flooding quantities of water. Collect spillage in containers, seal securely and deliver for disposal according to local regulations.

**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** Avoid contact with skin, eyes and inhalation of vapours. Ensure adequate ventilation.

**General hygiene considerations** Wash hands before breaks and immediately after handling the product.

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

**Storage Conditions** Keep container tightly closed in a dry and well-ventilated place.

### 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                     |
|-------------------------------------------------------------------------------------------------------|------|---------------------------|--------------------------------|
| DISTILLATES (PETROLEUM),<br>HYDROTREATED HEAVY<br>PARAFFINIC<br>64742-54-7                            |      | 0.97 mg/kg bw/day [4] [6] | 5.4 mg/m <sup>3</sup> [5] [6]  |
| PHOSPHORODITHIOIC ACID, MIXED<br>O,O-BIS(2-ETHYLHEXYL AND<br>ISO-PR) ESTERS, ZINC SALTS<br>68909-93-3 |      | 11.7 mg/kg bw/day [4] [6] | 8.03 mg/m <sup>3</sup> [4] [6] |

[4] Systemic health effects.

[5] Local health effects.

[6] Long term.

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

| Chemical name            | Oral                      | Dermal | Inhalation                    |
|--------------------------|---------------------------|--------|-------------------------------|
| DISTILLATES (PETROLEUM), | 0.74 mg/kg bw/day [4] [6] |        | 1.2 mg/m <sup>3</sup> [5] [6] |

| Chemical name                                                                                         | Oral                      | Dermal | Inhalation                     |
|-------------------------------------------------------------------------------------------------------|---------------------------|--------|--------------------------------|
| HYDROTREATED HEAVY<br>PARAFFINIC<br>64742-54-7                                                        |                           |        |                                |
| PHOSPHORODITHIOIC ACID, MIXED<br>O,O-BIS(2-ETHYLHEXYL AND<br>ISO-PR) ESTERS, ZINC SALTS<br>68909-93-3 | 0.23 mg/kg bw/day [4] [6] |        | 2.04 mg/m <sup>3</sup> [4] [6] |

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

#### Predicted No Effect Concentration (PNEC)

| Chemical name                                                                                               | Freshwater | Freshwater<br>(intermittent release) | Marine water | Marine water<br>(intermittent release) | Air |
|-------------------------------------------------------------------------------------------------------------|------------|--------------------------------------|--------------|----------------------------------------|-----|
| PHOSPHORODITHIOIC<br>ACID, MIXED<br>O,O-BIS(2-ETHYLHEXYL<br>AND ISO-PR) ESTERS,<br>ZINC SALTS<br>68909-93-3 | 4 µg/L     | 20 µg/L                              | 4.6 µg/L     |                                        |     |

| Chemical name                                                                                               | Freshwater<br>sediment       | Marine sediment               | Sewage treatment | Soil                      | Food chain       |
|-------------------------------------------------------------------------------------------------------------|------------------------------|-------------------------------|------------------|---------------------------|------------------|
| DISTILLATES<br>(PETROLEUM),<br>HYDROTREATED HEAVY<br>PARAFFINIC<br>64742-54-7                               |                              |                               |                  |                           | 9.33 mg/kg food  |
| PHOSPHORODITHIOIC<br>ACID, MIXED<br>O,O-BIS(2-ETHYLHEXYL<br>AND ISO-PR) ESTERS,<br>ZINC SALTS<br>68909-93-3 | 0.01357 mg/kg<br>sediment dw | 0.001357 mg/kg<br>sediment dw | 2.5 mg/L         | 0.001469 mg/kg soil<br>dw | 10.67 mg/kg food |

#### 8.2. Exposure controls

**Engineering controls** No information available.

#### Personal protective equipment

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

**Hand protection** 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.

| Gloves              |                                |                 |                    |
|---------------------|--------------------------------|-----------------|--------------------|
| Duration of contact | PPE - Glove material           | Glove thickness | Break through time |
|                     | Wear protective nitrile rubber |                 |                    |

|  |                                            |  |  |
|--|--------------------------------------------|--|--|
|  | gloves Wear protective<br>Neoprene™ gloves |  |  |
|--|--------------------------------------------|--|--|

**Skin and body protection** No special protective equipment required.

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

## SECTION 9: Physical and chemical properties

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

|                        |                           |
|------------------------|---------------------------|
| <b>Physical state</b>  | Liquid                    |
| <b>Appearance</b>      | Viscous liquid            |
| <b>Colour</b>          | amber                     |
| <b>Odour</b>           | No information available. |
| <b>Odour threshold</b> | No information available  |

| <u>Property</u>                                | <u>Values</u>            | <u>Remarks • Method</u>  |
|------------------------------------------------|--------------------------|--------------------------|
| <b>Melting point / freezing point</b>          |                          | No information available |
| <b>Initial boiling point and boiling range</b> | > 250.00 °C              |                          |
| <b>Flammability</b>                            |                          | No information available |
| <b>Flammability Limit in Air</b>               |                          | No information available |
| Upper flammability or explosive limits         |                          |                          |
| Lower flammability or explosive limits         |                          |                          |
| <b>Flash point</b>                             | 220.00 °C                | No information available |
| <b>Autoignition temperature</b>                |                          | No information available |
| <b>Decomposition temperature</b>               |                          | No information available |
| <b>pH</b>                                      |                          | No information available |
| pH (as aqueous solution)                       |                          | No information available |
| <b>Kinematic viscosity</b>                     | > 20.50                  | 40 °C                    |
| Dynamic viscosity                              |                          | No information available |
| <b>Water solubility</b>                        | Immiscible in water      | No information available |
| <b>Solubility(ies)</b>                         |                          | No information available |
| <b>Partition coefficient</b>                   |                          | No information available |
| <b>Vapour pressure</b>                         |                          | No information available |
| <b>Relative density</b>                        | 0.85                     | No information available |
| Bulk density                                   |                          |                          |
| Liquid Density                                 |                          |                          |
| <b>Relative vapour density</b>                 |                          | No information available |
| <b>Particle characteristics</b>                |                          | No information available |
| Particle Size                                  |                          |                          |
| Particle Size Distribution                     |                          |                          |
| <b>Explosive properties</b>                    | No information available |                          |
| <b>Oxidising properties</b>                    | No information available |                          |

### 9.2. Other information

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

**Reactivity** Stable under recommended storage conditions.

**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** Stable under normal conditions.

**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** Carbon oxides. Nitrogen oxides (NOx). Phosphorus oxides. Hydrogen sulphide.

**SECTION 11: Toxicological information****11.1. Information on toxicological effects****Information on likely routes of exposure****Product Information**

|                     |                                     |
|---------------------|-------------------------------------|
| <b>Inhalation</b>   | May cause irritation.               |
| <b>Eye contact</b>  | May cause temporary eye irritation. |
| <b>Skin contact</b> | Allergic reactions (sensitiser).    |
| <b>Ingestion</b>    | Gastrointestinal discomfort.        |

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

**Symptoms** No information available.

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

No information available

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

|                                      |           |       |
|--------------------------------------|-----------|-------|
| <b>ATEmix (oral)</b>                 | 36,585.40 | mg/kg |
| <b>ATEmix (dermal)</b>               | 12,195.10 | mg/kg |
| <b>ATEmix (inhalation-gas)</b>       | 99,999.00 | ppm   |
| <b>ATEmix (inhalation-vapour)</b>    | 99,999.00 | mg/l  |
| <b>ATEmix (inhalation-dust/mist)</b> | 99,999.00 | mg/l  |

0 % of the mixture consists of ingredient(s) of unknown acute oral toxicity.

0 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity.

41 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas).

41 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapour).

41 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist).

**Component Information**

| Chemical name                                                                              | Oral LD50         | Dermal LD50              | Inhalation LC50      |
|--------------------------------------------------------------------------------------------|-------------------|--------------------------|----------------------|
| DISTILLATES (PETROLEUM),<br>HYDROTREATED HEAVY<br>PARAFFINIC                               | > 15 g/kg ( Rat ) | > 5000 mg/kg ( Rabbit )  | -                    |
| PHOSPHORODITHIOIC ACID,<br>MIXED<br>O,O-BIS(2-ETHYLHEXYL AND<br>ISO-PR) ESTERS, ZINC SALTS | -                 | = 13800 mg/kg ( Rabbit ) | > 2 mg/L ( Rat ) 1 h |

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

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

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

**Respiratory or skin sensitisation** No information available.

**Germ cell mutagenicity** No information available.

**Carcinogenicity** No information available.

The table below indicates whether each agency has listed any ingredient as a carcinogen.

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

**Unknown aquatic toxicity**

| Chemical name            | Algae/aquatic plants | Fish                                       | Toxicity to microorganisms | Crustacea                            |
|--------------------------|----------------------|--------------------------------------------|----------------------------|--------------------------------------|
| DISTILLATES (PETROLEUM), | -                    | LC50: >5000mg/L (96h, Oncorhynchus mykiss) | -                          | EC50: >1000mg/L (48h, Daphnia magna) |

|                                  |  |  |  |  |
|----------------------------------|--|--|--|--|
| HYDROTREATED<br>HEAVY PARAFFINIC |  |  |  |  |
|----------------------------------|--|--|--|--|

**12.2. Persistence and degradability**

**Persistence and degradability** No information available.

**12.3. Bioaccumulative potential**

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

| Chemical name                                                                     | Partition coefficient |
|-----------------------------------------------------------------------------------|-----------------------|
| PHOSPHORODITHIOIC ACID, MIXED O,O-BIS(2-ETHYLHEXYL AND ISO-PR) ESTERS, ZINC SALTS | 0.84                  |

**12.4. Mobility in soil**

**Mobility in soil** Insoluble.

**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         |
|-----------------------------------------------------------------------------------|---------------------------------|
| DISTILLATES (PETROLEUM), HYDROTREATED HEAVY PARAFFINIC                            | The substance is not PBT / vPvB |
| PHOSPHORODITHIOIC ACID, MIXED O,O-BIS(2-ETHYLHEXYL AND ISO-PR) ESTERS, ZINC SALTS | 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
- 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

**IMDG**

- 14.1 UN number or ID number Not regulated
- 14.3 Transport hazard class(es) Not regulated
- 14.4 Packing group Not regulated

|                                                                     |                          |
|---------------------------------------------------------------------|--------------------------|
| <b>14.5 Environmental hazards</b>                                   | Not applicable           |
| <b>14.6 Special precautions for user</b>                            |                          |
| <b>Special Provisions</b>                                           | None                     |
| <b>14.7 Maritime transport in bulk according to IMO instruments</b> | No information available |

**RID**

|                                          |                |
|------------------------------------------|----------------|
| <b>14.1 UN number or ID number</b>       | Not regulated  |
| <b>14.2 UN proper shipping name</b>      | Not regulated  |
| <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           |

**ADR**

|                                          |                |
|------------------------------------------|----------------|
| <b>14.1 UN number or ID number</b>       | Not regulated  |
| <b>14.2 UN proper shipping name</b>      | Not regulated  |
| <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           |

**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).

| Chemical name                                                          | Restricted substance per REACH Annex XVII                | Substance subject to authorisation per REACH Annex XIV |
|------------------------------------------------------------------------|----------------------------------------------------------|--------------------------------------------------------|
| DISTILLATES (PETROLEUM), HYDROTREATED<br>HEAVY PARAFFINIC - 64742-54-7 | Use restricted. See item 28.<br>Restricted Carcinogen 1B | -                                                      |

**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>KECL</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:**

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

**15.2. Chemical safety assessment**

|                               |                          |
|-------------------------------|--------------------------|
| <b>Chemical Safety Report</b> | 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**

H304 - May be fatal if swallowed and enters airways

**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         | <b>*</b>    | 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 |
| 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  
Ozone

Calculation method  
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) (AEGLS)  
U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act  
U.S. Environmental Protection Agency High Production Volume Chemicals  
Food Research Journal  
Hazardous Substance Database  
International Uniform Chemical Information Database (IUCLID)  
National Institute of Technology and Evaluation (NITE)  
Australian National Industrial Chemicals Notification and Assessment Scheme (NICNAS)  
NIOSH (National Institute for Occupational Safety and Health)  
National Library of Medicine's ChemID Plus (NLM CIP)  
National Library of Medicine's PubMed database (NLM PUBMED)  
National Toxicology Program (NTP)  
New Zealand's Chemical Classification and Information Database (CCID)  
Organisation for Economic Co-operation and Development Environment, Health, and Safety Publications  
Organisation for Economic Co-operation and Development High Production Volume Chemicals Programme  
Organisation for Economic Co-operation and Development Screening Information Data Set  
World Health Organization

**Prepared By** Jitendra Panchal

**Revision date** 24-Oct-2023

**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**