

## SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

### 1.1. Product identifier

Product Description: Taq DNA Polymerase  
Cat No. : FB6000-10; FB6000-75

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

Recommended Use Laboratory chemicals.  
Uses advised against No Information available

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

#### Company

**UK entity/business name**  
Fisher Scientific UK  
Bishop Meadow Road,  
Loughborough, Leicestershire LE11 5RG,  
United Kingdom

**EU entity/business name**  
Thermo Fisher Scientific  
Janssen Pharmaceuticaan 3a, 2440 Geel,  
Belgium

E-mail address [bege1.sdsdesk@thermofisher.com](mailto:bege1.sdsdesk@thermofisher.com)

### 1.4. Emergency telephone number

For information **US** call: 001-800-227-6701 / **Europe** call: +32 14 57 52 11  
Emergency Number **US**:001-201-796-7100 / **Europe**: +32 14 57 52 99  
**CHEMTREC** Tel. No. **US**:001-800-424-9300 / **Europe**:001-703-527-3887

## SECTION 2: HAZARDS IDENTIFICATION

### 2.1. Classification of the substance or mixture

#### CLP Classification - According to GB-CLP Regulations UK SI 2019/720 and UK SI 2020/1567

##### Physical hazards

Based on available data, the classification criteria are not met

##### Health hazards

Based on available data, the classification criteria are not met

##### Environmental hazards

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Based on available data, the classification criteria are not met

Full text of Hazard Statements: see section 16

## 2.2. Label elements

None required

## 2.3. Other hazards

Contains a known or suspected endocrine disruptor  
Included in the list established in accordance with Article 59(1) for having endocrine disrupting properties

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

### 3.2. Mixtures

| Component                                 | CAS No    | EC No             | Weight % | CLP Classification - According to GB-CLP Regulations UK SI 2019/720 and UK SI 2020/1567 |
|---|-----------|-------------------|----------|---|
| Glycerin                                  | 56-81-5   | 200-289-5         | > 50     | -   |
| Potassium chloride                        | 7447-40-7 | 231-211-8         | > 1      | -   |
| Ethylene oxide-Nonylphenol polymer        | 9016-45-9 |                   | > 0.5    | Eye Irrit. 2 (H319)<br>Aquatic chronic 2 (H411)   |
| Polyoxyethylene(20)sorbitan monolaurate   | 9005-64-5 |                   | > 0.5    | -   |
| 1,3-Propanediol,                          | 1185-53-1 | EEC No. 214-684-5 | > 0.5    | -   |
| 2-amino-2-(hydroxymethyl)-, hydrochloride | 3483-12-3 | EEC No. 222-468-7 | > 0.1    | Acute Tox. 4 (H302)<br>Skin Irrit. 2 (H315)<br>Eye Dam. 1 (H318)                        |
| 2,3-Butanediol, 1,4-dimercapto-, (R*,R*)- | 60-00-4   | EEC No. 200-449-4 | > 0.01   | Eye Irrit. 2 (H319)<br>Acute Tox. 4 (H332)<br>STOT RE 2 (H373)                          |
| Ethylenediamine tetraacetic acid (EDTA)   | 7732-18-5 | 231-791-2         | > 50     | -   |
| Water                                     |           |                   |          |   |

Full text of Hazard Statements: see section 16

## SECTION 4: FIRST AID MEASURES

### 4.1. Description of first aid measures

|                     |   |
|---------------------|---|
| <b>Eye Contact</b>  | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.         |
| <b>Skin Contact</b> | Wash off immediately with plenty of water for at least 15 minutes. Get medical attention immediately if symptoms occur. |

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**Ingestion** Do NOT induce vomiting. Get medical attention if symptoms occur.

**Inhalation** Remove to fresh air. Get medical attention immediately if symptoms occur.

**Self-Protection of the First Aider** No special precautions required.

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

None reasonably foreseeable.

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

**Notes to Physician** 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. Water spray, carbon dioxide (CO<sub>2</sub>), dry chemical, alcohol-resistant foam.

#### **Extinguishing media which must not be used for safety reasons**

No information available.

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

Thermal decomposition can lead to release of irritating gases and vapors.

#### **Hazardous Combustion Products**

None under normal use conditions.

### 5.3. Advice for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

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

Ensure adequate ventilation. Use personal protective equipment as required.

### 6.2. Environmental precautions

Should not be released into the environment.

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

Soak up with inert absorbent material. Keep in suitable, closed containers for disposal.

### 6.4. Reference to other sections

Refer to protective measures listed in Sections 8 and 13.

## SECTION 7: HANDLING AND STORAGE

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## 7.1. Precautions for safe handling

Wear personal protective equipment/face protection. Ensure adequate ventilation. Avoid contact with skin, eyes or clothing. Avoid ingestion and inhalation.

## Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Wash hands before breaks and after work.

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

Keep containers tightly closed in a dry, cool and well-ventilated place. To maintain product quality. Store in freezer.

**Technical Rules for Hazardous Substances (TRGS) 510** Class 12  
**Storage Class (LGK) (Germany)**

## 7.3. Specific end use(s)

Use in laboratories

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1. Control parameters

#### Exposure limits

List source(s): **UK** - EH40/2005 Work Exposure Limits, Fourth edition. Published 2020. **IRE** - 2021 Code of Practice for the Chemical Agents Regulations, Schedule 1. Published by the Health and Safety Authority

| Component | The United Kingdom                         | European Union | Ireland                                |
|-----------|--|----------------|--|
| Glycerin  | TWA: 10 mg/m <sup>3</sup> 8 hr (mist only) |                | TWA: 10 mg/m <sup>3</sup> 8 hr. (mist) |

#### Biological limit values

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) / Derived Minimum Effect Level (DMEL)

See table for values

| Component   | Acute effects local (Dermal) | Acute effects systemic (Dermal) | Chronic effects local (Dermal) | Chronic effects systemic (Dermal) |
|---|------------------------------|---------------------------------|--------------------------------|-----------------------------------|
| Potassium chloride<br>7447-40-7 (> 1)   |                              | DNEL = 910mg/kg<br>bw/day       |                                | DNEL = 303mg/kg<br>bw/day         |
| 1,3-Propanediol,<br>2-amino-2-(hydroxymethyl)-,<br>hydrochloride<br>1185-53-1 (> 0.5) |                              |                                 |                                | DNEL = 216.6mg/kg<br>bw/day       |

| Component                  | Acute effects local (Inhalation) | Acute effects systemic (Inhalation) | Chronic effects local (Inhalation) | Chronic effects systemic (Inhalation) |
|----------------------------|----------------------------------|-------------------------------------|------------------------------------|---------------------------------------|
| Glycerin<br>56-81-5 (> 50) |                                  |                                     | DNEL = 56mg/m <sup>3</sup>         |                                       |

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|   |                           |                              |                             |                               |
|---|---------------------------|------------------------------|-----------------------------|-------------------------------|
| Potassium chloride<br>7447-40-7 (> 1)   |                           | DNEL = 5320mg/m <sup>3</sup> |                             | DNEL = 1064mg/m <sup>3</sup>  |
| 1,3-Propanediol,<br>2-amino-2-(hydroxymethyl)-,<br>hydrochloride<br>1185-53-1 (> 0.5) |                           |                              |                             | DNEL = 152.8mg/m <sup>3</sup> |
| Ethylenediamine tetraacetic<br>acid (EDTA)<br>60-00-4 (> 0.01)                        | DNEL = 3mg/m <sup>3</sup> |                              | DNEL = 1.5mg/m <sup>3</sup> |                               |

**Predicted No Effect Concentration (PNEC)**

See values below.

| Component  | Fresh water      | Fresh water sediment          | Water Intermittent | Microorganisms in sewage treatment | Soil (Agriculture)        |
|--|------------------|-------------------------------|--------------------|------------------------------------|---------------------------|
| Glycerin<br>56-81-5 (> 50)                                       | PNEC = 0.885mg/L | PNEC = 3.3mg/kg sediment dw   | PNEC = 8.85mg/L    | PNEC = 1000mg/L                    | PNEC = 0.141mg/kg soil dw |
| Potassium chloride<br>7447-40-7 (> 1)                            | PNEC = 0.1mg/L   |                               | PNEC = 1mg/L       | PNEC = 10mg/L                      |                           |
| Polyoxyethylene(20)sorbit<br>an monolaurate<br>9005-64-5 (> 0.5) | PNEC = 0.2mg/L   | PNEC = 1.141mg/kg sediment dw | PNEC = 0.239mg/L   |                                    |                           |
| Ethylenediamine tetraacetic<br>acid (EDTA)<br>60-00-4 (> 0.01)   | PNEC = 2.2mg/L   |                               | PNEC = 1.2mg/L     | PNEC = 43mg/L                      | PNEC = 0.72mg/kg soil dw  |

| Component  | Marine water      | Marine water sediment        | Marine water intermittent | Food chain | Air |
|--|-------------------|------------------------------|---------------------------|------------|-----|
| Glycerin<br>56-81-5 (> 50)                                       | PNEC = 0.0885mg/L | PNEC = 0.33mg/kg sediment dw |                           |            |     |
| Potassium chloride<br>7447-40-7 (> 1)                            | PNEC = 0.1mg/L    |                              |                           |            |     |
| Polyoxyethylene(20)sorbit<br>an monolaurate<br>9005-64-5 (> 0.5) | PNEC = 0.02mg/L   | PNEC = 1000mg/kg sediment dw |                           |            |     |
| Ethylenediamine tetraacetic<br>acid (EDTA)<br>60-00-4 (> 0.01)   | PNEC = 0.22mg/L   |                              |                           |            |     |

**8.2. Exposure controls**

**Engineering Measures**

Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location.

**Personal protective equipment**

**Eye Protection**

Wear safety glasses with side shields (or goggles) (European standard - EN 166)

**Hand Protection**

Protective gloves

| Glove material | Breakthrough time                 | Glove thickness | EU standard | Glove comments        |
|----------------|-----------------------------------|-----------------|-------------|-----------------------|
| Natural rubber | See manufacturers recommendations | -               | EN 374      | (minimum requirement) |
| Nitrile rubber |                                   |                 |             |                       |
| Neoprene       |                                   |                 |             |                       |
| PVC            |                                   |                 |             |                       |

**Skin and body protection**

Long sleeved clothing.

Inspect gloves before use.

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Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves.  
(Refer to manufacturer/supplier for information)

Ensure gloves are suitable for the task: Chemical compatibility, Dexterity, Operational conditions, User susceptibility, e.g. sensitisation effects, also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion.

Remove gloves with care avoiding skin contamination.

## Respiratory Protection

When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

## Large scale/emergency use

Use a NIOSH/MSHA or European Standard EN 136 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced

**Recommended Filter type:** Particle filter

## Small scale/Laboratory use

Maintain adequate ventilation

## Environmental exposure controls

No information available.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

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

|   |                          |  |
|---|--------------------------|--|
| Physical State                            | Liquid                   |  |
| Appearance                                | Colorless                |  |
| Odor                                      | No information available |  |
| Odor Threshold                            | No data available        |  |
| Melting Point/Range                       | No data available        |  |
| Softening Point                           | No data available        |  |
| Boiling Point/Range                       | No information available |  |
| Flammability (liquid)                     | No data available        |  |
| Flammability (solid,gas)                  | Not applicable           | Liquid                                   |
| Explosion Limits                          | No data available        |  |
| Flash Point                               | Not applicable           | <b>Method -</b> No information available |
| Autoignition Temperature                  | No data available        |  |
| Decomposition Temperature                 | No data available        |  |
| pH  | 9                        |  |
| Viscosity                                 | No data available        |  |
| Water Solubility                          | Miscible                 |  |
| Solubility in other solvents              | No information available |  |
| Partition Coefficient (n-octanol/water)   |                          |  |
| Component                                 | <b>log Pow</b>           |  |
| Glycerin                                  | -1.75                    |  |
| Ethylene oxide-Nonylphenol polymer        | 3.7                      |  |
| 1,3-Propanediol,                          | -3.6                     |  |
| 2-amino-2-(hydroxymethyl)-, hydrochloride |                          |  |
| Vapor Pressure                            | No data available        |  |
| Density / Specific Gravity                | No data available        |  |
| Bulk Density                              | Not applicable           | Liquid                                   |
| Vapor Density                             | No data available        | (Air = 1.0)                              |
| Particle characteristics                  | Not applicable (liquid)  |  |

### 9.2. Other information

VOC Content(%) 50

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## SECTION 10: STABILITY AND REACTIVITY

**10.1. Reactivity** None known, based on information available

**10.2. Chemical stability** Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

**Hazardous Polymerization** Hazardous polymerization does not occur.  
**Hazardous Reactions** None under normal processing.

**10.4. Conditions to avoid** Incompatible products. Excess heat.

**10.5. Incompatible materials** None known.

**10.6. Hazardous decomposition products** None under normal use conditions.

## SECTION 11: TOXICOLOGICAL INFORMATION

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

#### Product Information

(a) acute toxicity;  
**Oral** Based on available data, the classification criteria are not met  
**Dermal** Based on available data, the classification criteria are not met  
**Inhalation** Based on available data, the classification criteria are not met

#### Toxicology data for the components

| Component   | LD50 Oral                                 | LD50 Dermal                            | LC50 Inhalation              |
|---|---|--|------------------------------|
| Glycerin  | 12600 mg/kg ( Rat )                       | > 10 g/kg ( Rabbit )                   | > 2.75 mg/L/4h ( Rat )(mist) |
| Potassium chloride  | LD50 = 2600 mg/kg ( Rat )                 | -                                      | -                            |
| Ethylene oxide-Nonylphenol polymer                            | LD50 = 2590 mg/kg ( Rat )                 | LD50 = 1780 µL/kg ( Rabbit )           | -                            |
| Polyoxyethylene(20)sorbitan monolaurate                       | LD50 = 37000 mg/kg ( Rat )                | -                                      | LC50 > 5.1 mg/L ( Rat ) 4 h  |
| 1,3-Propanediol,<br>2-amino-2-(hydroxymethyl)-, hydrochloride | OECD 425 (Rat)<br>LD50 > 5000 mg/kg bw    | OECD 402 (Rat)<br>LD50 > 5000 mg/kg bw | -                            |
| 2,3-Butanediol, 1,4-dimercapto-, (R*,R*)-                     | 400 mg/kg ( Rat )                         | -                                      | -                            |
| Ethylenediamine tetraacetic acid (EDTA)                       | 4500 mg/kg ( Rat )<br>>2000 mg/kg ( Rat ) | -                                      | 1 mg/l (rat)                 |
| Water   | -   | -                                      | -                            |

(b) skin corrosion/irritation; No data available

(c) serious eye damage/irritation; No data available

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**(d) respiratory or skin sensitization;**

**Respiratory** No data available  
**Skin** No data available

| Component  | Test method             | Test species | Study result    |
|--|-------------------------|--------------|-----------------|
| 1,3-Propanediol,<br>2-amino-2-(hydroxymethyl)-, hydrochloride<br>1185-53-1 (> 0.5) | OECD Test Guideline 406 | guinea pig   | non-sensitising |

**(e) germ cell mutagenicity;** No data available

| Component  | Test method  | Test species          | Study result |
|--|--|-----------------------|--------------|
| 1,3-Propanediol,<br>2-amino-2-(hydroxymethyl)-, hydrochloride<br>1185-53-1 (> 0.5) | OECD Test Guideline 471<br>Bacterial Reverse Mutation Test | Mammalian<br>in vitro | negative     |

**(f) carcinogenicity;** No data available  
 There are no known carcinogenic chemicals in this product

**(g) reproductive toxicity;** No data available

**(h) STOT-single exposure;** No data available

**(i) STOT-repeated exposure;** No data available  
**Target Organs** No information available.

**(j) aspiration hazard;** No data available

**Symptoms / effects, both acute and delayed** No information available.

**11.2. Information on other hazards**

**Endocrine Disrupting Properties** Assess endocrine disrupting properties for human health. This product does not contain any known or suspected endocrine disruptors.

**SECTION 12: ECOLOGICAL INFORMATION**

**12.1. Toxicity**

**Ecotoxicity effects** Contains no substances known to be hazardous to the environment or that are not degradable in waste water treatment plants.

| Component   | Freshwater Fish  | Water Flea                                      | Freshwater Algae                                    |
|---|--|---|---|
| Glycerin  | LC50: 51 - 57 mL/L, 96h static<br>(Oncorhynchus mykiss)  |   |   |
| Potassium chloride  | Lepomis macrochirus: LC50:<br>1060 mg/L /96h<br>Pimephales promelas: LC50: 750<br>- 1020 mg/L /96h | EC50: 825 mg/L/48h                              | EC50: 2500 mg/L/72h                                 |
| 1,3-Propanediol,<br>2-amino-2-(hydroxymethyl)-, hydrochloride |  | Daphnia Magna<br>EC50 >100 mg/L (48h)           |   |
| Ethylenediamine tetraacetic acid (EDTA)                       | LC50: 34 - 62 mg/L, 96h static<br>(Lepomis macrochirus)  | EC50: = 113 mg/L, 48h Static<br>(Daphnia magna) | EC50: = 1.01 mg/L, 72h<br>(Desmodesmus subspicatus) |

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|  |  |  |
|--|--|--|
|  | LC50: 44.2 - 76.5 mg/L, 96h static (Pimephales promelas) |  |
|--|--|--|

| Component  | Microtox                          | M-Factor |
|--|-----------------------------------|----------|
| 1,3-Propanediol, 2-amino-2-(hydroxymethyl)-, hydrochloride | OECD 209<br>EC50 > 1000 mg/L (3h) |          |

**12.2. Persistence and degradability** No information available

**12.3. Bioaccumulative potential** No information available

| Component  | log Pow | Bioconcentration factor (BCF) |
|--|---------|-------------------------------|
| Glycerin   | -1.75   | No data available             |
| Ethylene oxide-Nonylphenol polymer                         | 3.7     | No data available             |
| 1,3-Propanediol, 2-amino-2-(hydroxymethyl)-, hydrochloride | -3.6    | No data available             |

**12.4. Mobility in soil** No information available

**12.5. Results of PBT and vPvB assessment** No data available for assessment.

**12.6. Endocrine disrupting properties**

**Endocrine Disruptor Information**  
**Assess endocrine disrupting properties for the environment**

Substance identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

| Component                          | EU - Endocrine Disruptors Candidate List | EU - Endocrine Disruptors - Evaluated Substances |
|------------------------------------|--|--|
| Ethylene oxide-Nonylphenol polymer | Group III Chemical                       |  |

| Component   | EU National Authorities Endocrine Disruptor Lists - Environment | Japan - Endocrine Disruptor Information |
|---|---|---|
| Ethylene oxide-Nonylphenol polymer<br>9016-45-9 (> 0.5) | List I  |   |

**12.7. Other adverse effects**

**Persistent Organic Pollutant**  
**Ozone Depletion Potential**

This product does not contain any known or suspected substance  
This product does not contain any known or suspected substance

## SECTION 13: DISPOSAL CONSIDERATIONS

**13.1. Waste treatment methods**

**Waste from Residues/Unused Products**

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

**Contaminated Packaging**

Empty remaining contents. Dispose of in accordance with local regulations. Do not re-use empty containers.

**European Waste Catalogue (EWC)**

According to the European Waste Catalog, Waste Codes are not product specific, but application specific.

**Other Information**

Waste codes should be assigned by the user based on the application for which the product

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was used.

## SECTION 14: TRANSPORT INFORMATION

**IMDG/IMO** Not regulated

**14.1. UN number**  
**14.2. UN proper shipping name**  
**14.3. Transport hazard class(es)**  
**14.4. Packing group**

**ADR** Not regulated

**14.1. UN number**  
**14.2. UN proper shipping name**  
**14.3. Transport hazard class(es)**  
**14.4. Packing group**

**IATA** Not regulated

**14.1. UN number**  
**14.2. UN proper shipping name**  
**14.3. Transport hazard class(es)**  
**14.4. Packing group**

**14.5. Environmental hazards** No hazards identified

**14.6. Special precautions for user** No special precautions required.

**14.7. Maritime transport in bulk according to IMO instruments** Not applicable, packaged goods

## SECTION 15: REGULATORY INFORMATION

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

### International Inventories

Europe (EINECS/ELINCS/NLP), China (IECSC), Taiwan (TCSI), Korea (KECL), Japan (ENCS), Japan (ISHL), Canada (DSL/NDSL), Australia (AICS), New Zealand (NZIoC), Philippines (PICCS). US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710)

| Component  | CAS No    | EINECS    | ELINCS | NLP       | IECSC | TCSI | KECL     | ENCS | ISHL |
|--|-----------|-----------|--------|-----------|-------|------|----------|------|------|
| Glycerin   | 56-81-5   | 200-289-5 | -      | -         | X     | X    | KE-29297 | X    | X    |
| Potassium chloride   | 7447-40-7 | 231-211-8 | -      | -         | X     | X    | KE-29086 | X    | X    |
| Ethylene oxide-Nonylphenol polymer                         | 9016-45-9 | -         | -      | 500-024-6 | X     | X    | KE-26244 | X    | X    |
| Polyoxyethylene(20)sorbitan monolaurate                    | 9005-64-5 | -         | -      | 500-018-3 | X     | X    | KE-31681 | X    | X    |
| 1,3-Propanediol, 2-amino-2-(hydroxymethyl)-, hydrochloride | 1185-53-1 | 214-684-5 | -      | -         | X     | X    | KE-34819 | X    | -    |
| 2,3-Butanediol, 1,4-dimercapto-, (R*,R*)-                  | 3483-12-3 | 222-468-7 | -      | -         | X     | X    | -        | -    | -    |
| Ethylenediamine tetraacetic acid (EDTA)                    | 60-00-4   | 200-449-4 | -      | -         | X     | X    | KE-13648 | X    | X    |
| Water  | 7732-18-5 | 231-791-2 | -      | -         | X     | X    | KE-35400 | X    | -    |

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| Component  | CAS No    | TSCA | TSCA Inventory notification - Active-Inactive | DSL | NDSL | AICS | NZIoC | PICCS |
|--|-----------|------|---|-----|------|------|-------|-------|
| Glycerin   | 56-81-5   | X    | ACTIVE  | X   | -    | X    | X     | X     |
| Potassium chloride   | 7447-40-7 | X    | ACTIVE  | X   | -    | X    | X     | X     |
| Ethylene oxide-Nonylphenol polymer                         | 9016-45-9 | X    | ACTIVE  | X   | -    | X    | X     | X     |
| Polyoxyethylene(20)sorbitan monolaurate                    | 9005-64-5 | X    | ACTIVE  | X   | -    | X    | X     | X     |
| 1,3-Propanediol, 2-amino-2-(hydroxymethyl)-, hydrochloride | 1185-53-1 | X    | ACTIVE  | X   | -    | X    | X     | X     |
| 2,3-Butanediol, 1,4-dimercapto-, (R*,R*)-                  | 3483-12-3 | X    | ACTIVE  | X   | -    | X    | X     | X     |
| Ethylenediamine tetraacetic acid (EDTA)                    | 60-00-4   | X    | ACTIVE  | X   | -    | X    | X     | X     |
| Water  | 7732-18-5 | X    | ACTIVE  | X   | -    | X    | X     | X     |

**Legend:** X - Listed '-' - Not Listed

**KECL** - NIER number or KE number (<http://ncis.nier.go.kr/en/main.do>)

## Authorisation/Restrictions according to EU REACH

| Component  | CAS No    | REACH (1907/2006) - Annex XIV - Substances Subject to Authorization | REACH (1907/2006) - Annex XVII - Restrictions on Certain Dangerous Substances  | REACH Regulation (EC 1907/2006) article 59 - Candidate List of Substances of Very High Concern (SVHC)   |
|--|-----------|---|--|---|
| Glycerin   | 56-81-5   | -   | -  | -   |
| Potassium chloride   | 7447-40-7 | -   | -  | -   |
| Ethylene oxide-Nonylphenol polymer                         | 9016-45-9 | -   | Use restricted. See item 46[b].<br>(see link for restriction details)<br>Use restricted. See item 46a.<br>(see link for restriction details) | SVHC Candidate list - 500-024-6; 932-998-7 - Endocrine disrupting properties, Article 57f - environment |
| Polyoxyethylene(20)sorbitan monolaurate                    | 9005-64-5 | -   | -  | -   |
| 1,3-Propanediol, 2-amino-2-(hydroxymethyl)-, hydrochloride | 1185-53-1 | -   | -  | -   |
| 2,3-Butanediol, 1,4-dimercapto-, (R*,R*)-                  | 3483-12-3 | -   | -  | -   |
| Ethylenediamine tetraacetic acid (EDTA)                    | 60-00-4   | -   | Use restricted. See item 75.<br>(see link for restriction details)   | -   |
| Water  | 7732-18-5 | -   | -  | -   |

After the sunset date the use of this substance requires either an authorization or can only be used for exempted uses, e.g. use in scientific research and development which includes routine analytics or use as intermediate.

### REACH links

<https://echa.europa.eu/authorisation-list>

<https://echa.europa.eu/substances-restricted-under-reach>

<https://echa.europa.eu/candidate-list-table>

### Seveso III Directive (2012/18/EC)

| Component | CAS No  | Seveso III Directive (2012/18/EC) - Qualifying Quantities for Major Accident Notification | Seveso III Directive (2012/18/EC) - Qualifying Quantities for Safety Report Requirements |
|-----------|---------|---|--|
| Glycerin  | 56-81-5 | Not applicable  | Not applicable   |

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|  |           |                |                |
|--|-----------|----------------|----------------|
| Potassium chloride   | 7447-40-7 | Not applicable | Not applicable |
| Ethylene oxide-Nonylphenol polymer                         | 9016-45-9 | Not applicable | Not applicable |
| Polyoxyethylene(20)sorbitan monolaurate                    | 9005-64-5 | Not applicable | Not applicable |
| 1,3-Propanediol, 2-amino-2-(hydroxymethyl)-, hydrochloride | 1185-53-1 | Not applicable | Not applicable |
| 2,3-Butanediol, 1,4-dimercapto-, (R*,R*)-                  | 3483-12-3 | Not applicable | Not applicable |
| Ethylenediamine tetraacetic acid (EDTA)                    | 60-00-4   | Not applicable | Not applicable |
| Water  | 7732-18-5 | Not applicable | Not applicable |

**Regulation (EC) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of dangerous chemicals**

| Component   | ANNEX I - PART 1<br>List of chemicals subject to export notification procedure (referred to in Article 8)  | ANNEX I - PART 2<br>List of chemicals qualifying for PIC notification (referred to in Article 11)                                       | ANNEX I - PART 3<br>List of chemicals subject to the PIC procedure (referred to in Articles 13 and 14) |
|---|--|---|--|
| Ethylene oxide-Nonylphenol polymer<br>9016-45-9 ( > 0.5 ) | <p>p(1) — pesticide in the group of plant protection products<br/>b — ban (for the category or categories concerned)</p> <p>p(2) — other pesticide including biocides<br/>b — ban (for the category or categories concerned)</p> <p>i(1) — industrial chemical for professional use<br/>sr — severe restriction</p> <p>i(2) — industrial chemical for public<br/>sr — severe restriction</p> | <p>i — industrial chemical<br/>b — ban (for the category or categories concerned)</p> <p>p — pesticides<br/>sr — severe restriction</p> | -  |

<https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32012R0649&qid=1604065742303>

**Contains component(s) that meet a 'definition' of per & poly fluoroalkyl substance (PFAS)?**

Not applicable

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 .

**National Regulations**

**UK** - Take note of Control of Substances Hazardous to Health Regulations (COSHH) 2002 and 2005 Amendment

**WGK Classification**

Water endangering class = 1 (self classification)

| Component                                    | Germany - Water Classification (AwSV) | Germany - TA-Luft Class |
|--|---------------------------------------|-------------------------|
| Glycerin                                     | WGK1                                  |                         |
| Potassium chloride                           | WGK1                                  |                         |
| Ethylene oxide-Nonylphenol polymer           | WGK2                                  |                         |
| Polyoxyethylene(20)sorbitan monolaurate      | WGK1                                  |                         |
| 1,3-Propanediol, 2-amino-2-(hydroxymethyl)-, | WGK1                                  |                         |

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|   |      |  |
|---|------|--|
| hydrochloride                             |      |  |
| 2,3-Butanediol, 1,4-dimercapto-, (R*,R*)- | WGK2 |  |
| Ethylenediamine tetraacetic acid (EDTA)   | WGK2 |  |

|                    |  |
|--------------------|--|
| <b>Component</b>   | <b>France - INRS (Tables of occupational diseases)</b> |
| Potassium chloride | Tableaux des maladies professionnelles (TMP) - RG 67   |

| Component   | Switzerland - Ordinance on the Reduction of Risk from handling of hazardous substances preparation (SR 814.81) | Switzerland - Ordinance on Incentive Taxes on Volatile Organic Compounds (OVOC) | Switzerland - Ordinance of the Rotterdam Convention on the Prior Informed Consent Procedure |
|---|--|---|---|
| Ethylene oxide-Nonylphenol polymer 9016-45-9 (> 0.5)      | Prohibited and Restricted Substances   |   | Annex I - industrial chemical<br>Annex I - pesticide  |
| Polyoxyethylene(20)sorbitan monolaurate 9005-64-5 (> 0.5) | Prohibited and Restricted Substances   |   |   |
| Ethylenediamine tetraacetic acid (EDTA) 60-00-4 (> 0.01)  | Prohibited and Restricted Substances   |   |   |

## 15.2. Chemical safety assessment

Chemical Safety Assessment/Reports (CSA/CSR) are not required for mixtures

## SECTION 16: OTHER INFORMATION

### Full text of H-Statements referred to under sections 2 and 3

H315 - Causes skin irritation

H319 - Causes serious eye irritation

H335 - May cause respiratory irritation

### Legend

**CAS** - Chemical Abstracts Service

**EINECS/ELINCS** - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

**PICCS** - Philippines Inventory of Chemicals and Chemical Substances

**IECSC** - Chinese Inventory of Existing Chemical Substances

**KECL** - Korean Existing and Evaluated Chemical Substances

**WEL** - Workplace Exposure Limit

**ACGIH** - American Conference of Governmental Industrial Hygienists

**DNEL** - Derived No Effect Level

**RPE** - Respiratory Protective Equipment

**LC50** - Lethal Concentration 50%

**NOEC** - No Observed Effect Concentration

**PBT** - Persistent, Bioaccumulative, Toxic

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory

**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List

**ENCS** - Japanese Existing and New Chemical Substances

**AICS** - Australian Inventory of Chemical Substances

**NZIoC** - New Zealand Inventory of Chemicals

**TWA** - Time Weighted Average

**IARC** - International Agency for Research on Cancer Predicted No Effect Concentration (PNEC)

**LD50** - Lethal Dose 50%

**EC50** - Effective Concentration 50%

**POW** - Partition coefficient Octanol:Water

**vPvB** - very Persistent, very Bioaccumulative

**ADR** - European Agreement Concerning the International Carriage of Dangerous Goods by Road

**IMO/IMDG** - International Maritime Organization/International Maritime Dangerous Goods Code

**OECD** - Organisation for Economic Co-operation and Development

**BCF** - Bioconcentration factor

**Key literature references and sources for data**

<https://echa.europa.eu/information-on-chemicals>

**ICAO/IATA** - International Civil Aviation Organization/International Air Transport Association

**MARPOL** - International Convention for the Prevention of Pollution from Ships

**ATE** - Acute Toxicity Estimate

**VOC** - (Volatile Organic Compound)

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Suppliers safety data sheet, Chemadvisor - LOLI, Merck index, RTECS

**Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:**

**Physical hazards** On basis of test data

**Health Hazards** Calculation method

**Environmental hazards** Calculation method

## Training Advice

Chemical hazard awareness training, incorporating labelling, Safety Data Sheets (SDS), Personal Protective Equipment (PPE) and hygiene.

**Creation Date** 23-Jan-2014

**Revision Date** 12-Oct-2023

**Revision Summary** Not applicable.

**This safety data sheet complies with Regulation UK SI 2019/758 and UK SI 2020/1577 as amended.**

## 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**