# SAFETY DATA SHEET

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

**Revision date** 02/11/2025 **Revision Number** 1

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

### 1.1. Product identifier

**Product Code(s)** C1712

**Safety data sheet number** 0000120

**Product Name** Astonish Multi Surface Cleaner Orange Grove

**Pure substance/mixture** Mixture

**Formula** 1712F1

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

**Recommended use** Hard surface cleaning.

**Uses advised against** Do not use on soft or porous surfaces such as unsealed wood, unsealed stone, fabrics, upholstery or wallpaper.

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

**Manufacturer**
The London Oil Refining Company Ltd
Astonish House
Unit 8 Thornbury Ind. Park.
Woodhall Road
Bradford BD3 7AF, UK
Tel: +44 1274 767440 (8am-4pm Mon-Fri)
www.astonish.co.uk

For further information, please contact

**E-mail address** info@astonish.co.uk

### 1.4. Emergency telephone number

| | |
|---|---|
| Emergency Telephone | UK - Emergency Telephone: +44 (0) 1274 767440 (8am-4pm Mon-Fri).<br>Alternatively in UK: Contact NHS 111 Telephone 111 (24 hours a day, 7days a week):<br>Website 111.nhs.uk or a doctor |

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

| | |
|---|---|
| **Serious eye damage/eye irritation** | Category 2 - (H319) |

### 2.2. Label elements

**Signal word**
Warning

**Hazard statements**
H319 - Causes serious eye irritation Benzisothiazolinone May produce an allergic reaction.

**Precautionary statements**
P101 - If medical advice is needed, have product container or label at hand
P102 - Keep out of reach of children
P103 - Read label before use
P280 - Wear protective gloves and eye/face protection
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

**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 | Specific concentration limit (SCL) | M-Factor | M-Factor (long-term) |
|---|---|---|---|---|---|---|---|

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | | | amended) | | | |
| Butyl Diglycol<br>112-34-5 | 0.5 - <1% | (603-096-00-8)<br>203-961-6 | - | Eye Irrit. 2 (H319) | - | - | - |
| Sodium Hydroxide<br>1310-73-2 | 0.25 - <0.5% | (011-002-00-6)<br>215-185-5 | - | Skin Corr. 1A (H314)<br>Met. Corr. 1 (H290) | Eye Irrit. 2 :: 0.5%<=C<2%<br>Skin Corr. 1A :: C>=5%<br>Skin Corr. 1B :: 2%<=C<5%<br>Skin Irrit. 2 :: 0.5%<=C<2% | - | - |
| isopentyl acetate<br>123-92-2 | <0.025% | (607-130-00-2)<br>204-662-3 | - | Flam. Liq. 3 (H226) | - | - | - |
| 2,6-di-tert-butyl-p-cresol<br>128-37-0 | <0.025% | 204-881-4 | - | Aquatic Chronic 1 (H410)<br>Aquatic Acute 1 (H400) | - | - | - |

**Full text of H- and EUH-phrases: see section 16**

This product does not contain candidate substances of very high concern at a concentration >= 0.1% (UK REACH Article 59)

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

**General advice** Show this safety data sheet to the doctor in attendance.

**Inhalation** Remove to fresh air.

**Eye contact** 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.

**Skin contact** Wash skin with soap and water. In the case of skin irritation or allergic reactions see a physician.

**Ingestion** Rinse mouth. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Call a physician.

**Self-protection of the first aider** 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

**Symptoms** May cause redness and tearing of the eyes. Prolonged contact may cause redness and irritation.

**Effects of Exposure** See Section 11 for additional Toxicological Information.

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

**Note to physicians** 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

**Specific hazards arising from the chemical** No information available.

### 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 or clothing. Use personal protective equipment as required.

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

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

**Methods for containment** Prevent further leakage or spillage if safe to do so.

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

**Prevention of secondary hazards** Clean contaminated objects and areas thoroughly observing environmental regulations.

### 6.4. Reference to other sections

**Reference to other sections** See section 8 for more information. See section 13 for more information.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

**Advice on safe handling** Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product.

**General hygiene considerations** Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product.

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

**Storage Conditions** Keep containers tightly closed in a dry, cool and well-ventilated place.

### 7.3. Specific end use(s)

**Risk Management Methods (RMM)** The information required is contained in this Safety Data Sheet.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

**Exposure Limits**

| Chemical name | United Kingdom |
|---|---|
| Butyl Diglycol<br>112-34-5 | TWA: 10 ppm<br>TWA: 67.5 mg/m$^3$<br>STEL: 15 ppm<br>STEL: 101.2 mg/m$^3$ |
| Sodium Hydroxide<br>1310-73-2 | STEL: 2 mg/m$^3$ |
| isopentyl acetate<br>123-92-2 | TWA: 50 ppm<br>TWA: 270 mg/m$^3$<br>STEL: 100 ppm<br>STEL: 541 mg/m$^3$ |
| 2,6-di-tert-butyl-p-cresol<br>128-37-0 | TWA: 10 mg/m$^3$<br>STEL: 30 mg/m$^3$ |

**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 |
|---|---|---|---|
| Undecanol, branched and linear, ethoxylated (>5-15 EO)<br>68439-46-3 | | 2080 mg/kg bw/day [4] [6] | 294 mg/m$^3$ [4] [6] |
| Butyl Diglycol<br>112-34-5 | | 83 mg/kg bw/day [4] [6] | 67.5 mg/m$^3$ [4] [6]<br>67.5 mg/m$^3$ [5] [6]<br>101.2 mg/m$^3$ [5] [7] |
| Sodium Hydroxide<br>1310-73-2 | | | 1 mg/m$^3$ [5] [6] |
| Tetrasodium N,N-bis(carboxylatomethyl)-L-glutamate<br>51981-21-6 | | 15000 mg/kg bw/day [4] [6] | 7.3 mg/m$^3$ [4] [6] |
| Amines, C12-18(even numbered)-alkyldimethyl, N-oxides<br>68955-55-5 | | 11 mg/kg bw/day [4] [6] | 6.2 mg/m$^3$ [4] [6] |
| Decanal<br>112-31-2 | | 7.05 mg/kg bw/day [4] [6]<br>14.1 mg/kg bw/day [4] [7] | 24.86 mg/m$^3$ [4] [6]<br>49.71 mg/m$^3$ [4] [7] |

| Chemical name | Oral | Dermal | Inhalation |
|---|---|---|---|
| | | 17.62 mg/cm2 [5] [6]<br>35.24 mg/cm2 [5] [7] | 62.14 mg/m$^3$ [5] [6]<br>124.28 mg/m$^3$ [5] [7] |
| 1,2-benzisothiazol-3(2H)-one<br>2634-33-5 | | 0.966 mg/kg bw/day [4] [6] | 6.81 mg/m$^3$ [4] [6] |
| Linalool<br>78-70-6 | | 2.5 mg/kg bw/day [4] [6]<br>5 mg/kg bw/day [4] [7]<br>3 mg/cm2 [5] [6]<br>3 mg/cm2 [5] [7] | 2.8 mg/m$^3$ [4] [6]<br>16.5 mg/m$^3$ [4] [7] |
| n-Octanal<br>124-13-0 | | 0.37 mg/kg bw/day [4] [6] | 1.3 mg/m$^3$ [4] [6] |
| Geranyl acetate<br>105-87-3 | | 35.5 mg/kg bw/day [4] [6] | 62.59 mg/m$^3$ [4] [6] |
| Benzyl acetate<br>140-11-4 | | 2.5 mg/kg bw/day [4] [6] | 9 mg/m$^3$ [4] [6] |
| 2,6-dimethyloct-7-en-2-ol<br>18479-58-8 | | 20.8 mg/kg bw/day [4] [6] | 73.5 mg/m$^3$ [4] [6] |
| Citral<br>5392-40-5 | | 1.7 mg/kg bw/day [4] [6]<br>140 µg/cm2 [5] [6] | 9 mg/m$^3$ [4] [6] |
| 2,6-di-tert-butyl-p-cresol<br>128-37-0 | | 0.5 mg/kg bw/day [4] [6] | 3.5 mg/m$^3$ [4] [6] |

**Notes**

**[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 |
|---|---|---|---|
| Undecanol, branched and linear, ethoxylated (>5-15 EO)<br>68439-46-3 | 25 mg/kg bw/day [4] [6] | | 87 mg/m$^3$ [4] [6] |
| Butyl Diglycol<br>112-34-5 | 5 mg/kg bw/day [4] [6] | | 40.5 mg/m$^3$ [4] [6]<br>40.5 mg/m$^3$ [5] [6]<br>60.7 mg/m$^3$ [5] [7] |
| Sodium Hydroxide<br>1310-73-2 | | | 1 mg/m$^3$ [5] [6] |
| Tetrasodium N,N-bis(carboxylatomethyl)-L-glutamate<br>51981-21-6 | 1.5 mg/kg bw/day [4] [6] | | 1.8 mg/m$^3$ [4] [6] |
| Amines, C12-18(even numbered)-alkyldimethyl, N-oxides<br>68955-55-5 | 0.44 mg/kg bw/day [4] [6] | | 1.53 mg/m$^3$ [4] [6] |
| Decanal<br>112-31-2 | 3.52 mg/kg bw/day [4] [6]<br>7.05 mg/kg bw/day [4] [7] | 7.05 mg/kg bw/day [4] [6]<br>7.05 mg/kg bw/day [4] [7]<br>8.81 mg/cm2 [5] [6]<br>17.62 mg/cm2 [5] [7] | 6.13 mg/m$^3$ [4] [6]<br>12.26 mg/m$^3$ [4] [7]<br>15.32 mg/m$^3$ [5] [6]<br>30.65 mg/m$^3$ [5] [7] |
| 1,2-benzisothiazol-3(2H)-one<br>2634-33-5 | | | 1.2 mg/m$^3$ [4] [6] |
| Linalool<br>78-70-6 | 0.2 mg/kg bw/day [4] [6]<br>1.2 mg/kg bw/day [4] [7] | 2.5 mg/kg bw/day [4] [6]<br>2.5 mg/kg bw/day [4] [7]<br>1.5 mg/cm2 [5] [6]<br>1.5 mg/cm2 [5] [7] | 0.7 mg/m$^3$ [4] [6]<br>4.1 mg/m$^3$ [4] [7] |
| n-Octanal<br>124-13-0 | 0.19 mg/kg bw/day [4] [6] | | 0.32 mg/m$^3$ [4] [6] |

| Chemical name | Oral | Dermal | Inhalation |
|---|---|---|---|
| Geranyl acetate<br>105-87-3 | 8.9 mg/kg bw/day [4] [6] | | 15.4 mg/m$^3$ [4] [6] |
| Benzyl acetate<br>140-11-4 | 1.3 mg/kg bw/day [4] [6] | | 2.2 mg/m$^3$ [4] [6] |
| 2,6-dimethyloct-7-en-2-ol<br>18479-58-8 | 12.5 mg/kg bw/day [4] [6] | | 21.7 mg/m$^3$ [4] [6] |
| Citral<br>5392-40-5 | 0.6 mg/kg bw/day [4] [6] | 140 µg/cm2 [5] [6] | 2.7 mg/m$^3$ [4] [6] |
| 2,6-di-tert-butyl-p-cresol<br>128-37-0 | | | 0.86 mg/m$^3$ [4] [6] |

**Notes**

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

**Predicted No Effect Concentration (PNEC)**

| Chemical name | Freshwater | Freshwater (intermittent release) | Marine water | Marine water (intermittent release) | Air |
|---|---|---|---|---|---|
| Undecanol, branched and linear, ethoxylated (>5-15 EO)<br>68439-46-3 | 0.10379 mg/L | 0.014 mg/L | 0.10379 mg/L | | |
| Butyl Diglycol<br>112-34-5 | 1.1 mg/L | 11 mg/L | 0.11 mg/L | | |
| Tetrasodium N,N-bis(carboxylatomethyl)-L-glutamate<br>51981-21-6 | 9.45 mg/L | 0.953 mg/L | 0.945 mg/L | 0.0953 mg/L | |
| Amines, C12-18(even numbered)-alkyldimethyl, N-oxides<br>68955-55-5 | 0.0335 mg/L | 0.0335 mg/L | 0.00335 mg/L | | |
| Decanal<br>112-31-2 | 1.17 µg/L | 11.7 µg/L | 0.117 µg/L | | |
| 1,2-benzisothiazol-3(2H)-one<br>2634-33-5 | 4.03 µg/L | 1.1 µg/L | 0.403 µg/L | 110 ng/L | |
| Linalool<br>78-70-6 | 0.2 mg/L | 2 mg/L | 0.02 mg/L | | |
| n-Octanal<br>124-13-0 | 0.00154 mg/L | | 0.000154 mg/L | | |
| Geranyl acetate<br>105-87-3 | 3.72 µg/L | 37.2 µg/L | 0.372 µg/L | | |
| Benzyl acetate<br>140-11-4 | 0.0184 mg/L | 0.04 mg/L | 0.00184 mg/L | | |
| 2,6-dimethyloct-7-en-2-ol<br>18479-58-8 | 27.8 µg/L | 0.278 mg/L | 2.78 µg/L | | |
| Citral<br>5392-40-5 | 0.00678 mg/L | 0.0678 mg/L | 0.000678 mg/L | | |
| isopentyl acetate<br>123-92-2 | 0.011 mg/L | 0.11 mg/L | 0.0011 mg/L | | |

| Chemical name | Freshwater | Freshwater (intermittent release) | Marine water | Marine water (intermittent release) | Air |
|---|---|---|---|---|---|
| 2,6-di-tert-butyl-p-cresol<br>128-37-0 | 0.199 µg/L | 1.99 µg/L | 0.0199 µg/L | | |

| Chemical name | Freshwater sediment | Marine sediment | Sewage treatment | Soil | Food chain |
|---|---|---|---|---|---|
| Undecanol, branched and linear, ethoxylated (>5-15 EO)<br>68439-46-3 | 13.7 mg/kg sediment dw | 13.7 mg/kg sediment dw | 1.4 mg/L | 1 mg/kg soil dw | |
| Butyl Diglycol<br>112-34-5 | 4.4 mg/kg sediment dw | 0.44 mg/kg sediment dw | 200 mg/L | 0.32 mg/kg soil dw | 56 mg/kg food |
| Tetrasodium N,N-bis(carboxylatomethyl)-L-glutamate<br>51981-21-6 | | | 41.2 mg/L | 0.5 mg/kg soil dw | 67 mg/kg food |
| Amines, C12-18(even numbered)-alkyldimethyl, N-oxides<br>68955-55-5 | 5.24 mg/kg sediment dw | 0.524 mg/kg sediment dw | 24 mg/L | 1.02 mg/kg soil dw | 11.1 mg/kg food |
| Decanal<br>112-31-2 | 0.0972 mg/kg sediment dw | 0.00972 mg/kg sediment dw | 3.16 mg/L | 0.0187 mg/kg soil dw | 313 mg/kg food |
| 1,2-benzisothiazol-3(2H)-one<br>2634-33-5 | 49.9 µg/kg sediment dw | 4.99 µg/kg sediment dw | 1.03 mg/L | 3 mg/kg soil dw | |
| Linalool<br>78-70-6 | 2.22 mg/kg sediment dw | 0.222 mg/kg sediment dw | 10 mg/L | 0.327 mg/kg soil dw | 7.8 mg/kg food |
| n-Octanal<br>124-13-0 | 0.07146 mg/kg sediment dw | 0.00715 mg/kg sediment dw | 3.16 mg/L | 0.01339 mg/kg soil dw | |
| Geranyl acetate<br>105-87-3 | 0.442 mg/kg sediment dw | 0.0442 mg/kg sediment dw | 8 mg/L | 0.0859 mg/kg soil dw | |
| Benzyl acetate<br>140-11-4 | 0.526 mg/kg sediment dw | 0.0526 mg/kg sediment dw | 8.55 mg/L | 0.09443 mg/kg soil dw | |
| 2,6-dimethyloct-7-en-2-ol<br>18479-58-8 | 0.594 mg/kg sediment dw | 0.0594 mg/kg sediment dw | 10 mg/L | 0.103 mg/kg soil dw | 111 mg/kg food |
| Citral<br>5392-40-5 | 0.125 mg/kg sediment dw | 0.0125 mg/kg sediment dw | 1.6 mg/L | 0.0209 mg/kg soil dw | |
| isopentyl acetate<br>123-92-2 | 0.335 mg/kg sediment dw | 0.0335 mg/kg sediment dw | 30 mg/L | 0.06 mg/kg soil dw | |
| 2,6-di-tert-butyl-p-cresol<br>128-37-0 | 99.6 µg/kg sediment dw | 9.96 µg/kg sediment dw | 0.17 mg/L | 47.69 µg/kg soil dw | 8.33 mg/kg food |

**8.2. Exposure controls**

**Engineering controls** No information available.

**Personal protective equipment**

**Eye/face protection** Wear eye protection. Wear safety glasses with side shields (or goggles).

**Hand protection** For users with sensitive skin, it is recommended that suitable protective gloves are worn. Wear suitable 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. |
| **General hygiene considerations** | Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product. |
| **Environmental exposure controls** | This product does not pose a hazard in normal use when following the usage instructions. |

## SECTION 9: Physical and chemical properties

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

| | |
|---|---|
| **Physical state** | Liquid |
| **Color** | colorless |
| **Odor** | Orange/Citrus. |
| **Odor threshold** | No data available |

| **Property** | **Values** | **Remarks • Method** |
|---|---|---|
| **Melting point / freezing point** | No data available | None known |
| **Initial boiling point and boiling range** | 100 °C | None known |
| **Flammability** | No data available | None known |
| **Flammability Limit in Air** | | None known |
| **Upper flammability or explosive limits** | No data available | |
| **Lower flammability or explosive limits** | No data available | |
| **Flash point** | No data available | None known |
| **Autoignition temperature** | No data available | None known |
| **Decomposition temperature** | | None known |
| **pH** | 8.5 - 10.5 | None known |
| **pH (as aqueous solution)** | No data available | None known |
| **Kinematic viscosity** | No data available | None known |
| **Dynamic viscosity** | No data available | None known |
| **Water solubility** | No data available | None known |
| **Solubility(ies)** | No data available | None known |
| **Partition coefficient** | No data available | None known |
| **Vapor pressure** | No data available | None known |
| **Relative density** | 0.995 - 1.015 @ 20°C | None known |
| **Bulk density** | No data available | |
| **Liquid Density** | No data available | |
| **Relative vapor density** | > 1 (Air=1) | None known |
| **Particle characteristics** | | |
| **Particle Size** | | |
| **Particle Size Distribution** | | |
| **Explosive properties** | No information available | |
| **Oxidizing properties** | No information available | |

**9.2. Other information**

## SECTION 10: Stability and reactivity

**10.1. Reactivity**

**Reactivity** Stable.

**10.2. Chemical stability**

**Stability** Stable under normal conditions.

**Explosion data**
**Sensitivity to mechanical impact** None.
**Sensitivity to static discharge** None.

**10.3. Possibility of hazardous reactions**

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

**10.4. Conditions to avoid**

**Conditions to avoid** None known based on information supplied.

**10.5. Incompatible materials**

**Incompatible materials** None known based on information supplied.

**10.6. Hazardous decomposition products**

**Hazardous decomposition products** None known based on information supplied.

## SECTION 11: Toxicological information

**11.1. Information on toxicological effects**

**Information on likely routes of exposure**

**Product Information**

**Inhalation** No known effect based on information supplied.

**Eye contact** Causes eye irritation. May cause redness, itching, and pain.

**Skin contact** May cause sensitization by skin contact.

**Ingestion** No known effect based on information supplied.

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

**Symptoms** May cause redness and tearing of the eyes. Prolonged contact may cause redness and irritation. Irritating.

**Acute toxicity** .

**Numerical measures of toxicity**

**The following values are calculated based on chapter 3.1 of the GHS document**
**ATEmix (dermal)** 99,999.00 mg/kg

**ATEmix (inhalation-gas)** 99,999.00 ppm
**ATEmix (inhalation-vapor)** 99,999.00 mg/l
**ATEmix (inhalation-dust/mist)** 99,999.00 mg/l

**Component Information**

| Chemical name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|---|---|---|---|
| Butyl Diglycol | = 5660 mg/kg ( Rat ) | = 2700 mg/kg ( Rabbit ) | - |
| Sodium Hydroxide | = 325 mg/kg ( Rat ) | = 1350 mg/kg ( Rabbit ) | - |
| 2,6-di-tert-butyl-p-cresol | > 2930 mg/kg ( Rat ) | > 2000 mg/kg ( Rat ) | - |

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

**Skin corrosion/irritation** Based on available data, the classification criteria are not met.

**Serious eye damage/eye irritation** Causes serious eye irritation.

**Respiratory or skin sensitization** May cause sensitization in susceptible persons.

**Germ cell mutagenicity** Based on available data, the classification criteria are not met.

**Carcinogenicity** Based on available data, the classification criteria are not met.

**Reproductive toxicity** Based on available data, the classification criteria are not met.

**STOT - single exposure** Based on available data, the classification criteria are not met.

**STOT - repeated exposure** Based on available data, the classification criteria are not met.

**Aspiration hazard** Based on available data, the classification criteria are not met.

**Other adverse effects** No other adverse effects expected.

## 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 | Crustacea |
|---|---|---|---|---|

| | | | | |
|---|---|---|---|---|
| | | | microorganisms | |
| Butyl Diglycol | EC50: >100mg/L (96h, Desmodesmus subspicatus) | LC50: =1300mg/L (96h, Lepomis macrochirus) | - | EC50: >100mg/L (48h, Daphnia magna) |
| Sodium Hydroxide | - | LC50: =45.4mg/L (96h, Oncorhynchus mykiss) | - | - |
| 2,6-di-tert-butyl-p-cresol | EC50: =6mg/L (72h, Pseudokirchneriella subcapitata)<br>EC50: >0.42mg/L (72h, Desmodesmus subspicatus) | - | - | - |

### 12.2. Persistence and degradability

**Persistence and degradability** None known.

### 12.3. Bioaccumulative potential

**Bioaccumulation** Not likely to bioaccumulate.

**Component Information**

| Chemical name | Partition coefficient |
|---|---|
| Butyl Diglycol | 1 |
| isopentyl acetate | 2.7 |
| 2,6-di-tert-butyl-p-cresol | 5.1 |

### 12.4. Mobility in soil

**Mobility in soil** Not determined.

### 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 above the threshold of declaration.

| Chemical name | PBT and vPvB assessment |
|---|---|
| Butyl Diglycol | The substance is not PBT / vPvB |
| Sodium Hydroxide | The substance is not PBT / vPvB |
| isopentyl acetate | The substance is not PBT / vPvB |
| 2,6-di-tert-butyl-p-cresol | The substance is not PBT / vPvB |

### 12.6. Other adverse effects

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

**Waste from residues/unused products** Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

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

## SECTION 14: Transport information

**IATA**

**14.1 UN number or ID number** Not regulated
**14.2 UN proper shipping name** Not regulated
**14.3 Transport hazard class(es)** Not regulated
**14.4 Packing group** Not regulated
**14.5 Environmental hazards** Not applicable
**14.6 Special precautions for 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** Not applicable
**14.6 Special precautions for user**
**Special Provisions** None
**14.7 Maritime transport in bulk according to IMO instruments** Not regulated

**RID**

**14.1 UN number or ID number** Not regulated
**14.2 UN proper shipping name** Not regulated
**14.3 Transport hazard class(es)** Not regulated
**14.4 Packing group** Not regulated
**14.5 Environmental hazards** Not applicable
**14.6 Special precautions for user**
**Special Provisions** None

**ADR**

**14.1 UN number or ID number** Not regulated
**14.2 UN proper shipping name** Not regulated
**14.3 Transport hazard class(es)** Not regulated
**14.4 Packing group** Not regulated
**14.5 Environmental hazards** Not applicable
**14.6 Special precautions for user**
**Special Provisions** None

## SECTION 15: Regulatory information

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

**National regulations**

**Authorizations 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 authorization per REACH Annex XIV |
|---|---|---|
| Butyl Diglycol - 112-34-5 | Use restricted. See item 55. | - |

**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)**

| Chemical name | Poisons and Explosive Precursors |
|---|---|
| Sodium Hydroxide | Poison, Reportable 12 % of total caustic alkalinity |

**International Inventories**

| | |
|---|---|
| **TSCA** | Contact supplier for inventory compliance status |
| **DSL/NDSL** | Contact supplier for inventory compliance status |
| **EINECS/ELINCS** | Contact supplier for inventory compliance status |
| **ENCS** | Contact supplier for inventory compliance status |
| **IECSC** | Contact supplier for inventory compliance status |
| **KECL** | Contact supplier for inventory compliance status |
| **PICCS** | Contact supplier for inventory compliance status |
| **AIIC** | Contact supplier for inventory compliance status |
| **NZIoC** | Contact supplier for inventory compliance status |

**Legend:**
**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory
**DSL/NDSL** - 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** A Chemical Safety Assessment has not been carried out for this mixture

## 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**
H226 - Flammable liquid and vapor

H290 - May be corrosive to metals
H314 - Causes severe skin burns and eye damage
H319 - Causes serious eye irritation
H400 - Very toxic to aquatic life
H410 - Very toxic to aquatic life with long lasting effects

**Legend**
SVHC: Substances of Very High Concern for Authorization:

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

| | | | |
|---|---|---|---|
| TWA | TWA (time-weighted average) | STEL | STEL (Short Term Exposure Limit) |
| Ceiling | Maximum limit value | * | Skin designation |
| + | Sensitizers | | |

| Classification procedure | |
|---|---|
| Classification according to Regulation (EC) No. 1272/2008 [CLP] | Method Used |
| Acute oral toxicity | On basis of test data |
| Acute dermal toxicity | Calculation method |
| Acute inhalation toxicity - gas | Calculation method |
| Acute inhalation toxicity - vapor | Calculation method |
| Acute inhalation toxicity - dust/mist | Calculation method |
| Skin corrosion/irritation | Calculation method |
| Serious eye damage/eye irritation | On basis of test data |
| Respiratory sensitization | Calculation method |
| Skin sensitization | Calculation method |
| Mutagenicity | Calculation method |
| Carcinogenicity | Calculation method |
| Reproductive toxicity | Calculation method |
| STOT - single exposure | Calculation method |
| STOT - repeated exposure | Calculation method |
| Acute aquatic toxicity | Calculation method |
| Chronic aquatic toxicity | Calculation method |
| Aspiration hazard | Calculation method |
| Ozone | Calculation method |

**Key literature references and sources for data used to compile the SDS**
Agency for Toxic Substances and Disease Registry (ATSDR)
U.S. Environmental Protection Agency ChemView Database
European Food Safety Authority (EFSA)
European Chemicals Agency (ECHA) Committee for Risk Assessment (ECHA_RAC)
European Chemicals Agency (ECHA) (ECHA_API)
EPA (Environmental Protection Agency)
Acute Exposure Guideline Level(s) (AEGL(s))
U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act
U.S. Environmental Protection Agency High Production Volume Chemicals
Food Research Journal
Hazardous Substance Database
International Uniform Chemical Information Database (IUCLID)
National Institute of Technology and Evaluation (NITE)
Australia 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)
Organization for Economic Co-operation and Development Environment, Health, and Safety Publications
Organization for Economic Co-operation and Development High Production Volume Chemicals Program
Organization for Economic Co-operation and Development Screening Information Data Set
World Health Organization

**Revision date** 02/11/2025

**Reason for revision** Created to comply with Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008

**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**

**UK SDS version information - XGHS**
UL release:
GHS Revision 7
2022 Q1

**United Kingdom** Partial process, including GHS Wizard, NO TW

Full text of H-Statements referred to under section 3: H226 - Flammable liquid and vapor H290 - May be corrosive to metals H314 - Causes severe skin burns and eye damage H319 - Causes serious eye irritation H400 - Very toxic to aquatic life H410 - Very toxic to aquatic life with long lasting effects

| Chemical name | Classification according to GB CLP (SI 2020/1567 as amended) | Specific concentration limit (SCL) |
|---|---|---|
| Butyl Diglycol | Eye Irrit. 2 (H319) | |
| Sodium Hydroxide | Skin Corr. 1A (H314)<br>Met. Corr. 1 (H290) | Eye Irrit. 2 :: 0.5%<=C<2%<br>Skin Corr. 1A :: C>=5%<br>Skin Corr. 1B :: 2%<=C<5%<br>Skin Irrit. 2 :: 0.5%<=C<2% |
| isopentyl acetate | Flam. Liq. 3 (H226) | |
| 2,6-di-tert-butyl-p-cresol | Aquatic Chronic 1 (H410)<br>Aquatic Acute 1 (H400) | |