# SAFETY DATA SHEET

TEKNOCOAT AQUA 2550-02 - All variants

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

### 1.1 Product identifier

**Product name** : TEKNOCOAT AQUA 2550-02 - All variants

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

**Product use** : Paint.

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

Teknos Group Oy, Takkatie 3, FI-00370 HELSINKI, FINLAND. Tel. +358 9 506 091.

**e-mail address of person responsible for this SDS** : Prod-safe@teknos.com

**National contact**

Teknos (UK) Limited, 7 Longlands Rd, Bicester, Oxfordshire OX26 5AH, United Kingdom. Tel. +44 (0) 1869 208005.

### 1.4 Emergency telephone number

**National advisory body/Poison Centre**

**Telephone number** : NHS: 111

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

**Product definition** : Mixture

**Classification according to UK CLP/GHS**

Skin Sens. 1, H317

The product is classified as hazardous according to UK CLP Regulation SI 2019/720 as amended.

See Section 16 for the full text of the H statements declared above.

See Section 11 for more detailed information on health effects and symptoms.

### 2.2 Label elements

**Hazard pictograms** :

**Signal word** : Warning

**Hazard statements** : H317 - May cause an allergic skin reaction.

**Precautionary statements**

**Prevention** : P280 - Wear protective gloves.
P261 - Avoid breathing vapour.

**Response** : P302 + P352 - IF ON SKIN: Wash with plenty of water.
P333 + P313 - If skin irritation or rash occurs: Get medical advice or attention.
P362 + P364 - Take off contaminated clothing and wash it before reuse.

**Storage** : Not applicable.

**Disposal** : P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.

**Supplemental label elements** :

## SECTION 2: Hazards identification

**Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles** : Not applicable.

### 2.3 Other hazards

**Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII** : This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

**Other hazards which do not result in classification** : None known.

## SECTION 3: Composition/information on ingredients

**3.2 Mixtures** : Mixture

| Product/ingredient name | Identifiers | % | Classification | Type |
|---|---|---|---|---|
| 2-Butoxyethanol | REACH #: 01-2119475108-36<br>EC: 203-905-0<br>CAS: 111-76-2<br>Index: 603-014-00-0 | ≤3 | Acute Tox. 4, H302<br>Acute Tox. 4, H332<br>Skin Irrit. 2, H315<br>Eye Irrit. 2, H319 | [1] [2] |
| Polyethylene wax | REACH #: 01-2119488076-30<br>EC: 232-315-6<br>CAS: 8002-74-2 | ≤1 | Not classified. | [2] |
| adipohydrazide | REACH #: 01-2119962900-36<br>EC: 213-999-5<br>CAS: 1071-93-8 | ≤0.3 | Skin Sens. 1, H317<br>Aquatic Chronic 2, H411 | [1] |
| Ammonia | REACH #: 01-2119488876-14<br>EC: 215-647-6<br>CAS: 1336-21-6<br>Index: 007-001-01-2 | <0.1 | Skin Corr. 1B, H314<br>Eye Dam. 1, H318<br>STOT SE 3, H335<br>Aquatic Acute 1, H400 (M=1) | [1] [2] |
| ammonia, anhydrous | EC: 231-635-3<br>CAS: 7664-41-7<br>Index: 007-001-00-5 | <0.1 | Flam. Gas 2, H221<br>Press. Gas (Comp.), H280<br>Acute Tox. 3, H331<br>Skin Corr. 1B, H314<br>Eye Dam. 1, H318<br>Aquatic Acute 1, H400 (M=1) | [1] [2] |
| magnesium carbonate | EC: 208-915-9<br>CAS: 546-93-0 | ≤0.1 | Not classified. | [2] |
| 2-Ethoxyethanol | EC: 203-804-1<br>CAS: 110-80-5<br>Index: 603-012-00-X | <0.1 | Flam. Liq. 3, H226<br>Acute Tox. 4, H302<br>Acute Tox. 3, H331<br>Repr. 1B, H360FD | [1] [2] [3] |
| 2-methyl-2H-isothiazol-3-one | EC: 220-239-6<br>CAS: 2682-20-4 | <0.01 | Acute Tox. 3, H301<br>Acute Tox. 3, H311<br>Acute Tox. 2, H330<br>Skin Corr. 1B, H314<br>Eye Dam. 1, H318<br>Skin Sens. 1A, H317<br>Aquatic Acute 1, H400 (M=10)<br>Aquatic Chronic 1, H410 (M=1)<br>EUH071 | [1] |
| Ethanediol | REACH #: | ≤0.1 | Acute Tox. 4, H302 | [1] [2] |

## SECTION 3: Composition/information on ingredients

| | | | | |
|---|---|---|---|---|
| | 01-2119456816-28<br>EC: 203-473-3<br>CAS: 107-21-1<br>Index: 603-027-00-1 | | STOT RE 2, H373 (oral) | |
| Formaldehyde | REACH #: 01-2119488953-20<br>EC: 200-001-8<br>CAS: 50-00-0<br>Index: 605-001-00-5 | <0.1 | Acute Tox. 3, H301<br>Acute Tox. 3, H311<br>Acute Tox. 2, H330<br>Skin Corr. 1B, H314<br>Eye Dam. 1, H318<br>Skin Sens. 1, H317<br>Muta. 2, H341<br>Carc. 1B, H350<br>STOT SE 3, H335<br>**See Section 16 for the full text of the H statements declared above.** | [1] [2] |

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs, vPvBs or Substances of equivalent concern, or have been assigned a workplace exposure limit and hence require reporting in this section.

Type

[1] Substance classified with a health or environmental hazard
[2] Substance with a workplace exposure limit
[3] Substance with carcinogenic, mutagenic or reproductive toxicity properties

Occupational exposure limits, if available, are listed in Section 8.

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

**Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention if irritation occurs.

**Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

**Skin contact** : Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.

**Ingestion** : Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

**Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

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

**Over-exposure signs/symptoms**

**Eye contact** : No specific data.

## SECTION 4: First aid measures

**Inhalation** : No specific data.

**Skin contact** : Adverse symptoms may include the following:
irritation
redness

**Ingestion** : No specific data.

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

**Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

**Specific treatments** : No specific treatment.

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

**Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire.

**Unsuitable extinguishing media** : None known.

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

**Hazards from the substance or mixture** : In a fire or if heated, a pressure increase will occur and the container may burst.

**Hazardous combustion products** : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
metal oxide/oxides

### 5.3 Advice for firefighters

**Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

**Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to British standard BS EN 469 will provide a basic level of protection for chemical incidents.

## SECTION 6: Accidental release measures

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

**For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

**For emergency responders** : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

**6.2 Environmental precautions** : Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

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

**Small spill** : Stop leak if without risk. Move containers from spill area. Absorb with an inert material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

## SECTION 6: Accidental release measures

**Large spill** : Stop leak if without risk. Move containers from spill area. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations.

**6.4 Reference to other sections** : See Section 1 for emergency contact information.
See Section 8 for information on appropriate personal protective equipment.
See Section 13 for additional waste treatment information.

## SECTION 7: Handling and storage

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

### 7.1 Precautions for safe handling

**Protective measures** : Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapour or mist. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

**Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

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

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

### 7.3 Specific end use(s)

**Recommendations** : Not available.

**Industrial sector specific solutions** : Not available.

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

**Occupational exposure limits**

| | |
|---|---|
| 2-Butoxyethanol | **EH40/2005 WELs (United Kingdom (UK), 1/2020)** Absorbed through skin.<br>STEL 15 minutes: 50 ppm.<br>TWA 8 hours: 25 ppm.<br>STEL 15 minutes: 246 mg/m³.<br>TWA 8 hours: 123 mg/m³. |
| Polyethylene wax | **EH40/2005 WELs (United Kingdom (UK), 1/2020)**<br>STEL 15 minutes: 6 mg/m³. Form: Fume.<br>TWA 8 hours: 2 mg/m³. Form: Fume. |
| Ammonia | **EH40/2005 WELs (United Kingdom (UK), 1/2020) [ammonia]**<br>STEL 15 minutes: 25 mg/m³. Form: anhydrous.<br>STEL 15 minutes: 35 ppm. Form: anhydrous.<br>TWA 8 hours: 25 ppm. Form: anhydrous.<br>TWA 8 hours: 18 mg/m³. Form: anhydrous. |
| ammonia, anhydrous | |

| | |
|---|---|
| | **EH40/2005 WELs (United Kingdom (UK), 1/2020) [ammonia]**<br>STEL 15 minutes: 25 mg/m³. Form: anhydrous.<br>STEL 15 minutes: 35 ppm. Form: anhydrous.<br>TWA 8 hours: 25 ppm. Form: anhydrous.<br>TWA 8 hours: 18 mg/m³. Form: anhydrous. |
| magnesium carbonate | **EH40/2005 WELs (United Kingdom (UK), 1/2020)**<br>TWA 8 hours: 10 mg/m³. Form: inhalable dust.<br>TWA 8 hours: 4 mg/m³. Form: respirable dust. |
| 2-Ethoxyethanol | **EH40/2005 WELs (United Kingdom (UK), 1/2020)** Absorbed through skin.<br>TWA 8 hours: 2 ppm.<br>TWA 8 hours: 8 mg/m³. |
| Ethanediol | **EH40/2005 WELs (United Kingdom (UK), 1/2020)** Absorbed through skin.<br>TWA 8 hours: 10 mg/m³. Form: Particulate.<br>TWA 8 hours: 20 ppm. Form: Vapour.<br>STEL 15 minutes: 40 ppm. Form: Vapour.<br>TWA 8 hours: 52 mg/m³. Form: Vapour.<br>STEL 15 minutes: 104 mg/m³. Form: Vapour. |
| Formaldehyde | **EH40/2005 WELs (United Kingdom (UK), 1/2020)** Carc.<br>STEL 15 minutes: 2.5 mg/m³.<br>STEL 15 minutes: 2 ppm.<br>TWA 8 hours: 2 ppm.<br>TWA 8 hours: 2.5 mg/m³. |

### Biological exposure indices

| Product/ingredient name | Exposure indices |
|---|---|
| 2-Butoxyethanol | **EH40/2005 BMGVs (United Kingdom (UK), 1/2020)**<br>BGV: 240 mmol/mol creatinine, butoxyacetic acid [in urine].<br>Sampling time: post shift. |

**Recommended monitoring procedures** : Reference should be made to monitoring standards, such as the following: British Standard BS EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) British Standard BS EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) British Standard BS EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

### DNELs/DMELs

| Product/ingredient name | Result |
|---|---|
| 2-Butoxyethanol | **DNEL - General population - Long term - Oral**<br>6.3 mg/kg bw/day<br>Effects: Systemic<br><br>**DNEL - General population - Short term - Oral**<br>26.7 mg/kg bw/day<br>Effects: Systemic<br><br>**DNEL - General population - Long term - Inhalation**<br>59 mg/m³<br>Effects: Systemic<br><br>**DNEL - Workers - Long term - Inhalation**<br>98 mg/m³<br>Effects: Systemic<br><br>**DNEL - General population - Short term - Inhalation**<br>147 mg/m³<br>Effects: Local<br><br>**DNEL - Workers - Short term - Inhalation** |

246 mg/m³
Effects: Local

**DNEL - General population - Short term - Inhalation**
426 mg/m³
Effects: Systemic

**DNEL - Workers - Short term - Inhalation**
1091 mg/m³
Effects: Systemic

adipohydrazide

**DNEL - Workers - Long term - Inhalation**
17.5 mg/m³
Effects: Systemic

ammonia, anhydrous

**DNEL - General population - Long term - Inhalation**
2.8 mg/m³
Effects: Local

**DNEL - General population - Short term - Oral**
6.8 mg/kg bw/day
Effects: Systemic

**DNEL - General population - Long term - Oral**
6.8 mg/kg bw/day
Effects: Systemic

**DNEL - General population - Short term - Dermal**
6.8 mg/kg bw/day
Effects: Systemic

**DNEL - General population - Long term - Dermal**
6.8 mg/kg bw/day
Effects: Systemic

**DNEL - Workers - Short term - Dermal**
6.8 mg/kg bw/day
Effects: Systemic

**DNEL - Workers - Long term - Dermal**
6.8 mg/kg bw/day
Effects: Systemic

**DNEL - General population - Short term - Inhalation**
7.2 mg/m³
Effects: Local

**DNEL - Workers - Long term - Inhalation**
14 mg/m³
Effects: Local

**DNEL - General population - Short term - Inhalation**
23.8 mg/m³
Effects: Systemic

**DNEL - General population - Long term - Inhalation**
23.8 mg/m³
Effects: Systemic

**DNEL - Workers - Short term - Inhalation**
36 mg/m³
Effects: Local

**DNEL - Workers - Short term - Inhalation**
47.6 mg/m³
Effects: Systemic

| | |
|---|---|
| | **DNEL - Workers - Long term - Inhalation**<br>47.6 mg/m³<br>Effects: Systemic |
| magnesium carbonate | **DNEL - General population - Short term - Oral**<br>7.23 mg/kg bw/day<br>Effects: Systemic<br><br>**DNEL - General population - Long term - Oral**<br>7.23 mg/kg bw/day<br>Effects: Systemic |
| 2-Ethoxyethanol | **DNEL - Workers - Long term - Inhalation**<br>83 µg/m³<br>Effects: Systemic<br><br>**DNEL - Workers - Long term - Dermal**<br>0.3 mg/kg bw/day<br>Effects: Systemic |
| 2-methyl-2H-isothiazol-3-one | **DNEL - General population - Long term - Inhalation**<br>0.021 mg/m³<br>Effects: Local<br><br>**DNEL - Workers - Long term - Inhalation**<br>0.021 mg/m³<br>Effects: Local<br><br>**DNEL - General population - Long term - Oral**<br>0.027 mg/kg bw/day<br>Effects: Systemic<br><br>**DNEL - General population - Short term - Inhalation**<br>0.043 mg/m³<br>Effects: Local<br><br>**DNEL - Workers - Short term - Inhalation**<br>0.043 mg/m³<br>Effects: Local<br><br>**DNEL - General population - Short term - Oral**<br>0.053 mg/kg bw/day<br>Effects: Systemic |
| Ethanediol | **DNEL - General population - Long term - Inhalation**<br>7 mg/m³<br>Effects: Local<br><br>**DNEL - Workers - Long term - Inhalation**<br>35 mg/m³<br>Effects: Local<br><br>**DNEL - General population - Long term - Dermal**<br>53 mg/kg bw/day<br>Effects: Systemic<br><br>**DNEL - Workers - Long term - Dermal**<br>106 mg/kg bw/day<br>Effects: Systemic |
| Formaldehyde | **DNEL - General population - Long term - Dermal**<br>12 µg/cm²<br>Effects: Local<br><br>**DNEL - Workers - Long term - Dermal** |

37 µg/cm²
Effects: Local

**DNEL - General population - Long term - Inhalation**
0.1 mg/m³
Effects: Local

**DNEL - Workers - Long term - Inhalation**
0.375 mg/m³
Effects: Local

**DNEL - Workers - Short term - Inhalation**
0.75 mg/m³
Effects: Local

**DNEL - General population - Long term - Inhalation**
3.2 mg/m³
Effects: Systemic

**DNEL - General population - Long term - Oral**
4.1 mg/kg bw/day
Effects: Systemic

**DNEL - Workers - Long term - Inhalation**
9 mg/m³
Effects: Systemic

**DNEL - General population - Long term - Dermal**
102 mg/kg bw/day
Effects: Systemic

**DNEL - Workers - Long term - Dermal**
240 mg/kg bw/day
Effects: Systemic

**PNECs**

Not available.

## 8.2 Exposure controls

**Appropriate engineering controls** : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

**Individual protection measures**

**Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

**Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.

**Skin protection**

**Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately

## SECTION 8: Exposure controls/personal protection

estimated.

Recommendations : Wear suitable gloves tested to EN374.

> 8 hours (breakthrough time): Nitrile gloves. thickness > 0.3 mm

Not recommended polyvinyl alcohol (PVA) gloves

**Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**Respiratory protection** : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Filter type (spray application): A P

**Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

## SECTION 9: Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

### 9.1 Information on basic physical and chemical properties

**Appearance**

**Physical state** : Liquid.

**Colour** : Various

**Odour** : Slight

**Odour threshold** : Not available.

**Melting point/freezing point** : Not available.

**Initial boiling point and boiling range** :

| Ingredient name | °C | °F | Method |
|---|---|---|---|
| water | 100 | 212 | |
| 2-Butoxyethanol | 171 to 171.5 | 339.8 to 340.7 | IP 123-93 |

**Flammability (solid, gas)** : Not available.

**Upper/lower flammability or explosive limits** : Lower: 1.2% (2-(2-ethoxyethoxy)ethanol)
Upper: 23.5% (2-(2-ethoxyethoxy)ethanol)

**Flash point** : Closed cup: >100°C (>212°F)

**Auto-ignition temperature** :

| Ingredient name | °C | °F | Method |
|---|---|---|---|
| Ethyldiglycol | 204 | 399.2 | |
| 2-Butoxyethanol | 230 | 446 | DIN 51794 |

**Decomposition temperature** : Not available.

**pH** : 8.2 to 8.8 [Conc. (% w/w): 100%]

**Viscosity** : Dynamic (room temperature): Not available.
Kinematic (room temperature): Not available.
Kinematic (40°C): Not available.

**Solubility(ies)** :

Not available.

**Solubility in water** : Not available.

**Partition coefficient: n-octanol/water** : Not applicable.

## SECTION 9: Physical and chemical properties

**Vapour pressure** :

| Ingredient name | Vapour Pressure at 20˚C | | | Vapour pressure at 50˚C | | |
|---|---|---|---|---|---|---|
| | mm Hg | kPa | Method | mm Hg | kPa | Method |
| water | 17.5 | 2.3 | | | | |
| 2-Butoxyethanol | 0.75006 | 0.1 | | | | |

**Relative density** : Not available.

**Density** : 1.2 g/cm³

**Vapour density** : Not available.

**Explosive properties** : Not available.

**Oxidising properties** : Not available.

**Particle characteristics**

**Median particle size** : Not applicable.

### 9.2 Other information

Not available.

## SECTION 10: Stability and reactivity

**10.1 Reactivity** : No specific test data related to reactivity available for this product or its ingredients.

**10.2 Chemical stability** : The product is stable.

**10.3 Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.

**10.4 Conditions to avoid** : No specific data.

**10.5 Incompatible materials** : No specific data.

**10.6 Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

**Acute toxicity**

| Product/ingredient name | Result |
|---|---|
| Ammonia | **Rat - Oral - LD50**<br>350 mg/kg<br>Toxic effects: Gastrointestinal - Other changes Liver - Other changes Kidney, Ureter, and Bladder - Other changes |
| ammonia, anhydrous | **Rat - Inhalation - LC50 Gas.**<br>2000 ppm [4 hours]<br><br>**Rat - Inhalation - LC50 Gas.**<br>9500 ppm [1 hours]<br><br>**Rat - Inhalation - LC50 Vapour**<br>4673 mg/m³ [4 hours] |
| magnesium carbonate | **Rat - Oral - LD50**<br>8000 mg/kg |
| 2-Ethoxyethanol | **Rat - Oral - LD50**<br>2125 mg/kg<br>Toxic effects: Behavioral - Somnolence (general depressed |

activity) Behavioral - Withdrawal Lung, Thorax, or Respiration - Respiratory depression

**Rat - Dermal - LD50**
3900 mg/kg

**Rabbit - Dermal - LD50**
3.6 g/kg

2-methyl-2H-isothiazol-3-one

**Rat - Inhalation - LC50 Dusts and mists**
0.11 mg/l [4 hours]

Ethanediol

**Rat - Oral - LD50**
4700 mg/kg

Formaldehyde

**Rat - Oral - LD50**
100 mg/kg

**Rabbit - Dermal - LD50**
270 mg/kg

**Rat - Inhalation - LC50 Gas.**
250 ppm [4 hours]

**Conclusion/Summary [Product]** : Not available.

**Acute toxicity estimates**

| Product/ingredient name | Oral (mg/kg) | Dermal (mg/kg) | Inhalation (gases) (ppm) | Inhalation (vapours) (mg/l) | Inhalation (dusts and mists) (mg/l) |
|---|---|---|---|---|---|
| TEKNOCOAT AQUA 2550-02 | 70275.2 | N/A | N/A | 644.2 | N/A |
| 2-Butoxyethanol | 1200 | N/A | N/A | 11 | N/A |
| ammonia, anhydrous | N/A | N/A | 2000 | 4.673 | N/A |
| magnesium carbonate | 8000 | N/A | N/A | N/A | N/A |
| 2-Ethoxyethanol | 500 | 3600 | N/A | 3 | N/A |
| 2-methyl-2H-isothiazol-3-one | 100 | 300 | N/A | N/A | 0.11 |
| Ethanediol | 500 | N/A | N/A | N/A | N/A |
| Formaldehyde | 100 | 270 | 250 | N/A | N/A |

**Skin corrosion/irritation**

| Product/ingredient name | Result |
|---|---|
| 2-Butoxyethanol | **Rabbit - Skin - Mild irritant**<br>Amount/concentration applied: 500 mg |
| Polyethylene wax | **Rabbit - Skin - Mild irritant**<br>Duration of treatment/exposure: 24 hours<br>Amount/concentration applied: 500 mg<br><br>**Rabbit - Skin - Moderate irritant**<br>Amount/concentration applied: 500 mg |
| 2-Ethoxyethanol | **Rabbit - Skin - Mild irritant**<br>Amount/concentration applied: 500 mg |
| Ethanediol | **Rabbit - Skin - Mild irritant**<br>Amount/concentration applied: 555 mg |
| Formaldehyde | **Human - Skin - Mild irritant**<br>Duration of treatment/exposure: 72 hours<br>Amount/concentration applied: 150 ug l<br><br>**Human - Skin - Severe irritant** |

Amount/concentration applied: 0.01 %

**Rabbit - Skin - Mild irritant**
Amount/concentration applied: 540 mg

**Rabbit - Skin - Moderate irritant**
Duration of treatment/exposure: 24 hours
Amount/concentration applied: 50 mg

**Rabbit - Skin - Severe irritant**
Duration of treatment/exposure: 24 hours
Amount/concentration applied: 2 mg

**Rabbit - Skin - Severe irritant**
Amount/concentration applied: 0.8 %

**Mouse - Skin - Moderate irritant**
Amount/concentration applied: 7 %

**Rat - Skin - Moderate irritant**
Amount/concentration applied: 7 %

**Conclusion/Summary [Product]** : Not available.

**Serious eye damage/eye irritation**

| Product/ingredient name | Result |
|---|---|
| 2-Butoxyethanol | **Rabbit - Eyes - Moderate irritant**<br>Duration of treatment/exposure: 24 hours<br>Amount/concentration applied: 100 mg<br><br>**Rabbit - Eyes - Severe irritant**<br>Amount/concentration applied: 100 mg |
| Polyethylene wax | **Rabbit - Eyes - Mild irritant**<br>Amount/concentration applied: 50 %<br><br>**Rabbit - Eyes - Mild irritant**<br>Duration of treatment/exposure: 24 hours<br>Amount/concentration applied: 100 mg |
| Ammonia | **Rabbit - Eyes - Severe irritant**<br>Amount/concentration applied: 250 ug<br><br>**Rabbit - Eyes - Severe irritant**<br>Amount/concentration applied: 44 ug<br><br>**Rabbit - Eyes - Severe irritant**<br>Duration of treatment/exposure: 0.5 minutes<br>Amount/concentration applied: 1 mg |
| 2-Ethoxyethanol | **Guinea pig - Eyes - Mild irritant**<br>Amount/concentration applied: 10 ug<br><br>**Rabbit - Eyes - Mild irritant**<br>Duration of treatment/exposure: 24 hours<br>Amount/concentration applied: 500 mg<br><br>**Rabbit - Eyes - Moderate irritant**<br>Amount/concentration applied: 50 mg |
| Ethanediol | **Rabbit - Eyes - Mild irritant**<br>Duration of treatment/exposure: 24 hours<br>Amount/concentration applied: 500 mg<br><br>**Rabbit - Eyes - Mild irritant** |

| | |
|---|---|
| | Duration of treatment/exposure: 1 hours<br>Amount/concentration applied: 100 mg<br><br>**Rabbit - Eyes - Moderate irritant**<br>Duration of treatment/exposure: 6 hours<br>Amount/concentration applied: 1440 mg |
| Formaldehyde | **Human - Eyes - Mild irritant**<br>Duration of treatment/exposure: 6 minutes<br>Amount/concentration applied: 1 ppm<br><br>**Rabbit - Eyes - Severe irritant**<br>Duration of treatment/exposure: 24 hours<br>Amount/concentration applied: 750 ug<br><br>**Rabbit - Eyes - Severe irritant**<br>Amount/concentration applied: 750 ug<br><br>**Rabbit - Eyes - Severe irritant**<br>Amount/concentration applied: 37 %<br><br>**Rabbit - Eyes - Severe irritant**<br>Amount/concentration applied: 10 mg<br><br>**Mouse - Eyes - Moderate irritant**<br>Amount/concentration applied: 3 % |

**Conclusion/Summary [Product]** : Not available.

### Respiratory corrosion/irritation

Not available.

**Conclusion/Summary [Product]** : Not available.

## Respiratory or skin sensitization

Not available.

**Skin**

**Conclusion/Summary [Product]** : Not available.

**Respiratory**

**Conclusion/Summary [Product]** : Not available.

### Germ cell mutagenicity

Not available.

**Conclusion/Summary [Product]** : Not available.

### Carcinogenicity

Not available.

**Conclusion/Summary [Product]** : Not available.

### Reproductive toxicity

Not available.

## SECTION 11: Toxicological information

**Conclusion/Summary [Product]** : Not available.

### Specific target organ toxicity (single exposure)

| Product/ingredient name | Result |
|---|---|
| Ammonia | STOT SE 3, H335 (Respiratory tract irritation) |
| Formaldehyde | STOT SE 3, H335 (Respiratory tract irritation) |

### Specific target organ toxicity (repeated exposure)

| Product/ingredient name | Result |
|---|---|
| Ethanediol | STOT RE 2, H373 (oral) |

### Aspiration hazard

Not available.

### Information on likely routes of exposure

Not available.

### Potential acute health effects

**Eye contact** : No known significant effects or critical hazards.

**Inhalation** : No known significant effects or critical hazards.

**Skin contact** : May cause an allergic skin reaction.

**Ingestion** : No known significant effects or critical hazards.

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

**Eye contact** : No specific data.

**Inhalation** : No specific data.

**Skin contact** : Adverse symptoms may include the following:
irritation
redness

**Ingestion** : No specific data.

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

**Short term exposure**

**Potential immediate effects** : Not available.

**Potential delayed effects** : Not available.

**Long term exposure**

**Potential immediate effects** : Not available.

**Potential delayed effects** : Not available.

### Potential chronic health effects

Not available.

**Conclusion/Summary [Product]** : Not available.

**General** : Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.

**Carcinogenicity** : No known significant effects or critical hazards.

**Mutagenicity** : No known significant effects or critical hazards.

**Reproductive toxicity** : No known significant effects or critical hazards.

### Other information

Not available.

## SECTION 12: Ecological information

### 12.1 Toxicity

| Product/ingredient name | Result |
|---|---|
| 2-Butoxyethanol | **Acute - LC50 - Marine water**<br>Fish - Inland silverside - *Menidia beryllina*<br>Size: 40 to 100 mm<br>1250000 µg/l [96 hours]<br>Effect: Mortality<br><br>**Acute - LC50 - Marine water**<br>Crustaceans - Common shrimp, sand shrimp - *Crangon crangon*<br>800000 µg/l [48 hours]<br>Effect: Mortality |
| Ammonia | **Acute - LC50 - Fresh water**<br>Fish - Western mosquitofish - *Gambusia affinis* - Adult<br>37 ppm [96 hours]<br>Effect: Mortality |
| ammonia, anhydrous | **Acute - LC50 - Fresh water**<br>Fish - Carp - *Hypophthalmichthys nobilis*<br>300 µg/l [96 hours]<br>Effect: Mortality<br><br>**Acute - LC50 - Fresh water**<br>Daphnia - Water flea - *Daphnia magna*<br>0.53 ppm [48 hours]<br>Effect: Mortality<br><br>**Acute - EC50 - Marine water**<br>Algae - Sea Lettuce - *Ulva fasciata* - Zoea<br>29.2 mg/l [96 hours]<br>Effect: Reproduction<br><br>**Chronic - NOEC - Marine water**<br>Fish - Sea bass - *Dicentrarchus labrax*<br>Weight: 131.3 g<br>0.204 mg/l [62 days]<br>Effect: Biochemistry |
| 2-Ethoxyethanol | **Acute - LC50 - Fresh water**<br>Fish - Bluegill - *Lepomis macrochirus*<br>Size: 33 to 75 mm<br>>10000000 µg/l [96 hours]<br>Effect: Mortality |
| 2-methyl-2H-isothiazol-3-one | **Acute - EC50 - Fresh water**<br>US EPA<br>Daphnia - Water flea - *Daphnia magna*<br>Age: <24 hours<br>0.18 ppm [48 hours]<br>Effect: Intoxication<br><br>**Acute - LC50 - Fresh water**<br>US EPA<br>Fish - Rainbow trout,donaldson trout - *Oncorhynchus mykiss*<br>Weight: 0.73 g<br>0.07 ppm [96 hours]<br>Effect: Mortality |
| Ethanediol | **Acute - LC50 - Fresh water**<br>Fish - Fathead minnow - *Pimephales promelas*<br>Age: ≤7 days<br>8050000 µg/l [96 hours] |

Effect: Mortality

**Acute - LC50 - Fresh water**
Crustaceans - Water flea - *Ceriodaphnia dubia* - Neonate
6900000 µg/l [48 hours]
Effect: Mortality

Formaldehyde

**Acute - EC50 - Fresh water**
Daphnia - Water flea - *Daphnia pulex* - Neonate
Age: <24 hours
5800 µg/l [48 hours]
Effect: Intoxication

**Acute - EC50 - Marine water**
Algae - Green algae - *Ulva pertusa*
0.788 mg/l [96 hours]
Effect: Reproduction

**Acute - LC50 - Fresh water**
US EPA
Fish - Rainbow trout,donaldson trout - *Oncorhynchus mykiss*
1.41 ppm [96 hours]
Effect: Mortality

**Chronic - NOEC - Fresh water**
Fish - Chinook salmon - *Oncorhynchus tshawytscha* - Egg
953.9 ppm [43 days]
Effect: Mortality

**Chronic - NOEC - Marine water**
Algae - Haptophyte - *Isochrysis galbana* - Exponential growth phase
Age: 4 to 5 days
0.005 mg/l [96 hours]
Effect: Population

**Conclusion/Summary [Product]** : Not available.

## 12.2 Persistence and degradability

Not available.

**Conclusion/Summary [Product]** : Not available.

## 12.3 Bioaccumulative potential

| Product/ingredient name | $LogP_{ow}$ | BCF | Potential |
|---|---|---|---|
| 2-Butoxyethanol | 0.81 | - | Low |
| 2-Ethoxyethanol | -0.32 | - | Low |
| Ethanediol | -1.36 | - | Low |

## 12.4 Mobility in soil

**Soil/water partition coefficient** : Not available.

**Mobility** : Not available.

## 12.5 Results of PBT and vPvB assessment

## SECTION 12: Ecological information

| Product/ingredient name | PBT | P | B | T | vPvB | vP | vB |
|---|---|---|---|---|---|---|---|
| 2-Butoxyethanol | No | No | No | No | No | No | No |
| Polyethylene wax | No | No | No | No | No | No | No |
| adipohydrazide | No | No | No | No | No | No | No |
| Ammonia | No | No | No | No | No | No | No |
| ammonia, anhydrous | No | No | No | No | No | No | No |
| magnesium carbonate | No | No | No | No | No | No | No |
| 2-Ethoxyethanol | No | No | No | Yes | No | No | No |
| 2-methyl-2H-isothiazol-3-one | No | No | No | No | No | No | No |
| Ethanediol | No | No | No | Yes | No | No | No |
| Formaldehyde | No | No | No | Yes | No | No | No |

**12.6 Other adverse effects** : No known significant effects or critical hazards.

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

**Product**

**Methods of disposal** : The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

**European waste catalogue (EWC)** : 080111*, 200127*

**Packaging**

**Methods of disposal** : The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

**Special precautions** : This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

## SECTION 14: Transport information

| | ADR/RID | ADN | IMDG | IATA |
|---|---|---|---|---|
| **14.1 UN number** | Not regulated. | Not regulated. | Not regulated. | Not regulated. |
| **14.2 UN proper shipping name** | - | - | - | - |
| **14.3 Transport hazard class(es)** | - | - | - | - |
| **14.4 Packing group** | - | - | - | - |
| **14.5 Environmental hazards** | No. | No. | No. | No. |

**14.6 Special precautions for user** : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

## SECTION 14: Transport information

**14.7 Transport in bulk according to IMO instruments** : Not relevant/applicable due to nature of the product.

## SECTION 15: Regulatory information

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

#### UK (GB)/REACH

##### Annex XIV - List of substances subject to authorisation

###### Annex XIV

None of the components are listed.

###### Substances of very high concern

| Intrinsic property | Ingredient name | Status | Reference number | Date of revision |
|---|---|---|---|---|
| Toxic to reproduction | 2-ethoxyethanol | Candidate | - | 12/15/2010 |

##### Ozone depleting substances

Not listed.

##### Prior Informed Consent (PIC)

Not listed.

##### Persistent Organic Pollutants

Not listed.

#### Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

| Product/ingredient name | % | Designation [Usage] |
|---|---|---|
| TEKNOCOAT AQUA 2550-02<br>Formaldehyde | ≥90<br><0.1 | 3<br>72 |

#### Seveso Directive

This product is not controlled under the Seveso Directive.

#### National regulations

| Product/ingredient name | List name | Name on list | Classification | Notes |
|---|---|---|---|---|
| Formaldehyde | EH40/2005 WELs | - | Carc | - |

#### EU regulations

**Industrial emissions (integrated pollution prevention and control) - Air** : Not listed

**Industrial emissions (integrated pollution prevention and control) - Water** : Not listed

#### International regulations

##### Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

##### Montreal Protocol

Not listed.

##### Stockholm Convention on Persistent Organic Pollutants

Not listed.

##### Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

## SECTION 15: Regulatory information

**UNECE Aarhus Protocol on POPs and Heavy Metals**

Not listed.

**15.2 Chemical safety assessment** : This product contains substances for which Chemical Safety Assessments are still required.

## SECTION 16: Other information

Indicates information that has changed from previously issued version.

**Abbreviations and acronyms** : ATE = Acute Toxicity Estimate
GB CLP = UK CLP (EC No 1272/2008) on the Classification, Labelling and Packaging of Substances and Mixtures as amended by (EU Exit) Regulations 2019 No. 720 and amendments
DMEL = Derived Minimal Effect Level
DNEL = Derived No Effect Level
EUH statement = GB CLP-specific Hazard statement
N/A = Not available
PBT = Persistent, Bioaccumulative and Toxic
PNEC = Predicted No Effect Concentration
RRN = REACH Registration Number
SGG = Segregation Group
vPvB = Very Persistent and Very Bioaccumulative

**Procedure used to derive the classification**

| Classification | Justification |
|---|---|
| Skin Sens. 1, H317 | Calculation method |

**Full text of abbreviated H statements**

| | |
|---|---|
| H221 | Flammable gas. |
| H226 | Flammable liquid and vapour. |
| H280 | Contains gas under pressure; may explode if heated. |
| H301 | Toxic if swallowed. |
| H302 | Harmful if swallowed. |
| H311 | Toxic in contact with skin. |
| H314 | Causes severe skin burns and eye damage. |
| H315 | Causes skin irritation. |
| H317 | May cause an allergic skin reaction. |
| H318 | Causes serious eye damage. |
| H319 | Causes serious eye irritation. |
| H330 | Fatal if inhaled. |
| H331 | Toxic if inhaled. |
| H332 | Harmful if inhaled. |
| H335 | May cause respiratory irritation. |
| H341 | Suspected of causing genetic defects. |
| H350 | May cause cancer. |
| H360FD | May damage fertility. May damage the unborn child. |
| H373 | May cause damage to organs through prolonged or repeated exposure. |
| H400 | Very toxic to aquatic life. |
| H410 | Very toxic to aquatic life with long lasting effects. |
| H411 | Toxic to aquatic life with long lasting effects. |
| EUH071 | Corrosive to the respiratory tract. |

**Full text of classifications**

| | |
|---|---|
| Acute Tox. 2 | ACUTE TOXICITY - Category 2 |
| Acute Tox. 3 | ACUTE TOXICITY - Category 3 |
| Acute Tox. 4 | ACUTE TOXICITY - Category 4 |
| Aquatic Acute 1 | SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 1 |
| Aquatic Chronic 1 | LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 1 |
| Aquatic Chronic 2 | LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2 |
| Carc. 1B | CARCINOGENICITY - Category 1B |
| Eye Dam. 1 | SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1 |
| Eye Irrit. 2 | SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2 |
| Flam. Gas 2 | FLAMMABLE GASES - Category 2 |
| Flam. Liq. 3 | FLAMMABLE LIQUIDS - Category 3 |

## SECTION 16: Other information

| | |
|---|---|
| Muta. 2 | GERM CELL MUTAGENICITY - Category 2 |
| Press. Gas (Comp.) | GASES UNDER PRESSURE - Compressed gas |
| Repr. 1B | REPRODUCTIVE TOXICITY - Category 1B |
| Skin Corr. 1B | SKIN CORROSION/IRRITATION - Category 1B |
| Skin Irrit. 2 | SKIN CORROSION/IRRITATION - Category 2 |
| Skin Sens. 1 | SKIN SENSITISATION - Category 1 |
| Skin Sens. 1A | SKIN SENSITISATION - Category 1A |
| STOT RE 2 | SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 2 |
| STOT SE 3 | SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 3 |

**Date of issue/ Date of revision** : 23/04/2025

**Date of previous issue** : 14/09/2023

**Version** : 3



**Notice to reader**

**The information in this SDS is based on the present state of our knowledge and on current laws. The product is not to be used for purposes other than those specified under section 1 without first obtaining written handling instructions. It is always the responsibility of the user to take all necessary steps to fulfil the demands set out in the local rules and legislation. The information in this SDS is meant to be a description of the safety requirements for our product. It is not to be considered a guarantee of the product's properties.**