

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

**Precautionary statements:**

**P102** – Keep out of reach of children.

**P280** – Wear protective gloves/protective clothing/eye protection/face protection.

**P302 + P335 + P334** – IF ON SKIN: Brush off loose particles from skin. Immerse in cool water [or wrap in wet bandages].

**P305 + P351 + P338** – IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

**P333 + P313** – If skin irritation or rash occurs: Get medical advice/attention.

**P501** – Dispose of contents/container in accordance with local regulations.

**2.3. Other hazards:**

The product has no other known specific hazards for human or environment.

Results of PBT and vPvB assessment: No data available.

Endocrine disrupting property: Based on available data, does not contain endocrine disruptors.

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

**3.1. Substances:**

Not applicable.

**3.2. Mixtures:**

| Description   | CAS number | EC number / ECHA list number | REACH registration number | Conc. (%)   | Classification according to Regulation (EC) No 1272/2008 (CLP) |  |  |
|---|------------|------------------------------|---------------------------|-------------|--|--|--|
|   |            |                              |                           |             | Pictogram, signal word code(s)                                 | Hazard class and category code(s)  | Hazard statement code(s)   |
| <b>Glyoxal***</b><br>Index number:<br>605-016-00-7  | 107-22-2   | 203-474-9                    | 01-<br>2119461733-37      | <0.000005   | GHS07<br>GHS08<br>Warning                                      | Muta. 2<br>Acute Tox. 4<br>Eye Irrit. 2<br>Skin Irrit. 2<br>Skin Sens. 1<br>STOT SE 3  | H341<br>H332<br>H319<br>H315<br>H317<br>H335                           |
| <b>Ammonia (18% solution)</b><br>Index number:<br>007-001-01-2  | 1336-21-6  | 215-647-6                    | -                         | 0.05        | GHS05<br>GHS09<br>Danger                                       | Skin Corr. 1B<br>Aquatic Acute 1   | H314<br>H400   |
| <b>Tetrahydro-1,3,4,6-tetrakis(hydroxymethyl)imidazo[4,5-d]imidazole-2,5(1H,3H)-dione*</b>  | 5395-50-6  | 226-408-0                    | -                         | 0.02-0.05   | GHS07<br>Warning   | Skin Sens. 1B  | H317   |
| <b>Reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)</b><br>Index number:<br>613-167-00-5 | 55965-84-9 | -                            | 01-<br>2120764691-48      | 0.001-0.002 | GHS06<br>GHS05<br>GHS09<br>Danger                              | Acute Tox. 2<br>Acute Tox. 2<br>Acute Tox. 3<br>Skin Corr. 1C<br>Eye Dam. 1<br>Skin Sens. 1A<br>Aquatic Acute 1<br>M =100<br>Aquatic Chronic 1<br>M =100 | H330<br>H310<br>H301<br>H314<br>H318<br>H317<br>H400<br>H410<br>EUH071 |
| <b>Ethanediol**/***</b><br>Index number:<br>603-027-00-1  | 107-21-1   | 203-473-3                    | 01-<br>2119456816-28      | 0.25        | GHS07<br>GHS08<br>Warning                                      | Acute Tox. 4<br>STOT RE 2  | H302<br>H373   |

|  |            |           |                               |                   |                                   |  |  |
|--|------------|-----------|-------------------------------|-------------------|-----------------------------------|--|--|
| <b>1-Tetradecanol*</b>   | 112-72-1   | 204-000-3 | 01-<br>2119485910-33          | <0.001            | GHS07<br>GHS09<br>Warning         | Eye Irrit. 2<br>Aquatic<br>Chronic 1   | H319<br>H410   |
| <b>Bronopol (INN)</b><br>Index number:<br>603-085-00-8                     | 52-51-7    | 200-143-0 | 01-<br>2119980938-15          | <0.0001           | GHS05<br>GHS07<br>GHS09<br>Danger | Acute Tox. 4<br>Acute Tox. 4<br>STOT SE 3<br>Skin Irrit. 2<br>Eye Dam. 1<br>Aquatic<br>Acute 1<br>M =10<br>Aquatic<br>Chronic 2                                  | H312<br>H302<br>H335<br>H315<br>H318<br>H400<br>H411                   |
| <b>alpha-isotridecyl-<br/>omega-<br/>hydroxypolyglycole<br/>ther *</b>     | 9043-30-5  | 500-027-2 | -                             | 0.2-0.3           | GHS05<br>Danger                   | Eye Dam. 1<br>Aquatic<br>Chronic 3   | H318<br>H412   |
| <b>Titanium dioxide*</b>   | 13463-67-7 | 236-675-5 | 01-<br>2119489379-<br>17-0014 | 0.9-1             | -                                 | not classified   | -  |
| <b>Trimethylol<br/>propane*</b>  | 77-99-6    | 201-074-9 | 01-<br>2119486799-10          | 0.00095-<br>0.004 | GHS08<br>Warning                  | Repr. 2  | H361fd   |
| <b>Octhilinone (ISO)</b><br>Index number:<br>613-112-00-5                  | 26530-20-1 | 247-761-7 | -                             | 0.1               | GHS06<br>GHS05<br>GHS09<br>Danger | Acute Tox. 2<br>Acute Tox. 3<br>Acute Tox. 3<br>Skin Corr. 1<br>Eye Dam. 1<br>Skin Sens.<br>1A<br>Aquatic<br>Acute 1<br>M =100<br>Aquatic<br>Chronic 1<br>M =100 | H330<br>H311<br>H301<br>H314<br>H318<br>H317<br>H400<br>H410<br>EUH071 |
| <b>Terbutryn*</b>  | 886-50-0   | 212-950-5 | -                             | 0.08              | GHS07<br>GHS09<br>Warning         | Acute Tox. 4<br>Skin Sens. 1B<br>Aquatic<br>Acute 1<br>M =100<br>Aquatic<br>Chronic 1<br>M =100  | H302<br>H317<br>H400<br>H410   |
| <b>1,2-Benzisothiazol-<br/>3(2 H)-one</b><br>Index number:<br>613-088-00-6 | 2634-33-5  | 220-120-9 | 01-<br>2120761540-60          | <0.00002          | GHS05<br>GHS06<br>GHS09<br>Danger | Acute Tox. 2<br>Acute Tox. 4<br>Skin Irrit. 2<br>Eye Dam. 1<br>Skin Sens. 1<br>Aquatic<br>Acute 1<br>M =1<br>Aquatic<br>Chronic 1<br>M =1                        | H330<br>H302<br>H315<br>H318<br>H317<br>H400<br>H410                   |



**2-Methylisothiazol-3(2H)-one** (CAS: 2682-20-4):

oral: ATE = 120 mg/kg

dermal: ATE = 300 mg/kg bw

inhalation: ATE = 0,134 mg/L/4 h (dust or mist)

Specific concentration limits:

**Ammonia solution** (CAS: 1336-21-6):

STOT SE 3; H335: C ≥ 5 %

**Tetrahydro-1,3,4,6-tetrakis(hydroxymethyl)imidazo[4,5-d]imidazole-2,5(1H,3H)-dione** (CAS: 5395-50-6):

Skin Sens. 1B; H317: C ≥ 32 %

**Reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)** (CAS: 55965-84-9):

Skin Corr. 1C; H314: C ≥ 0,6 %

Skin Irrit. 2; H315: 0,06 % ≤ C < 0,6 %

Eye Dam. 1; H318: C ≥ 0,6 %

Eye Irrit. 2; H319: 0,06 % ≤ C < 0,6 %

Skin Sens. 1A; H317: C ≥ 0,0015 %

**2-Octyl-2H-isothiazol-3-one** (CAS: 26530-20-1):

Skin Sens. 1A; H317: C ≥ 0,0015 %

**Terbutryn** (CAS: 886-50-0):

Skin Sens. 1B; H317: C ≥ 3 %

**1,2-Benzisothiazol-3(2H)-one** (CAS: 2634-33-5):

Skin Sens. 1A; H317: C ≥ 0,036 %

**2-Methylisothiazol-3(2H)-one** (CAS: 2682-20-4):

Skin Sens. 1A; H317: C ≥ 0,0015 %

It does not contain any other substance considered to be hazardous to health or to the environment, which is classified as a PBT or vPvB substance, which has a workplace exposure limit value, or its concentration does not reach the level specified in the relevant legislation and therefore it does not need to be included in the safety data sheet.

For the full text of hazard statements, see Section 16.

## SECTION 4: FIRST AID MEASURES

### 4.1. Description of first aid measures:

**General information:** Take off contaminated clothing immediately.

No action shall be taken involving any personal risk or without suitable training.

In case of doubt or persistent symptoms, seek medical advice.

#### INGESTION:

Measures:

- Rinse mouth with water.
- Give the victim plenty of water to drink.
- Immediately call a physician.

#### INHALATION:

Measures:

- Take the victim into fresh air, loosen his clothes and let him rest.
- In case of complaints, obtain medical help.

#### SKIN CONTACT:

Measures:

- Take off contaminated clothing and shoes.
- Wash the skin with plenty of water and soap (for 15 minutes).
- In case of symptoms, obtain medical attention.

#### EYE CONTACT:

Measures:

- In case of contact with eyes, flush with water holding eyelids apart and moving the eyeballs (for at least 15 minutes).
- In case of complaints, obtain medical help.

- 4.2. **Most important symptoms and effects, both acute and delayed:**  
May cause an allergic skin reaction.
- 4.3. **Indication of any immediate medical attention and special treatment needed:**  
No special treatment needed; treat symptomatically.

## SECTION 5: FIREFIGHTING MEASURES

- 5.1. **Extinguishing media:**
- 5.1.1. **Suitable extinguishing media:**  
Water fog, foam, dry chemical, carbon dioxide.
- 5.1.2. **Unsuitable extinguishing media:**  
Full water jet.
- 5.2. **Special hazards arising from the substance or mixture:**  
In case of fire, smoke and other combustion products may be formed; the inhalation of such combustion products can have serious adverse effects on health.
- 5.3. **Advice for firefighters:**  
Wear full protective clothing and self-contained breathing apparatus.  
Cool the fire affected containers with water spray.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

- 6.1. **Personal precautions, protective equipment and emergency procedures:**
- 6.1.1. **For non-emergency personnel:**  
Allow only well-trained experts wearing suitable protective clothing to abide in the field of accident.
- 6.1.2. **For emergency responders:**  
Avoid contact with skin, eyes and clothing.  
Ensure adequate ventilation.
- 6.2. **Environmental precautions:**  
Dispose of the spillage and the resulting waste according to the applicable environmental regulations. Do not allow the product and the resulting waste to enter sewers/soil/surface or ground water. Notify the respective authorities in accordance with local law in the case of environmental pollution immediately.
- 6.3. **Methods and material for containment and cleaning up:**  
Collect the spilled product with non-combustible absorbent, then place into a suitable, closed, properly labelled, hazardous chemical waste container for removal/disposal.
- 6.4. **Reference to other sections:**  
For further and detailed information see Sections 8 and 13.

## SECTION 7: HANDLING AND STORAGE

- 7.1. **Precautions for safe handling:**  
Observe conventional hygiene precautions.  
Avoid contact with skin, eyes and clothing.  
Wash hands thoroughly after the use of this product.  
Observe the pertinent regulations on industrial safety and basic hygiene rules.  
**Technical measures:**  
Ensure adequate ventilation.  
Wear appropriate personal protective equipment.  
For information on personal protective equipment, see Section 8.  
**Precautions against fire and explosion:**  
No special measures required.
- 7.2. **Conditions for safe storage, including any incompatibilities:**  
**Technical measures and storage condition:**  
Keep in the original, closed and appropriately labelled container.  
The place of storage has to be properly ventilated and cleanable.  
Keep away from food, drink and animal feed.  
**Incompatible materials:** See Section 10.5.  
**Packaging material:** No special prescriptions.
- 7.3. **Specific end use(s):**  
No specific instructions available.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1. Control parameters:

**Occupational exposure limit values** (Commission Directive (EC) No 2000/39 of 8 June 2000):

**Ammonia, anhydrous** (CAS: 7664-41-7): Eight hours: 14 mg/m<sup>3</sup>, 20 ppm; Short-term: 36 mg/m<sup>3</sup>, 50 ppm

**Ethylene glycol** (CAS: 107-21-1): Eight hours: 52 mg/m<sup>3</sup>, 20 ppm; Short-term: 104 mg/m<sup>3</sup>, 40 ppm (Notation: skin)

**Isobutyric acid, monoester with 2,2,4-trimethylpentane-1,3-diol** (CAS: 25265-77-4):

#### DNEL values:

Worker:

Dermal exposure, systemic: 13.9 mg/kg bw/d

Inhalative exposure, systemic: 49 mg/m<sup>3</sup>

Consumer:

Oral exposure, systemic: 8.33 mg/kg bw/d

Dermal exposure, systemic: 8.33 mg/kg bw/d

Inhalative exposure, systemic: 14.5 mg/m<sup>3</sup>

| PNEC values                  |             |          |
|------------------------------|-------------|----------|
| Compartment                  | Value       | Note(s)  |
| Freshwater                   | 0.015 mg/l  | no notes |
| Marine water                 | 0.002 mg/l  | no notes |
| Freshwater sediment          | 0.78 mg/kg  | no notes |
| Marine water sediment        | 0.078 mg/kg | no notes |
| Sewage Treatment Plant (STP) | 7.5 mg/l    | no notes |
| Intermittent release         | nincs adat  | no notes |
| Secondary poisoning          | nincs adat  | no notes |
| Soil                         | 0.147 mg/kg | no notes |

**Ethanediol** (CAS: 107-21-1):

| DNEL values |          | Oral exposure      |                     | Dermal exposure    |                     | Inhalative exposure |                      |
|-------------|----------|--------------------|---------------------|--------------------|---------------------|---------------------|----------------------|
|             |          | Short term (acute) | Long term (chronic) | Short term (acute) | Long term (chronic) | Short term (acute)  | Long term (chronic)  |
| Consumer    | Local    | no data            | no data             | no data            | no data             | no data             | 7 mg/m <sup>3</sup>  |
|             | Systemic | no data            | no data             | no data            | 53 mg/kg bw/d       | no data             | no data              |
| Worker      | Local    | no data            | no data             | no data            | no data             | no data             | 35 mg/m <sup>3</sup> |
|             | Systemic | no data            | no data             | no data            | 106 mg/kg bw/d      | no data             | no data              |

| PNEC values                  |            |          |
|------------------------------|------------|----------|
| Compartment                  | Value      | Note(s)  |
| Freshwater                   | 10 mg/l    | no notes |
| Marine water                 | 1 mg/l     | no notes |
| Freshwater sediment          | 20.9 mg/kg | no notes |
| Marine water sediment        | nincs adat | no notes |
| Sewage Treatment Plant (STP) | 199.5 mg/l | no notes |
| Intermittent release         | 10 mg/l    | no notes |
| Secondary poisoning          | nincs adat | no notes |
| Soil                         | 1.53 mg/kg | no notes |

**Bronopol (INN) (CAS: 52-51-7):**

| DNEL values |          | Oral exposure      |                     | Dermal exposure    |                     | Inhalative exposure    |                       |
|-------------|----------|--------------------|---------------------|--------------------|---------------------|------------------------|-----------------------|
|             |          | Short term (acute) | Long term (chronic) | Short term (acute) | Long term (chronic) | Short term (acute)     | Long term (chronic)   |
| Consumer    | Local    | no data            | no data             | 0.008 mg/kg bw/d   | 0.008 mg/kg bw/d    | 1.3 mg/m <sup>3</sup>  | 1.3 mg/m <sup>3</sup> |
|             | Systemic | 1.1 mg/kg bw/d     | 0.35 mg/kg bw/d     | 4.2 mg/kg bw/d     | 1.4 mg/kg bw/d      | 3.7 mg/m <sup>3</sup>  | 1.2 mg/m <sup>3</sup> |
| Worker      | Local    | no data            | no data             | 0.013 mg/kg bw/d   | 0.013 mg/kg bw/d    | 4.2 mg/m <sup>3</sup>  | 4.2 mg/m <sup>3</sup> |
|             | Systemic | no data            | no data             | 7 mg/kg bw/d       | 2.3 mg/kg bw/d      | 12.3 mg/m <sup>3</sup> | 4.1 mg/m <sup>3</sup> |

**8.2. Exposure controls:**

In case of a hazardous material with no controlled concentration limit it is the employer's duty to keep concentration levels down to a minimum achievable by existing scientific and technological means, where the hazardous substance poses no harm to workers.

**8.2.1. Appropriate engineering controls:**

In pursuance of work is proper foresight needed to avoid spilling onto clothes and floors and to avoid contact with eyes and skin.

**8.2.2. Individual protection measures, such as personal protective equipment:**

Observe the general safety regulations when handling chemicals.

- Eye/face protection:** Use appropriate protective glasses (EN ISO 16321-1:2022; EN 166).
- Skin protection:**
  - Hand protection:** Use appropriate protective gloves (EN 374).
  - Other:** Use appropriate protective clothing.
- Respiratory protection:** Use appropriate respiratory protective device.
- Thermal hazards:** No thermal hazards known.

**8.2.3. Environmental exposure controls:**

No specific prescription.

The requirements detailed in Section 8 assume skilled work under normal conditions and usage of the product for appropriate aims. If conditions differ from normal or work is carried out under extreme conditions, an expert's advice is necessary before deciding upon further protective measures.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

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

| Parameter   | Value / Test method / Remarks                            |
|---|--|
| 1. Physical state   | liquid (suspension)                                      |
| 2. Colour   | white, and in factory premixed VARIO colour card colours |
| 3. Odour, odour threshold                                   | slight, sweetish   |
| 4. Melting point/freezing point                             | no data*   |
| 5. Boiling point or initial boiling point and boiling range | no data*   |
| 6. Flammability   | no data*   |
| 7. Lower and upper explosion limit                          | no data*   |
| 8. Flash point  | no data*   |
| 9. Auto-ignition temperature                                | no data*   |
| 10. Decomposition temperature                               | no data*   |
| 11. pH  | 8-9 (20 °C)  |
| 12. Kinematic viscosity                                     | no data*   |
| 13. Solubility in water                                     | no data*   |
| in other solvents   | no data*   |
| 14. Partition coefficient n-octanol/water (log value)       | no data*   |
| 15. Vapour pressure   | no data*   |
| 16. Density and/or relative density                         | no data*   |
| 17. Relative vapour density                                 | no data*   |
| 18. Particle characteristics                                | no data*   |



**9.2. Other information:**

**9.2.1. Information with regard to physical hazard classes:**

No further data available or not applicable for the product.

**9.2.2. Other safety characteristics:**

No other characteristics available.

\*: The manufacturer did not carry out any tests on this parameter for the product or the results of the tests are not available at the time of publication of the data sheet, or the property is not applicable for the product.

## SECTION 10: STABILITY AND REACTIVITY

**10.1. Reactivity:**

No dangerous reactions if stored and handled according to the instructions.

**10.2. Chemical stability:**

Stable within normal temperature and under general work conditions.

**10.3. Possibility of hazardous reactions:**

No hazardous reactions known.

**10.4. Conditions to avoid:**

No conditions to avoid known.

**10.5. Incompatible materials:**

No incompatible materials known.

**10.6. Hazardous decomposition products:**

No hazardous decomposition products known.

## SECTION 11: TOXICOLOGICAL INFORMATION

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

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

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

**Serious eye damage/irritation:** Based on available data, the classification criteria are not met.

**Respiratory or skin sensitisation:** May cause an allergic skin reaction.

**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.

**11.1.1. Summaries of the information derived from the test conducted:**

No data available.

**11.1.2. Relevant toxicological properties:**

Information about the components:

Acute toxicity:

**Glyoxal** (CAS: 107-22-2):

LD<sub>50</sub> (oral): 200 mg/kg

LC<sub>50</sub> (inhalative, rat, dust/mist): 2.44 mg/l/4 h

ATE (oral): 200 mg/kg bw

ATE (inhalative, gas): 4500 ppmv/4 h

ATE (inhalative, vapour): 11 mg/l/4 h

ATE (inhalative, dust/mist): 2.44 mg/l/4 h

**Ammonia (solution)** (CAS: 1336-21-6):

LD<sub>50</sub> (oral, rat): 350 mg/kg

**Isobutyric acid, monoester with 2,2,4-trimethylpentane-1,3-diol** (CAS: 25265-77-4):

LD<sub>50</sub> (oral, rat): 6500 mg/kg

LD<sub>50</sub> (dermal, rabbit): 15200 mg/kg

LC<sub>50</sub> (inhalative, rat): > 3.55 mg/l

**Ethanediol** (CAS: 107-21-1):

LD<sub>50</sub> (dermal, mouse, male/female): > 3500 mg/kg

LC<sub>50</sub> (inhalative, rat, dust/mist): > 2.5 mg/l/6 h

**Bronopol (INN)** (CAS: 52-51-7):

LD<sub>50</sub> (oral, rat): 193-211 mg/kg

LD<sub>50</sub> (dermal, rat): > 2000 mg/kg

**Reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)** (CAS: 55965-84-9):

LD<sub>50</sub> (oral, rat): 550 mg/kg

LD<sub>50</sub> (dermal, rabbit): 200-1000 mg/kg

LC<sub>50</sub> (inhalative, rat): 0.31 mg/l/4 h

**Titanium dioxide** (CAS: 13463-67-7):

LD<sub>50</sub> (oral, rat): > 5000 mg/kg

LC<sub>50</sub> (inhalative, rat): > 6.82 mg/l/4 h

**Trimethylol propane** (CAS: 77-99-6):

LD<sub>50</sub> (oral, rat): > 14000 mg/kg

LC<sub>50</sub> (inhalative, rat): > 0.29 mg/l/4 h

**Limestone** (CAS: 1317-65-3):

LD<sub>50</sub> (oral, rat): > 5000 mg/kg

**Natural stone** (CAS: 999999-99-4):

LD<sub>50</sub> (oral): > 5000 mg/kg bw (Weir, 1974)

**1,2-Benzisothiazol-3(2 H)-one** (CAS: 2634-33-5):

oral: ATE = 450 mg/kg bw

inhalation: ATE = 0,21 mg/L (dusts or mists)

Skin corrosion/irritation:

**Ethanediol** (CAS: 107-21-1):

Not skin irritant (rabbit).

**Limestone** (CAS: 1317-65-3):

Not skin irritant.

**Natural stone** (CAS: 999999-99-4):

Not skin irritant (rabbit, in vivo, OECD 404)

Serious eye damage/irritation:

**Ammonia (18% solution)** (CAS: 1336-21-6):

Serious eye irritant (rabbit)

**Isobutyric acid, monoester with 2,2,4-trimethylpentane-1,3-diol** (CAS: 25265-77-4):

Not eye irritant (rabbit, OECD 405)

**Ethanediol** (CAS: 107-21-1):

Not eye irritant (rabbit)

**Limestone** (CAS: 1317-65-3):

Not eye irritant.

Respiratory or skin sensitisation:

**Tetrahydro-1,3,4,6-tetrakis(hydroxymethyl)imidazo[4,5-d]imidazole-2,5(1H,3H)-dione** (CAS: 5395-50-6):

Skin sensitizing (guinea pig, OECD 406).

**Reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)** (CAS: 55965-84-9):

Skin sensitizing (guinea pig, OECD 406)

**Isobutyric acid, monoester with 2,2,4-trimethylpentane-1,3-diol** (CAS: 25265-77-4):

Not sensitizing (guinea pig).

**Ethanediol** (CAS: 107-21-1):

Not sensitizing (maximalization test, guinea pig, OECD 406)

**Octhilnone (ISO)** (CAS: 26530-20-1):

Skin sensitizing (mouse, OECD 429)

**Terbutryn** (CAS: 886-50-0):

Skin sensitizing (mouse, OECD 429)

Germ cell mutagenicity:

**Isobutyric acid, monoester with 2,2,4-trimethylpentane-1,3-diol** (CAS: 25265-77-4):

Negative (revers mutation and micronucleus assays, bacteria and mammalian cells showed no mutagenic effects).

**Ethanediol** (CAS: 107-21-1):

Not mutagenic (bacterial and mammalian cell culture studies).

**Natural stone** (CAS: 999999-99-4):

Not mutagenic (in vitro, OECD 471)

Carcinogenicity:

**Ethanediol** (CAS: 107-21-1):

Based on animal studies it is not carcinogenic.

**Natural stone** (CAS: 999999-99-4):

Concerns for lung cancer at high occupational exposure (inhalable crystalline silica may be produced during work with the product). The excess risk is limited to people with silicosis.

Reproductive toxicity:

**1-isopropyl-2,2-dimethyltrimethylene diisobutyrate** (CAS: 6846-50-0):

Suspected of damaging fertility and the unborn child.

**Ethanediol** (CAS: 107-21-1):

Based on animal studies it has no effects on fertility.

**Natural stone** (CAS: 999999-99-4):

No effect on fetal development, maternal or fetal survival (oral, rabbit).

STOT-single exposure:

**Glyoxal** (CAS: 107-22-2):

May cause respiratory irritation.

STOT-repeated exposure:

**Isobutyric acid, monoester with 2,2,4-trimethylpentane-1,3-diol** (CAS: 25265-77-4):

NOAEL (oral, rat): 1000 mg/kg

**Ethanediol** (CAS: 107-21-1):

Repeated or prolonged exposure may damage the kidneys.

**Natural stone** (CAS: 999999-99-4):

In case of prolonged and/or mass exposure (due to respirable crystalline silica), it may cause silicosis, which is nodular pulmonary fibrosis due to the deposition of fine respirable particles of crystalline silica in the lungs.

**11.1.3. Information on likely routes of exposure:**

Ingestion, inhalation, skin contact, eye contact.

**11.1.4. Symptoms related to the physical, chemical and toxicological characteristics:**

Information about the components:

**Ammonia (18% solution)** (CAS: 1336-21-6):

Inhalation can be harmful, causing severe damage to mucous membranes and upper respiratory tract tissues. In contact with eyes, may cause lacrimation and burns. In contact with skin may cause burns, may be harmful if absorbed through skin. Ingestion may cause burns, may be harmful.

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

May cause an allergic skin reaction.

**11.1.6. Interactive effects:**

No data available.

**11.1.7. Absence of specific data:**

No information.

**11.2. Information on other hazards:**

**Endocrine disrupting properties:**

Endocrine disrupting property: Based on available data, does not contain endocrine disruptors.

**Other information:**

No data available.

## SECTION 12: ECOLOGICAL INFORMATION

**12.1. Toxicity:**

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

Information about the components:

**Glyoxal** (CAS: 107-22-2):

LC<sub>50</sub> (fish): 86 mg/l

**Tetrahydro-1,3,4,6-tetrakis(hydroxymethyl)imidazo[4,5-d]imidazole-2,5(1H,3H)-dione** (CAS: 5395-50-6):

EC<sub>50</sub> (*Desmodesmus subspicatus*): 8.5 mg/l/72 h (OECD 201)

EC<sub>50</sub> (*Skeletonema costatum*): 2.2 mg/l/72 h (OECD 201)

EC<sub>50</sub> (*Acartia tonsa*): 79.8 mg/l/48 h

EC<sub>50</sub> (*Daphnia magna*): > 38.9 mg/l/48 h (OECD 202)

LC<sub>50</sub> (*Brachydanio rerio*): 17.6 mg/l/96 h (OECD 203)

NOEC (*Daphnia magna*): 11.2 mg/l/21d (OECD 211)

NOEC (algae): 3.93 mg/l/72 h (OECD 201)

NOEC (Skeletoema costatum): 1.16 mg/l/72 h (OECD 201)

**Reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)** (CAS: 55965-84-9):

EC50 (Pseudokirchneriella subcapitata): 0.048 mg/l/72 h (OECD 201)

EC50 (Daphnia magna): 0.1 mg/l/48 h (OECD 202)

EC50 (Skeletoema costatum): 0.0052 mg/l/72 h (OECD 201, RAC)

LC50 (Onchorhynchus mykiss): 0.22 mg/l/96 h (OECD 203)

NOEC (Daphnia magna): 0.004 mg/l/21d (OECD 211)

NOEC (Onchorhynchus mykiss): 0.098 mg/l/28 nap (OECD 215)

NOEC (Pseudokirchneriella subcapitata): 0.0012 mg/l/72 h (OECD 201)

EC50 (active sludge): 7.92 mg/l/3 h (OECD 209)

EC20 (active sludge): 0.97 mg/l/3 h (OECD 209)

**Ethanediol** (CAS: 107-21-1):

LC50 (Pimephales promelas): 72.860 mg/l/96 h (static, EPA OPP 72-1)

EC50 (Daphnia magna): > 100 mg/l/48 h (OECD 202)

EC50 (Selenastrum capricornutum): 6500-13000 mg/l/96 h (growth rate)

EC20 (active sludge): > 1995 mg/l/0,5 h (ISO 8192)

NOEC (Pimephales promelas): 15380 mg/l/7d

NOEC (Ceriodaphnia dubia): 8590 mg/l/7d

**1-Tetradecanol** (CAS: 112-72-1):

NOEC (Daphnia): > 0.001-0.01 mg/l (OECD 211)

**Bronopol (INN)** (CAS: 52-51-7):

EC50 (algae): 0.4-2.8 mg/l/72 h

EC50 (Daphnia magna): 1.4 mg/l/48 h

LC50 (Onchorhynchus mykiss): 41.2 mg/l/96 h

**Titanium dioxide** (CAS: 13463-67-7):

LC50 (Pimephales promelas): > 1000 mg/l/96 h

LC50 (Alburnus alburnus): > 1000 mg/l/96 h

EC50 (Pseudokirchneriella subcapitata): 61 mg/l/72 h

EC50 (Daphnia magna): > 1000 mg/l/48 h

**Trimethylol propane** (CAS : 77-99-6):

EC50 (Pseudokirchneriella subcapitata): > 1000 mg/l/72 h

EC50 (Daphnia magna): 13000 mg/l/48 h

**Limestone** (CAS: 1317-65-3):

LC50 (Onchorhynchus mykiss): > 10000 mg/l/96 h

EC50 (Daphnia magna): > 1000 mg/l/48 h

EC50 (Desmodesmus subspicatus): > 200 mg/l/72 h

**Occhilinone (ISO)** (CAS: 26530-20-1):

EC10 (Navicula peliculosa): 0.000224 mg/l/48 h (OECD 201, RAC)

EC50 (Desmodesmus subspicatus): 0.084 mg/l/72 h (OECD 201)

EC50 (Skeletoema costatum): 0.0015 mg/l/72 h (OECD 201, OCSPP 850.5400)

EC50 (Navicula peliculosa): 0.00129 mg/l/48 h (OECD 201, RAC)

EC50 (Daphnia magna): 0.42 mg/l/48 h (OECD 202)

LC50 (Onchorhynchus mykiss): 0.0036 mg/l/96 h (OECD 203)

NOEC (Daphnia magna): 0.002 mg/l/21d (OECD 211)

NOEC (Onchorhynchus mykiss): 0.022 mg/l/28d (OECD 210)

NOEC (Skeletoema costatum): 0.00068 mg/l/72 h (OECD 201, OCSPP 850.5400)

EC50 (active sludge): 10.4 mg/l/0.5 h (TTC test)

EC20 (active sludge): 7.3 mg/l/3 h (OECD 209)

**Terbutryn** (CAS: 886-50-0):

EC50 (Desmodesmus subspicatus): 0.067 mg/l/72 h (OECD 201)

EC50 (Daphnia magna): 6,4 mg/l/48 h (OECD 202)

LC50 (Onchorhynchus mykiss): 1.9 mg/l/96 h (OECD 203)

NOEC (Daphnia magna): 0.05 mg/l/21d (OECD 211)

NOEC (Pimephales promelas): 0.073 mg/l/28d (OECD 210)

NOEC (Desmodesmus subspicatus): 0.0005 mg/l/72 h (OECD 201)

EC20 (active sludge): > 100 mg/l/3 h (OECD 209)

## 12.2. **Persistence and degradability:**

Information about the components:

**Tetrahydro-1,3,4,6-tetrakis(hydroxymethyl)imidazo[4,5-d]imidazole-2,5(1H,3H)-dione** (CAS: 5395-50-6):

Degradability: > 70 % (OECD 301)

**Reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)** (CAS: 55965-84-9):

Degradability: > 60 % (OECD 301 D, closed cup)

**Ethanediol** (CAS: 107-21-1):

Readily degradable.

Degradability: 90 - 100 % (aerobic; active sludge; 53 mg/l; Dissolved organic carbon (DOC); exposition time: 10 day) (OECD 301 A)

**Octhilinone (ISO)** (CAS: 26530-20-1):

Degradability: 0.6 surface water (1.4 day, OECD 309), 1.6 marine water (2.1 day, OECD 309).

**Terbutryn** (CAS: 886-50-0):

Degradability: 0 % (7.7 nap, aerobic/anaerobic, OECD 301 F, OECD 307).

**12.3. Bioaccumulative potential:**

Information about the components:

**Glyoxal** (CAS: 107-22-2):

Log Pow: -1.15

**Tetrahydro-1,3,4,6-tetrakis(hydroxymethyl)imidazo[4,5-d]imidazole-2,5(1H,3H)-dione** (CAS: 5395-50-6):

Log Kow: 2 (OECD 107)

BCF: 1.41 (calculated, EPIWIN)

**Reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)** (CAS: 55965-84-9):

Log Kow: ≤ 0.71

BCF: 3.16 (calculated)

**Ethanediol** (CAS: 107-21-1):

Log Kow: kb. -1.36 (23 °C, calculated)

**Octhilinone (ISO)** (CAS: 26530-20-1):

BCF: 500-2000 (flow test, fish, OECD 305)

Log Kow: 2.92 (OECD 117)

**Terbutryn** (CAS: 886-50-0):

BCF: 103 (calculated, EPIWIN)

Log Kow: 3.19 (OECD 117)

**12.4. Mobility in soil:**

Information about the components:

**Ethanediol** (CAS: 107-21-1):

Not absorbed in solid soil.

**12.5. Results of PBT and vPvB assessment:**

No data available.

**12.6. Endocrine disrupting properties:**

Endocrine disrupting property: Based on available data, does not contain endocrine disruptors.

**12.7. Other adverse effects:**

No data available.

## SECTION 13: DISPOSAL CONSIDERATIONS

**13.1. Waste treatment methods:**

Disposal according to the local regulations.

**13.1.1. Information regarding the disposal of the product:**

Dispose of in accordance with applicable regulations.

Do not empty into drains.

**List of Waste Code:**

No waste disposal key according to the List of Waste Code (LoW code) can be determined for this product, as only the purpose of application defined by the user enables an allocation. The LoW code number has to be determined after a discussion with a waste disposal specialist.

**13.1.2. Information regarding the disposal of the packaging:**

Dispose of in accordance with applicable regulations.

The uncleaned packaging has to be disposed of in the same manner as the product itself.

**13.1.3. Physical/chemical properties that may affect waste treatment options shall be specified:**

No data available.

**13.1.4. Sewage disposal:**

No data available.

**13.1.5. Special precautions for any recommended waste treatment:**

No data available.

## SECTION 14: TRANSPORT INFORMATION

ADR/RID; ADN; IMDG; IATA:

Not subject to the conventions of carriage of dangerous goods.

- 14.1. **UN number or ID number:**  
No UN or ID number.
- 14.2. **UN proper shipping name:**  
No proper shipping name.
- 14.3. **Transport hazard class(es):**  
No transport hazard classes.
- 14.4. **Packing group:**  
No packing group.
- 14.5. **Environmental hazards:**  
Not applicable.
- 14.6. **Special precautions for user:**  
No relevant information available.
- 14.7. **Maritime transport in bulk according to IMO instruments:**  
Not applicable.

## SECTION 15: REGULATORY INFORMATION

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

**REGULATION (EC) No 1907/2006** OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive (EC) No 1999/45 and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive (EEC) No 76/769 and Commission Directives (EEC) No 91/155, (EEC) No 93/67, (EC) No 93/105 and (EC) No 2000/21

**REGULATION (EC) No 1272/2008** OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives (EEC) No 67/548 and (EC) No 1999/45, and amending Regulation (EC) No 1907/2006

**COMMISSION REGULATION (EU) 2020/878** of 18 June 2020 amending Annex II to Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)

The mixture contains substance listed in Annex XVII to Regulation (EC) No 1907/2006 of the European Parliament and of the Council:

**Ethanediol** (CAS: 107-21-1):

Conditions of restriction: Entry 3.

- 15.2. **Chemical safety assessment:** No information.

## SECTION 16: OTHER INFORMATION

**Information regarding the revision of the safety data sheet:**

The safety data sheet has been revised according to Regulation (EU) 2020/878 (Section 1-16).

The composition and hazard classification of the mixture were not modified compared to the previous version.

This safety data sheet supersedes all previous versions according to Annex II of Regulation (EC) No 1907/2006.

**Literature references / data sources:**

Previous version of the safety data sheet (24. 03. 2025, version 1).

**Methods used for the classification according to Regulation (EC) No 1272/2008:**

| Classification                                  | Method                      |
|---|-----------------------------|
| Sensitisation - Skin, hazard category 1A – H317 | Based on calculation method |

**Relevant hazard statements (code and full text) of Sections 2 and 3:**

**H301** – Toxic if swallowed.  
**H302** – Harmful if swallowed.  
**H310** – Fatal in contact with skin.  
**H311** – Toxic in contact with skin.  
**H312** – Harmful 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.  
**H332** – Harmful if inhaled.  
**H335** – May cause respiratory irritation.  
**H341** – Suspected of causing genetic defects *<state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>*.  
**H361f** – Suspected of damaging fertility.  
**H361fd** – Suspected of damaging fertility. Suspected of damaging the unborn child.  
**H373** – May cause damage to organs *<or state all organs affected, if known>* through prolonged or repeated exposure *<state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>*.  
**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.  
**H412** – Harmful to aquatic life with long lasting effects.  
**EUH 071** – Corrosive to the respiratory tract.

**Training advice:** No data available.

**Full text of the abbreviations in the safety data sheet:**

ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways.  
ADR: Agreement concerning the International Carriage of Dangerous Goods by Road.  
ATE: Acute Toxicity Estimate.  
AOX: Adsorbable organic halides.  
BCF: Bioconcentration factor.  
BOD: Biological Oxygen Demand.  
CAS number: Chemical Abstract Service number.  
CLP: Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures.  
CMR effects: Carcinogenic, mutagenic, reprotoxic effects.  
COD: Chemical Oxygen Demand.  
CSA: Chemical Safety Assessment.  
CSR: Chemical Safety Report.  
DNEL: Derived-No-Effect-Level.  
ECHA: European Chemical Agency.  
EC: European Community.  
EC number: EINECS and ELINCS numbers (see also EINECS and ELINCS).  
EEC: European Economic Community.  
EEA: European Economic Area (EU + Iceland, Liechtenstein and Norway).  
EINECS: European Inventory of Existing Commercial Chemical Substances.  
ELINCS: European List of Notified Chemical Substances.  
EN: European Norm.  
EU: European Union.  
EuPCS: European Product Categorisation System.  
EWC: European Waste Catalogue (replaced by LoW – see below).  
GHS: Globally Harmonized System of Classification and Labelling of Chemicals.  
IATA: International Air Transport Association.  
ICAO-TI: Technical Instructions for the Safe Transport of Dangerous Goods by Air.  
IMDG: International Maritime Dangerous Goods.  
IMO: International Maritime Organization.  
IMSBC: International Maritime Solid Bulk Cargoes.  
IUCLID: International Uniform Chemical Information Database.  
IUPAC: International Union of Pure and Applied Chemistry.  
Kow: n-Octanol - Water Partition Coefficient.  
LC50: Lethal concentration resulting in 50 % mortality.  
LD50: Lethal dose resulting in 50 % mortality (median lethal dose).

LoW: List of Waste.  
LOEC: Lowest Observed Effect Concentration.  
LOEL: Lowest Observed Effect Level.  
NOEC: No Observed Effect Concentration.  
NOEL: No Observed Effect Level.  
NOAEC: No Observed Adverse Effect Concentration.  
NOAEL: No Observed Adverse Effect Level.  
OECD: Organization for Economic Cooperation and Development.  
OSHA: Occupational Safety and Health Administration.  
PBT: Persistent, Bioaccumulative and Toxic.  
PNEC: Predicted No Effect Concentration.  
QSAR: Quantitative Structure Activity Relationship.  
REACH: Regulation 1907/2006/EC concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals.  
RID: Regulations Concerning the International Transport of Dangerous Goods by Rail.  
SCBA: Self Contained Breathing Apparatus.  
SDS: Safety Data Sheet.  
STOT: Specific Target Organ Toxicity.  
SVHC: Substances of Very High Concern.  
UN: United Nations.  
UVCB: Chemical Substances of Unknown or Variable Composition, Complex Reaction Products or of Biological Materials.  
VOC: Volatile Organic Compound.  
vPvB: very Persistent and very Bioaccumulative.

This safety data sheet had been prepared on the basis of information provided by the manufacturer/supplier and conform to the relevant regulations.

The information, data and recommendations contained herein are provided in good faith, obtained from reliable sources and believed to be true and accurate as of the date issued; however, no representation is made as to the comprehensiveness of the information.

The SDS shall be used only as a guide for handling the product; in the course of handling and using the product other considerations may arise or be required.

Users are cautioned to determine the appropriateness and applicability of the above information to their particular circumstances and purposes and assume all risk associated with the use of this product.

It is the responsibility of the user to fully comply with local, national and international regulations concerning the use of this product.

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Safety data sheet was prepared by:  
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