# Div Aqua B 96

**Revision:** 2024-08-08 **Version:** 05.3

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

### 1.1 Product identifier
**Trade name:** Div Aqua B 96

UFI: K406-20YP-M00T-TGTN

### 1.2 Relevant identified uses of the substance or mixture and uses advised against
**Product use:** Cooling water treatment / Cooling brine.
for process water disinfection
For industrial use only..

**Uses advised against:** Uses other than those identified are not recommended.

**SWED - Sector-specific worker exposure description :**
AISE_SWED_IS_8b_1
AISE_SWED_IS_4_1

### 1.3 Details of the supplier of the safety data sheet
Diversey Europe Operations BV, De Corridor 4, 3621ZB Breukelen [Maarssenbroeksedijk 2, 3542DN Utrecht], The Netherlands

**Contact details**
Diversey Ltd
Weston Favell Centre, Northampton NN3 8PD, United Kingdom
Tel: 01604 405311, Fax: 01604 406809
Regulatory Email: customerservice.uk@solenis.com

### 1.4 Emergency telephone number
Seek medical advice (show the label or safety data sheet where possible)
For medical or environmental emergency only:
call 0800 052 0185

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

Skin corrosion, Category 1C (H314)
Serious eye damage, Category 1 (H318)
Skin sensitisation, Category 1 (H317)
Acute aquatic toxicity, Category 1 (H400)
Chronic aquatic toxicity, Category 1 (H410)

### 2.2 Label elements


**Signal word:** Danger.

Contains 5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1) (Methylchloroisothiazolinone, Methylisothiazolinone)

**Hazard statements:**
H314 - Causes severe skin burns and eye damage.
H317 - May cause an allergic skin reaction.
H410 - Very toxic to aquatic life with long lasting effects.

**Precautionary statements:**
P280 - Wear protective gloves, protective clothing and eye or face protection.
P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 - Immediately call a POISON CENTRE, doctor or physician.

**Further indications on the label:**
Contains: preservative.

**2.3 Other hazards**
No other hazards known.

## SECTION 3: Composition/information on ingredients

**3.2 Mixtures**

| Ingredient(s) | EC number | CAS number | REACH number | Classification | Notes | Weight percent |
|---|---|---|---|---|---|---|
| magnesium nitrate | 233-826-7 | 10377-60-3 | 01-2119491164-38 | Oxidising solids, Category 3 (H272)<br>Skin irritation, Category 2 (H315)<br>Eye irritation, Category 2 (H319) | | 1-3 |
| 5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1) | 220-239-6<br>247-500-7 | 55965-84-9 | [6] | Acute toxicity - Dermal, Category 2 (H310)<br>Acute toxicity - Inhalation, Category 2 (H330)<br>Acute toxicity - Oral, Category 3 (H301)<br>Skin corrosion, Category 1C (H314)<br>EUH071<br>Serious eye damage, Category 1 (H318)<br>Skin sensitisation, Sub-category 1A (H317)<br>Acute aquatic toxicity, Category 1 M=100 (H400)<br>Chronic aquatic toxicity, Category 1 M=100 (H410) | | 1-3 |

**Specific concentration limits**
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1):
• Skin sensitisation, Category 1 (H317) >= 0.0015%
• Serious eye damage, Category 1 (H318) >= 0.6% > Eye irritation, Category 2 (H319) >= 0.06%
• Skin corrosion, Category 1C (H314) >= 0.6% > Skin irritation, Category 2 (H315) >= 0.06%

Workplace exposure limit(s), if available, are listed in subsection 8.1.
ATE, if available, are listed in section 11.
[6] Exempted: biocidal active. See Article 15(2) of Regulation (EC) No 1907/2006.
For the full text of the H and EUH phrases mentioned in this Section, see Section 16..

## SECTION 4: First aid measures

**4.1 Description of first aid measures**

**General Information:** Symptoms of intoxication may even occur after several hours. It is recommended to continue medical observation for at least 48 hours after the incident. If unconscious place in recovery position and seek medical advice. Provide fresh air. If breathing is irregular or stopped, administer artificial respiration. No mouth-to-mouth or mouth-to-nose resuscitation. Use Ambu bag or ventilator.

**Inhalation:** Remove person to fresh air and keep comfortable for breathing. Get medical attention or advice if you feel unwell.

**Skin contact:** Wash skin with plenty of lukewarm, gently flowing water for at least 30 minutes. Wash skin with plenty of lukewarm, gently flowing water. Take off immediately all contaminated clothing and wash it before reuse. Immediately call a POISON CENTRE, doctor or physician. If skin irritation occurs: Get medical advice or attention.

**Eye contact:** Hold eyelids apart and flush eyes with plenty of lukewarm water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTRE, doctor or physician.

**Ingestion:** Rinse mouth. Immediately drink 1 glass of water. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Keep at rest. Immediately call a POISON CENTRE, doctor or physician.

**Self-protection of first aider:** Consider personal protective equipment as indicated in subsection 8.2.

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

**Inhalation:** No known effects or symptoms in normal use.

**Skin contact:** Causes severe burns. May cause an allergic skin reaction.

**Eye contact:** Causes severe or permanent damage.

**Ingestion:** Ingestion will lead to a strong caustic effect on mouth and throat and to the danger of perforation of oesophagus and stomach.

**4.3 Indication of any immediate medical attention and special treatment needed**
No information available on clinical testing and medical monitoring. Specific toxicological information on substances, if available, can be found in section 11.

## SECTION 5: Firefighting measures

**5.1 Extinguishing media**
Carbon dioxide. Dry powder. Water spray jet. Fight larger fires with water spray jet or alcohol-resistant foam.

**5.2 Special hazards arising from the substance or mixture**
No special hazards known.

**5.3 Advice for firefighters**
As in any fire, wear self contained breathing apparatus and suitable protective clothing including gloves and eye/face protection.

## SECTION 6: Accidental release measures

**6.1 Personal precautions, protective equipment and emergency procedures**
Wear suitable protective clothing. Wear eye/face protection. Wear suitable gloves.

**6.2 Environmental precautions**
Dilute with plenty of water. Do not allow to enter drainage system, surface or ground water. Do not allow to enter the ground/soil. Inform responsible authorities in case undiluted product reaches drainage system, surface or ground water or the ground/soil.

**6.3 Methods and material for containment and cleaning up**
Dyke to collect large liquid spills. Absorb with liquid-binding material (sand, diatomite, universal binders). Do not place spilled materials back into the original container. Collect in closed and suitable containers for disposal.

**6.4 Reference to other sections**
For personal protective equipment see subsection 8.2. For disposal considerations see section 13.

## SECTION 7: Handling and storage

**7.1 Precautions for safe handling**
**Measures to prevent fire and explosions:**
No special precautions required.
**Measures required to protect the environment:**
For environmental exposure controls see subsection 8.2.
**Advices on general occupational hygiene:**
Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. Do not mix with other products unless adviced by Diversey. Wash face, hands and any exposed skin thoroughly after handling. Take off immediately all contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Avoid contact with skin and eyes. Use only with adequate ventilation. See chapter 8.2, Exposure controls / Personal protection.

**7.2 Conditions for safe storage, including any incompatibilities**
Store in accordance with local and national regulations. Store in a closed container. Keep only in original packaging.
For conditions to avoid see subsection 10.4. For incompatible materials see subsection 10.5.

Comah - Lower Tier requirements (tonnes): 100
Comah - Upper Tier requirements (tonnes): 200

**7.3 Specific end use(s)**
No specific advice for end use available.

## SECTION 8: Exposure controls/personal protection

**8.1 Control parameters**
**Workplace exposure limits**

Air limit values, if available:

Biological limit values, if available:

**Recommended monitoring procedures, if available:**

**Additional exposure limits under the conditions of use, if available:**

**DNEL/DMEL and PNEC values**
**Human exposure**
DNEL/DMEL oral exposure - Consumer (mg/kg bw)

| Ingredient(s) | Short term - Local effects | Short term - Systemic effects | Long term - Local effects | Long term - Systemic effects |
|---|---|---|---|---|
| magnesium nitrate | - | - | - | 12.5 |
| 5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and | - | - | - | - |

| | | | | |
|---|---|---|---|---|
| 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1) | | | | |

DNEL/DMEL dermal exposure - Worker

| Ingredient(s) | Short term - Local effects | Short term - Systemic effects (mg/kg bw) | Long term - Local effects | Long term - Systemic effects (mg/kg bw) |
|---|---|---|---|---|
| magnesium nitrate | No data available | - | No data available | 20.8 |
| 5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1) | - | - | - | - |

DNEL/DMEL dermal exposure - Consumer

| Ingredient(s) | Short term - Local effects | Short term - Systemic effects (mg/kg bw) | Long term - Local effects | Long term - Systemic effects (mg/kg bw) |
|---|---|---|---|---|
| magnesium nitrate | No data available | - | No data available | 12.5 |
| 5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1) | - | - | - | - |

DNEL/DMEL inhalatory exposure - Worker (mg/m³)

| Ingredient(s) | Short term - Local effects | Short term - Systemic effects | Long term - Local effects | Long term - Systemic effects |
|---|---|---|---|---|
| magnesium nitrate | - | - | - | 36.7 |
| 5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1) | - | - | - | - |

DNEL/DMEL inhalatory exposure - Consumer (mg/m³)

| Ingredient(s) | Short term - Local effects | Short term - Systemic effects | Long term - Local effects | Long term - Systemic effects |
|---|---|---|---|---|
| magnesium nitrate | - | - | - | 10.9 |
| 5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1) | - | - | - | - |

**Environmental exposure**

Environmental exposure - PNEC

| Ingredient(s) | Surface water, fresh (mg/l) | Surface water, marine (mg/l) | Intermittent (mg/l) | Sewage treatment plant (mg/l) |
|---|---|---|---|---|
| magnesium nitrate | 0.45 | 0.045 | 4.5 | 18 |
| 5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1) | - | - | - | - |

Environmental exposure - PNEC, continued

| Ingredient(s) | Sediment, freshwater (mg/kg) | Sediment, marine (mg/kg) | Soil (mg/kg) | Air (mg/m³) |
|---|---|---|---|---|
| magnesium nitrate | - | - | - | - |
| 5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1) | - | - | - | - |

**8.2 Exposure controls**

*The following information applies for the uses indicated in subsection 1.2 of the Safety Data Sheet.*
*If available, please refer to the product information sheet for application and handling instructions.*
*Normal use conditions are assumed for this section.*

*Recommended safety measures for handling the undiluted product:*

**Appropriate engineering controls:** If the product is diluted by using specific dosing systems with no risk of splashes or direct skin contact, the personal protection equipment as described in this section is not required.

**Appropriate organisational controls:** Avoid direct contact and/or splashes where possible. Train personnel.

**REACH use scenarios considered for the undiluted product:**

| | SWED - Sector-specific worker exposure description | LCS | PROC | Duration (min) | ERC |
|---|---|---|---|---|---|
| Automatic transfer and dilution | AISE_SWED_IS_8b_1 | IS | PROC 8b | 60 | ERC4 |

**Personal protective equipment**

**Eye / face protection:** Safety glasses or goggles (EN 16321 / EN 166). The use of a full-face shield or other full-face protection is strongly recommended when handling open containers or if splashes may occur.

**Hand protection:** Chemical-resistant protective gloves (EN 374). Verify instructions regarding permeability and breakthrough time, as provided by the gloves supplier. Consider specific local use conditions, such as risk of splashes, cuts, contact time and temperature.
Suggested gloves for prolonged contact: Material: butyl rubber Penetration time: ≥ 480 min Material thickness: ≥ 0.7 mm

Suggested gloves for protection against splashes: Material: nitrile rubber Penetration time: ≥ 30 min Material thickness: ≥ 0.4 mm
In consultation with the supplier of protective gloves a different type providing similar protection may be chosen.

**Body protection:** No special requirements under normal use conditions. Wear chemical-resistant clothing and boots in case direct dermal exposure and/or splashes may occur (EN 14605).

**Respiratory protection:** No special requirements under normal use conditions.

**Environmental exposure controls:** Should not reach sewage water or drainage ditch undiluted or unneutralised.

*Recommended safety measures for handling the diluted product:*

**Recommended maximum concentration (% w/w):** 0.05

**Appropriate engineering controls:** No special requirements under normal use conditions.
**Appropriate organisational controls:** Avoid direct contact and/or splashes where possible. Train personnel.

**REACH use scenarios considered for the diluted product:**

| | SWED | LCS | PROC | Duration (min) | ERC |
|---|---|---|---|---|---|
| Automatic application in a dedicated closed system | AISE_SWED_IS_1_1 | IS | PROC 1 | 480 | ERC4 |
| Automatic application in a dedicated system | AISE_SWED_IS_4_1 | IS | PROC 4 | 480 | ERC8a |

**Personal protective equipment**
**Eye / face protection:** No special requirements under normal use conditions.
**Hand protection:** No special requirements under normal use conditions.
**Body protection:** No special requirements under normal use conditions.
**Respiratory protection:** No special requirements under normal use conditions.

**Environmental exposure controls:** No special requirements under normal use conditions.

## SECTION 9: Physical and chemical properties

**9.1 Information on basic physical and chemical properties**
**Information in this section refers to the product, unless it is specifically stated that substance data is listed**

**Method / remark**

**Physical state:** Liquid
**Colour:** Clear , Pale Colourless Yellow
**Odour:** Product specific
**Odour threshold:** Not applicable
**Melting point/freezing point (°C):** Not determined — Not relevant to classification of this product
**Initial boiling point and boiling range (°C):** Not determined — See substance data

Substance data, boiling point

| Ingredient(s) | Value (°C) | Method | Atmospheric pressure (hPa) |
|---|---|---|---|
| magnesium nitrate | No data available | | |
| 5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1) | No data available | | |

**Method / remark**

**Flammability (solid, gas):** Not applicable to liquids
**Flammability (liquid):** Not flammable.
**Flash point (°C):** Not applicable.
**Sustained combustion:** Not applicable.
*( UN Manual of Tests and Criteria, section 32, L.2 )*
**Lower and upper explosion limit/flammability limit (%):** Not determined

Substance data, flammability or explosive limits, if available:

**Method / remark**

**Autoignition temperature:** Not determined
**Decomposition temperature:** Not applicable.
**pH:** ≈ 4 (neat) — ISO 4316
**Kinematic viscosity:** Not determined
**Solubility in / Miscibility with water:** Fully miscible

Substance data, solubility in water

| Ingredient(s) | Value (g/l) | Method | Temperature (°C) |
|---|---|---|---|
| magnesium nitrate | No data available | | |

| | | | |
|---|---|---|---|
| 5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1) | No data available | | |

Substance data, partition coefficient n-octanol/water (log Kow): see subsection 12.3

**Vapour pressure:** Not determined

**Method / remark**
See substance data

Substance data, vapour pressure

| Ingredient(s) | Value (Pa) | Method | Temperature (°C) |
|---|---|---|---|
| magnesium nitrate | No data available | | |
| 5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1) | 2.2 | Weight of Evidence | 25 |

**Method / remark**

**Relative density:** ≈ 1.03 (20 °C) — OECD 109 (EU A.3)
**Relative vapour density:** No data available. — Not relevant to classification of this product
**Particle characteristics:** No data available. — Not applicable to liquids.

**9.2 Other information**
**9.2.1 Information with regard to physical hazard classes**
**Explosive properties:** Not explosive.
**Oxidising properties:** Not oxidising.
**Corrosion to metals:** Not corrosive

**9.2.2 Other safety characteristics**
No other relevant information available.

## SECTION 10: Stability and reactivity

**10.1 Reactivity**
No reactivity hazards known under normal storage and use conditions.

**10.2 Chemical stability**
Stable under normal storage and use conditions.

**10.3 Possibility of hazardous reactions**
No hazardous reactions known under normal storage and use conditions.

**10.4 Conditions to avoid**
None known under normal storage and use conditions.

**10.5 Incompatible materials**
None known under normal use conditions.

**10.6 Hazardous decomposition products**
None known under normal storage and use conditions.

## SECTION 11: Toxicological information

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

Mixture data: .

**Relevant calculated ATE(s):**
ATE - Oral (mg/kg): >2000
ATE - Dermal (mg/kg): >2000
ATE - Inhalatory, mists (mg/l): >5

Substance data, where relevant and available, are listed below:.

**Acute toxicity**
Acute oral toxicity

| Ingredient(s) | Endpoint | Value (mg/kg) | Species | Method | Exposure time (h) | ATE Oral (mg/kg) |
|---|---|---|---|---|---|---|
| magnesium nitrate | $LD_{50}$ | > 2000 | Rat | OECD 423 (EU B.1 tris) | | Not established |

| | | | | | | |
|---|---|---|---|---|---|---|
| 5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1) | $LD_{50}$ | 64 | Rat | Method not given | | 64 |

Acute dermal toxicity

| Ingredient(s) | Endpoint | Value (mg/kg) | Species | Method | Exposure time (h) | ATE Dermal (mg/kg) |
|---|---|---|---|---|---|---|
| magnesium nitrate | | > 5000 | | | | Not established |
| 5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1) | $LD_{50}$ | 87.12 | Rabbit | Method not given | | 87.12 |

Acute inhalative toxicity

| Ingredient(s) | Endpoint | Value (mg/l) | Species | Method | Exposure time (h) |
|---|---|---|---|---|---|
| magnesium nitrate | | No data available | | | |
| 5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1) | $LC_{50}$ | 0.33 | Rat | | |

Acute inhalative toxicity, continued

| Ingredient(s) | ATE - inhalation, dust (mg/l) | ATE - inhalation, mist (mg/l) | ATE - inhalation, vapour (mg/l) | ATE - inhalation, gas (mg/l) |
|---|---|---|---|---|
| magnesium nitrate | Not established | Not established | Not established | Not established |
| 5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1) | Not established | 0.33 | Not established | Not established |

### Irritation and corrosivity

Skin irritation and corrosivity

| Ingredient(s) | Result | Species | Method | Exposure time |
|---|---|---|---|---|
| magnesium nitrate | Not irritant | | | |
| 5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1) | Corrosive | | Method not given | |

Eye irritation and corrosivity

| Ingredient(s) | Result | Species | Method | Exposure time |
|---|---|---|---|---|
| magnesium nitrate | Irritant | | | |
| 5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1) | Severe damage | | Method not given | |

Respiratory tract irritation and corrosivity

| Ingredient(s) | Result | Species | Method | Exposure time |
|---|---|---|---|---|
| magnesium nitrate | No data available | | | |
| 5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1) | No data available | | | |

### Sensitisation

Sensitisation by skin contact

| Ingredient(s) | Result | Species | Method | Exposure time (h) |
|---|---|---|---|---|
| magnesium nitrate | Not sensitising | | | |
| 5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1) | Sensitising | Guinea pig | Method not given OECD 406 (EU B.6) / GPMT | |

Sensitisation by inhalation

| Ingredient(s) | Result | Species | Method | Exposure time |
|---|---|---|---|---|
| magnesium nitrate | No data available | | | |
| 5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1) | No data available | | | |

### CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

Mutagenicity

| Ingredient(s) | Result (in-vitro) | Method (in-vitro) | Result (in-vivo) | Method (in-vivo) |
|---|---|---|---|---|
| magnesium nitrate | No evidence for mutagenicity | | No data available | |
| 5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1) | No evidence for mutagenicity | Method not given | No data available | |

Carcinogenicity

| Ingredient(s) | Effect |
|---|---|
| magnesium nitrate | No data available |
| 5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and | No evidence for carcinogenicity, negative test results |

| | |
|---|---|
| 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1) | |

Toxicity for reproduction

| Ingredient(s) | Endpoint | Specific effect | Value (mg/kg bw/d) | Species | Method | Exposure time | Remarks and other effects reported |
|---|---|---|---|---|---|---|---|
| magnesium nitrate | | | No data available | | | | |
| 5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1) | | | No data available | | | | No evidence for reproductive toxicity No evidence for teratogenic effects |

**Repeated dose toxicity**

Sub-acute or sub-chronic oral toxicity

| Ingredient(s) | Endpoint | Value (mg/kg bw/d) | Species | Method | Exposure time (days) | Specific effects and organs affected |
|---|---|---|---|---|---|---|
| magnesium nitrate | | No data available | | | | |
| 5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1) | | No data available | | | | |

Sub-chronic dermal toxicity

| Ingredient(s) | Endpoint | Value (mg/kg bw/d) | Species | Method | Exposure time (days) | Specific effects and organs affected |
|---|---|---|---|---|---|---|
| magnesium nitrate | | No data available | | | | |
| 5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1) | | No data available | | | | |

Sub-chronic inhalation toxicity

| Ingredient(s) | Endpoint | Value (mg/kg bw/d) | Species | Method | Exposure time (days) | Specific effects and organs affected |
|---|---|---|---|---|---|---|
| magnesium nitrate | | No data available | | | | |
| 5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1) | | No data available | | | | |

Chronic toxicity

| Ingredient(s) | Exposure route | Endpoint | Value (mg/kg bw/d) | Species | Method | Exposure time | Specific effects and organs affected | Remark |
|---|---|---|---|---|---|---|---|---|
| magnesium nitrate | | | No data available | | | | | |
| 5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1) | | | No data available | | | | | |

STOT-single exposure

| Ingredient(s) | Affected organ(s) |
|---|---|
| magnesium nitrate | No data available |
| 5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1) | No data available |

STOT-repeated exposure

| Ingredient(s) | Affected organ(s) |
|---|---|
| magnesium nitrate | No data available |
| 5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1) | No data available |

**Aspiration hazard**

Substances with an aspiration hazard (H304), if any, are listed in section 3.

**Potential adverse health effects and symptoms**

Effects and symptoms related to the product, if any, are listed in subsection 4.2.

**11.2 Information on other hazards**

**11.2.1 Endocrine disrupting properties**

Endocrine disrupting properties - Human data, if available:

**11.2.2 Other information**
No other relevant information available.

## SECTION 12: Ecological information

**12.1 Toxicity**

No data is available on the mixture .

Substance data, where relevant and available, are listed below:

**Aquatic short-term toxicity**
Aquatic short-term toxicity - fish

| Ingredient(s) | Endpoint | Value (mg/l) | Species | Method | Exposure time (h) |
|---|---|---|---|---|---|
| magnesium nitrate | $LC_{50}$ | > 100 | *Poecilia reticulata* | OECD 203, static Read across | 96 |
| 5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1) | $LC_{50}$ | 0.28 | *Lepomis macrochirus* | OECD 203 (EU C.1) | 96 |

Aquatic short-term toxicity - crustacea

| Ingredient(s) | Endpoint | Value (mg/l) | Species | Method | Exposure time (h) |
|---|---|---|---|---|---|
| magnesium nitrate | $EC_{50}$ | > 100 | *Daphnia magna Straus* | Read across | 48 |
| 5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1) | $EC_{50}$ | 0.126 | *Daphnia magna Straus* | OECD 202 (EU C.2) | 48 |

Aquatic short-term toxicity - algae

| Ingredient(s) | Endpoint | Value (mg/l) | Species | Method | Exposure time (h) |
|---|---|---|---|---|---|
| magnesium nitrate | $EC_{50}$ | > 100 | *Not specified* | Read across | 240 |
| 5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1) | $EC_{50}$ | 0.003 | *Pseudokirchneriella subcapitata* | OECD 201 (EU C.3) | 72 |

Aquatic short-term toxicity - marine species

| Ingredient(s) | Endpoint | Value (mg/l) | Species | Method | Exposure time (days) |
|---|---|---|---|---|---|
| magnesium nitrate | | No data available | | | |
| 5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1) | | No data available | | | |

Impact on sewage plants - toxicity to bacteria

| Ingredient(s) | Endpoint | Value (mg/l) | Inoculum | Method | Exposure time |
|---|---|---|---|---|---|
| magnesium nitrate | | No data available | | | |
| 5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1) | $EC_{20}$ | 0.97 | *Activated sludge* | OECD 209 | 3 hour(s) |

**Aquatic long-term toxicity**
Aquatic long-term toxicity - fish

| Ingredient(s) | Endpoint | Value (mg/l) | Species | Method | Exposure time | Effects observed |
|---|---|---|---|---|---|---|
| magnesium nitrate | | No data available | | | | |
| 5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1) | | No data available | | | | |

Aquatic long-term toxicity - crustacea

| Ingredient(s) | Endpoint | Value (mg/l) | Species | Method | Exposure time | Effects observed |
|---|---|---|---|---|---|---|
| magnesium nitrate | | No data available | | | | |
| 5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1) | | No data available | | | | |

Aquatic toxicity to other aquatic benthic organisms, including sediment-dwelling organisms, if available:

| Ingredient(s) | Endpoint | Value (mg/kg dw sediment) | Species | Method | Exposure time (days) | Effects observed |
|---|---|---|---|---|---|---|
| magnesium nitrate | | No data available | | | | |
| 5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1) | | No data available | | | | |

**Terrestrial toxicity**

Terrestrial toxicity - soil invertebrates, including earthworms, if available:

| Ingredient(s) | Endpoint | Value (mg/kg dw soil) | Species | Method | Exposure time (days) | Effects observed |
|---|---|---|---|---|---|---|
| 5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1) | | No data available | | | | |

Terrestrial toxicity - plants, if available:

| Ingredient(s) | Endpoint | Value (mg/kg dw soil) | Species | Method | Exposure time (days) | Effects observed |
|---|---|---|---|---|---|---|
| 5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1) | | No data available | | | | |

Terrestrial toxicity - birds, if available:

| Ingredient(s) | Endpoint | Value | Species | Method | Exposure time (days) | Effects observed |
|---|---|---|---|---|---|---|
| 5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1) | | No data available | | | | |

Terrestrial toxicity - beneficial insects, if available:

| Ingredient(s) | Endpoint | Value (mg/kg dw soil) | Species | Method | Exposure time (days) | Effects observed |
|---|---|---|---|---|---|---|
| 5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1) | | No data available | | | | |

Terrestrial toxicity - soil bacteria, if available:

| Ingredient(s) | Endpoint | Value (mg/kg dw soil) | Species | Method | Exposure time (days) | Effects observed |
|---|---|---|---|---|---|---|
| 5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1) | | No data available | | | | |

**12.2 Persistence and degradability**

**Abiotic degradation**

Abiotic degradation - photodegradation in air, if available:

| Ingredient(s) | Half-life time | Method | Evaluation | Remark |
|---|---|---|---|---|
| 5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1) | No data available | | | |

Abiotic degradation - hydrolysis, if available:

| Ingredient(s) | Half-life time in fresh water | Method | Evaluation | Remark |
|---|---|---|---|---|
| 5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1) | No data available | | | |

Abiotic degradation - other processes, if available:

| Ingredient(s) | Type | Half-life time | Method | Evaluation | Remark |
|---|---|---|---|---|---|
| 5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1) | | No data available | | | |

**Biodegradation**

Ready biodegradability - aerobic conditions

| Ingredient(s) | Inoculum | Analytical | $DT_{50}$ | Method | Evaluation |
|---|---|---|---|---|---|

| | | method | | | |
|---|---|---|---|---|---|
| magnesium nitrate | | | | | Not applicable (inorganic substance) |
| 5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1) | | Oxygen depletion | > 60% | OECD 301D | Readily biodegradable |

Ready biodegradability - anaerobic and marine conditions, if available:

| Ingredient(s) | Medium & Type | Analytical method | $DT_{50}$ | Method | Evaluation |
|---|---|---|---|---|---|
| 5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1) | | | | | No data available |

Degradation in relevant environmental compartments, if available:

| Ingredient(s) | Medium & Type | Analytical method | $DT_{50}$ | Method | Evaluation |
|---|---|---|---|---|---|
| 5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1) | | | | | No data available |

### 12.3 Bioaccumulative potential

Partition coefficient n-octanol/water (log Kow)

| Ingredient(s) | Value | Method | Evaluation | Remark |
|---|---|---|---|---|
| magnesium nitrate | No data available | | | |
| 5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1) | -0.71 - +0.75 | Method not given | No bioaccumulation expected | |

Bioconcentration factor (BCF)

| Ingredient(s) | Value | Species | Method | Evaluation | Remark |
|---|---|---|---|---|---|
| magnesium nitrate | No data available | | | | |
| 5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1) | No data available | | | | |

### 12.4 Mobility in soil

Adsorption/Desorption to soil or sediment

| Ingredient(s) | Adsorption coefficient Log Koc | Desorption coefficient Log Koc(des) | Method | Soil/sediment type | Evaluation |
|---|---|---|---|---|---|
| magnesium nitrate | No data available | | | | |
| 5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1) | No data available | | | | |

### 12.5 Results of PBT and vPvB assessment

Substances that fulfill the criteria for PBT/vPvB, if any, are listed in section 3.

### 12.6 Endocrine disrupting properties

Endocrine disrupting properties - Environmental effects, if available:

### 12.7 Other adverse effects

No other adverse effects known.

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

**Waste from residues / unused products:** The concentrated contents or contaminated packaging should be disposed of by a certified handler or according to the site permit. Release of waste to sewers is discouraged. The cleaned packaging material is suitable for energy recovery or recycling in line with local legislation.

**European Waste Catalogue:** 16 03 05* - organic wastes containing dangerous substances.

**Empty packaging**

**Recommendation:** Dispose of observing national or local regulations.

**Suitable cleaning agents:** Water, if necessary with cleaning agent.

## SECTION 14: Transport information


**Land transport (ADR/RID), Sea transport (IMDG), Air transport (ICAO-TI / IATA-DGR)**

**14.1 UN number or ID number:** 3265

**14.2 UN proper shipping name:**

Corrosive liquid, acidic, organic, n.o.s. ( 5-chloro-2-methyl-2H-isothiazol-3-one , 2-methyl-2H-isothiazol-3-one )

**14.3 Transport hazard class(es):**

**Transport hazard class (and subsidiary risks):** 8

**14.4 Packing group:** III

**14.5 Environmental hazards:**

**Environmentally hazardous:** Yes

**Marine pollutant:** Yes

**14.6 Special precautions for user:** None known.

**14.7 Maritime transport in bulk according to IMO instruments:** The product is not transported in bulk tankers.

**Other relevant information:**

**ADR**

**Classification code:** C3

**Tunnel restriction code:** (E)

**Hazard identification number:** 80

**IMO/IMDG**

**EmS:** F-A, S-B

The product has been classified, labelled and packaged in accordance with the requirements of ADR and the provisions of the IMDG Code Transport regulations include special provisions for certain classes of dangerous goods packed in limited quantities.

## SECTION 15: Regulatory information

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

**National regulations :**

- Regulation (EC) 1907/2006 - REACH (UK amended)
- Regulation (EC) 1272/2008 - CLP (UK amended)
- Regulation (EC) 1333/2008 - Food additives (UK amended)
- Delegated Regulation (EU) 2017/2100 and Regulation (EU) 2018/605 (UK amended)
- Agreement concerning the International Carriage of Dangerous Goods by Road (ADR)
- International Maritime Dangerous Goods (IMDG) Code

**Authorisations or restrictions (Regulation (EC) No 1907/2006, Title VII respectively Title VIII):** Not applicable.

**Comah - classification:** E1 - Hazardous to the Aquatic Environment in Category Acute 1 or Chronic 1

**15.2 Chemical safety assessment**

A chemical safety assessment has not been carried out on the mixture

## SECTION 16: Other information

*The information in this document is based on our best present knowledge. However, it does not constitute a guarantee for any specific product features and does not establish a legally binding contract*

**SDS code:** MSDS6432 **Version:** 05.3 **Revision:** 2024-08-08

**Reason for revision:**

This data sheet contains changes from the previous version in section(s):, 1, 16

**Classification procedure**

The classification of the mixture is in general based on calculation methods using substance data, as required by Regulation (EC) No 1272/2008. If for certain classifications data on the mixture is available or for example bridging principles or weight of evidence can be used for classification, this will be indicated in the relevant sections of the Safety Data Sheet. See section 9 for physical chemical properties, section 11 for toxicological information and section 12 for ecological information.

**Abbreviations and acronyms:**

- AISE - The international Association for Soaps, Detergents and Maintenance Products
- ATE - Acute Toxicity Estimate
- DNEL - Derived No Effect Limit
- EC50 - effective concentration, 50%
- ERC - Environmental release categories
- EUH - CLP Specific hazard statement
- LC50 - Lethal Concentration, 50% / Median Lethal Concentration
- LCS - Life cycle stage
- LD50 - Lethal Dose, 50% / Median Lethal dose
- NOAEL - No observed adverse effect level
- NOEL - No observed effect level
- OECD - Organisation for Economic Cooperation and Development
- PBT - Persistent, Bioaccumulative and Toxic
- PNEC - Predicted No Effect Concentration
- PROC - Process categories
- REACH number - REACH registration number, without supplier specific part
- vPvB - very Persistent and very Bioaccumulative
- H272 - May intensify fire; oxidiser.
- H301 - Toxic if swallowed.
- H310 - Fatal 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.
- H400 - Very toxic to aquatic life.
- H410 - Very toxic to aquatic life with long lasting effects.
- EUH071 - Corrosive to the respiratory tract.

**End of Safety Data Sheet**