

**Ammonium chloride buffer pH 10 R**

Revision: 26.02.2026

Product code: AC15.01372

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**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1. Product identifier**

Ammonium chloride buffer pH 10 R

UFI: VFD7-F23V-K009-2R1W

**1.2. Relevant identified uses of the substance or mixture and uses advised against****Use of the substance/mixture**

Reagents and laboratory chemicals  
Only for laboratory and analysis purposes.

**Uses advised against**

Do not use for private purposes (household).

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

Company name: AnalytiChem Services, Unipessoal, Lda  
Street: Rua de Júlio Dinis 676 7º  
Place: N-4050-320 Porto  
Telephone: +351 226002917  
E-mail: info@analytichem.com  
Contact person: SDS service department  
E-mail: SDS@analytichem.com  
Internet: www.analytichem.com  
Responsible Department: SDS service department

**Supplier or manufacturer details**

Company name: AnalytiChem Belgium NV  
Street: Industriezone "De Arend" 2  
Place: B-8210 Zedelgem  
Telephone: +32 50 28 83 20  
E-mail: info.be@analytichem.com  
Contact person: SDS service department  
E-mail: SDS@analytichem.com  
Responsible Department: AnalytiChem:  
EU-Belgium: AnalytiChem Belgium, Industriezone "De Arend" 2, 8210 Zedelgem, Belgium, +32 50 28 83 20  
EU-Germany: AnalytiChem Germany, Stempelstrasse 6, 47167 Duisburg, Germany, +49 203 51 94 – 200  
EU-Netherlands: AnalytiChem Netherlands, Communicatieweg 7, 3641 SG Mijdrecht, The Netherlands, +31 297 286848  
UK: AnalytiChem UK, Unit 7 Launton Business Center, Murdock Road, Bicester, OX26 4XB, England, +44 1869 355 500  
USA: AnalytiChem USA, 227 China Road, Winslow, Maine, 04901, United States, +1 800-244-8378  
Canada: AnalytiChem Canada, 21800 Clark Graham Avenue, Baie d'Urfe, H9X 4B6, Canada, +1 514-457-0701  
Australia: ORE Research & Exploration Pty Ltd, 37A Hosie Street, Bayswater North, 3153, Australia, +61 3 9729 0333  
+44 20 3807 3798 (CHEMTREC)

**1.4. Emergency telephone number:****Further Information**

inapplicable, this product is a mixture REACH registration number see section 3

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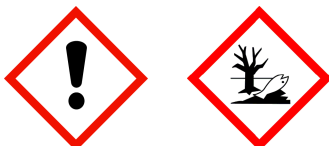
**SECTION 2: Hazards identification****2.1. Classification of the substance or mixture****Regulation (EC) No 1272/2008**

Skin Irrit. 2; H315  
Eye Irrit. 2; H319  
STOT SE 3; H335  
Aquatic Acute 1; H400  
Aquatic Chronic 3; H412

Full text of hazard statements: see SECTION 16.

**2.2. Label elements****Regulation (EC) No 1272/2008****Hazard components for labelling**

Ammonium hydroxide

**Signal word:** Danger**Pictograms:****Hazard statements**

H315 Causes skin irritation.  
H319 Causes serious eye irritation.  
H335 May cause respiratory irritation.  
H400 Very toxic to aquatic life.  
H412 Harmful to aquatic life with long lasting effects.

**Precautionary statements**

P260 Do not breathe mist/vapours/spray.  
P280 Wear protective gloves and eye protection/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 CENTER/doctor.

**2.3. Other hazards**

No data available

**SECTION 3: Composition/information on ingredients****3.2. Mixtures****Chemical characterization**

Mixtures in aqueous solution

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**Relevant ingredients**

| CAS No     | Chemical name   | Quantity   |
|------------|---|------------|
|            | EC No   |            |
|            | Index No  |            |
|            | REACH No  |            |
|            | Classification (Regulation (EC) No 1272/2008)                     |            |
| 1336-21-6  | Ammonium hydroxide  | 5 - < 10 % |
|            | 215-647-6   |            |
|            | 007-001-01-2  |            |
|            | 01-2119488876-14  |            |
|            | Skin Corr. 1B, Aquatic Acute 1, Aquatic Chronic 2; H314 H400 H411 |            |
| 12125-02-9 | ammonium chloride   | 5 - < 10 % |
|            | 235-186-4   |            |
|            | 017-014-00-8  |            |
|            | 01-2119487950-27  |            |
|            | Acute Tox. 4, Eye Irrit. 2; H302 H319                             |            |

Full text of H and EUH statements: see section 16.

**Specific Conc. Limits, M-factors and ATE**

| CAS No     | EC No     | Chemical name   | Quantity   |
|------------|-----------|---|------------|
|            |           | Specific Conc. Limits, M-factors and ATE  |            |
| 1336-21-6  | 215-647-6 | Ammonium hydroxide  | 5 - < 10 % |
|            |           | oral: LD50 = 350 mg/kg STOT SE 3; H335: >= 5 - 100<br>Aquatic Acute 1; H400: M=10 |            |
| 12125-02-9 | 235-186-4 | ammonium chloride   | 5 - < 10 % |
|            |           | dermal: LD50 = > 2000 mg/kg; oral: LD50 = 1410 mg/kg                              |            |

**Further Information**

This product does not contain substances of very high concern according to Regulation (EC) No 1907/2006 (REACH), Article 57 above the respective regulatory concentration limit of = 0.1 % (w/w).

**SECTION 4: First aid measures****4.1. Description of first aid measures****General information**

No data available

**After inhalation**

Provide fresh air.

Call a doctor if you feel unwell.

**After contact with skin**

Wash immediately with: Water

Take off immediately all contaminated clothing and wash it before reuse.

Call a physician immediately.

**After contact with eyes**

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist.

Remove contact lenses, if present and easy to do. Continue rinsing.

Protect uninjured eye.

**After ingestion**

Rinse mouth immediately and drink plenty of water.

Do NOT induce vomiting.

Do not allow a neutralisation agent to be drunk.

Call a physician immediately.

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

Irritant

Cough

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Dyspnoea

Risk of serious damage to eyes.

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

No data available

**SECTION 5: Firefighting measures****5.1. Extinguishing media****Suitable extinguishing media**

Co-ordinate fire-fighting measures to the fire surroundings.

**Unsuitable extinguishing media**

no restriction

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

Non-combustible liquids

Hazardous combustion products

In case of fire may be liberated:

Nitrogen oxides (NO<sub>x</sub>)**5.3. Advice for firefighters**

In case of fire: Wear self-contained breathing apparatus.

In case of fire and/or explosion do not breathe fumes.

Avoid contact with skin, eyes and clothes.

**Additional information**

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

Move undamaged containers from immediate hazard area if it can be done safely.

Use water spray jet to protect personnel and to cool endangered containers.

**SECTION 6: Accidental release measures****6.1. Personal precautions, protective equipment and emergency procedures****General advice**

Do not breathe vapour/aerosol.

**For non-emergency personnel**

Provide adequate ventilation.

Use personal protection equipment.

Avoid contact with skin, eyes and clothes.

Remove persons to safety.

Emergency procedures

Consult an expert

Do not breathe dust/fume/gas/mist/vapours/spray.

**For emergency responders**

Precautionary statements For emergency responders : Personal protection equipment: see section 8

**6.2. Environmental precautions**

Do not allow to enter into surface water or drains.

**6.3. Methods and material for containment and cleaning up****For containment**

Cover drains.

Prevent spread over a wide area (e.g. by containment or oil barriers).

Collect in closed and suitable containers for disposal.

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents).

**For cleaning up**

Clean contaminated articles and floor according to the environmental legislation.

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**Other information**

- Provide adequate ventilation.
- Do not breathe dust/fume/gas/mist/vapours/spray.
- Wear breathing apparatus if exposed to vapours/dusts/aerosols.

**6.4. Reference to other sections**

- Safe handling: see section 7
- Personal protection equipment: see section 8
- Disposal: see section 13

**SECTION 7: Handling and storage****7.1. Precautions for safe handling****Advice on safe handling**

- Read label before use. Handle and open container with care.
- When using do not eat, drink, smoke, sniff.
- Use personal protection equipment. Use extractor hood (laboratory).
- Provide adequate ventilation. Do not breathe vapour/aerosol.
- Avoid contact with skin, eyes and clothes.

**Advice on protection against fire and explosion**

- Usual measures for fire prevention.

**Advice on general occupational hygiene**

- Keep away from food, drink and animal feedingstuffs. Remove contaminated, saturated clothing immediately.
- Draw up and observe skin protection programme. Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat or drink. Avoid: aerosol or mist formation Do not breathe vapour/aerosol.

**Further information on handling**

- Draw up and observe skin protection programme.
- Wash hands and face before breaks and after work and take a shower if necessary.
- Take off immediately all contaminated clothing and wash it before reuse.

**7.2. Conditions for safe storage, including any incompatibilities****Requirements for storage rooms and vessels**

- Keep container tightly closed.

**Hints on joint storage**

- Take national regulations into account.

**Further information on storage conditions**

- Keep away from heat.
- Protect from sunlight.

**7.3. Specific end use(s)**

- Laboratory chemicals

**SECTION 8: Exposure controls/personal protection****8.1. Control parameters**

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**Exposure limits (EH40)**

| CAS No     | Substance               | ppm | mg/m <sup>3</sup> | fibres/ml | Category      | Origin |
|------------|-------------------------|-----|-------------------|-----------|---------------|--------|
| 7664-41-7  | Ammonia, anhydrous      | 25  | 18                |           | TWA (8 h)     | WEL    |
|            |                         | 35  | 25                |           | STEL (15 min) | WEL    |
| 12125-02-9 | Ammonium chloride, fume | -   | 10                |           | TWA (8 h)     | WEL    |
|            |                         | -   | 20                |           | STEL (15 min) | WEL    |

**DNEL/DMEL values**

| CAS No                   | Substance          | Exposure route | Effect   | Value                  |
|--------------------------|--------------------|----------------|----------|------------------------|
| 1336-21-6                | Ammonium hydroxide |                |          |                        |
| Worker DNEL, long-term   |                    | inhalation     | systemic | 47,6 mg/m <sup>3</sup> |
| Worker DNEL, acute       |                    | inhalation     | systemic | 47,6 mg/m <sup>3</sup> |
| Worker DNEL, long-term   |                    | inhalation     | local    | 14 mg/m <sup>3</sup>   |
| Worker DNEL, acute       |                    | inhalation     | local    | 36 mg/m <sup>3</sup>   |
| Worker DNEL, long-term   |                    | dermal         | systemic | 6,8 mg/kg bw/day       |
| Worker DNEL, acute       |                    | dermal         | systemic | 6,8 mg/kg bw/day       |
| Consumer DNEL, long-term |                    | inhalation     | systemic | 23,8 mg/m <sup>3</sup> |
| Consumer DNEL, acute     |                    | inhalation     | systemic | 23,8 mg/m <sup>3</sup> |
| Consumer DNEL, long-term |                    | inhalation     | local    | 2,8 mg/m <sup>3</sup>  |
| Consumer DNEL, acute     |                    | inhalation     | local    | 7,2 mg/m <sup>3</sup>  |
| Consumer DNEL, long-term |                    | dermal         | systemic | 68 mg/kg bw/day        |
| Consumer DNEL, acute     |                    | dermal         | systemic | 68 mg/kg bw/day        |
| Consumer DNEL, long-term |                    | oral           | systemic | 6,8 mg/kg bw/day       |
| Consumer DNEL, acute     |                    | oral           | systemic | 6,8 mg/kg bw/day       |
| 12125-02-9               | ammonium chloride  |                |          |                        |
| Worker DNEL, long-term   |                    | inhalation     | systemic | 33,5 mg/m <sup>3</sup> |
| Worker DNEL, long-term   |                    | dermal         | systemic | 190 mg/kg bw/day       |
| Consumer DNEL, long-term |                    | inhalation     | systemic | 9,9 mg/m <sup>3</sup>  |
| Consumer DNEL, long-term |                    | dermal         | systemic | 114 mg/kg bw/day       |
| Consumer DNEL, long-term |                    | oral           | systemic | 11,4 mg/kg bw/day      |

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**PNEC values**

| CAS No  | Substance          | Value       |
|---|--------------------|-------------|
| Environmental compartment                       |                    |             |
| 1336-21-6                                       | Ammonium hydroxide |             |
| Freshwater                                      |                    | 0,001 mg/l  |
| Freshwater (intermittent releases)              |                    | 0,007 mg/l  |
| Marine water                                    |                    | 0,001 mg/l  |
| 12125-02-9 ammonium chloride                    |                    |             |
| Freshwater                                      |                    | 1,2 mg/l    |
| Freshwater (intermittent releases)              |                    | 1,2 mg/l    |
| Marine water                                    |                    | 11,2 mg/l   |
| Microorganisms in sewage treatment plants (STP) |                    | 16,2 mg/l   |
| Soil  |                    | 0,163 mg/kg |

**8.2. Exposure controls****Appropriate engineering controls**

Technical measures and the application of suitable work processes have priority over personal protection equipment.

If handled uncovered, arrangements with local exhaust ventilation have to be used.

**Individual protection measures, such as personal protective equipment****Eye/face protection**

goggles

Wear eye/face protection.

**Hand protection**

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Suitable examples are gloves of KCL GmbH, D-36124 Eichenzell, e-mail: [vertrieb@kcl.de](mailto:vertrieb@kcl.de) with the following specification (test according to EN 374):

By long-term hand contact

Trade name/designation: KCL 730 Camatril® Velours

Recommended material: NBR (Nitrile rubber) 0,4 mm

Wearing time with permanent contact: > 480 min

By short-term hand contact

Trade name/designation: KCL 741 Dermatril® L

Recommended material: NBR (Nitrile rubber) 0,11 mm

Wearing time with occasional contact (splashes): > 480 min

The breakthrough times stated above were determined by KCL in laboratory tests acc. to EN374 with samples of the recommended glove types. This recommendation applies only to the product stated in the safety data sheet supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: [www.kcl.de](http://www.kcl.de)).

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**Skin protection**

Wear suitable protective clothing. Take off immediately all contaminated clothing.

Wash hands before breaks and after work.

The choice of body protection depends on the concentration and quantity of hazardous substances. The chemical resistance of protective agents must be clarified with their suppliers.

**Respiratory protection**

Respiratory protection necessary at: aerosol or mist formation

The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.

**Thermal hazards**

No data available

**Environmental exposure controls**

Do not allow to enter into surface water or drains.

**SECTION 9: Physical and chemical properties****9.1. Information on basic physical and chemical properties**

|   |                   |                          |
|---|-------------------|--------------------------|
| Physical state:   | Liquid            |                          |
| Colour:   | colourless        |                          |
| Odour:  | stinging          |                          |
| Odour threshold:  | No data available |                          |
| Melting point/freezing point:                             |                   | No data available        |
| Boiling point or initial boiling point and boiling range: |                   | No data available        |
| Flammability:   |                   | No data available        |
| Lower explosion limits:                                   |                   | No data available        |
| Upper explosion limits:                                   |                   | No data available        |
| Flash point:  |                   | No data available        |
| Auto-ignition temperature:                                |                   | No data available        |
| Decomposition temperature:                                |                   | No data available        |
| pH-Value:   |                   | 10                       |
| Viscosity / kinematic:                                    |                   | No data available        |
| Water solubility:   |                   | completely miscible      |
| Solubility in other solvents                              |                   |                          |
| No data available   |                   |                          |
| Dissolution rate:   |                   | No data available        |
| Partition coefficient n-octanol/water:                    |                   | No data available        |
| Dispersion stability:                                     |                   | No data available        |
| Vapour pressure:  |                   | No data available        |
| (at 20 °C)  |                   |                          |
| Vapour pressure:  |                   | No data available        |
| Density:  |                   | 0,9712 g/cm <sup>3</sup> |
| Relative density:   |                   | No data available        |
| Bulk density:   |                   | No data available        |
| Relative vapour density:                                  |                   | No data available        |
| Particle characteristics:                                 |                   | No data available        |

**9.2. Other information****Information with regard to physical hazard classes**

Explosive properties

No data available

Sustained combustibility:

No data available

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Self-ignition temperature

Solid:

No data available

Gas:

No data available

Oxidizing properties

No data available

**Other safety characteristics**

Evaporation rate:

No data available

Solvent separation test:

No data available

Solvent content:

0%

Solid content:

0%

Sublimation point:

No data available

Softening point:

No data available

Pour point:

No data available

No data available:

Viscosity / dynamic:

No data available

Flow time:

No data available

**Further Information**

No data available

**SECTION 10: Stability and reactivity****10.1. Reactivity**

No data available

**10.2. Chemical stability**

No data available

**10.3. Possibility of hazardous reactions**

Acid

**10.4. Conditions to avoid**

Heat

**10.5. Incompatible materials**

No data available

**10.6. Hazardous decomposition products**

In case of fire may be liberated:

SECTION 5: Firefighting measures

**Further information**

No data available

**SECTION 11: Toxicological information****11.1. Information on hazard classes****Toxicokinetics, metabolism and distribution**

There are no data available on the mixture itself.

**Acute toxicity**

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

**ATEmix calculated**

ATE (oral) &gt; 2000 mg/kg; ATE (dermal) &gt; 2000 mg/kg; ATE (inhalation vapour) &gt; 20 mg/l; ATE (inhalation dust/mist) &gt; 5 mg/l

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| CAS No     | Chemical name      |                      |         |  |                      |
|------------|--------------------|----------------------|---------|--|----------------------|
|            | Exposure route     | Dose                 | Species | Source                                       | Method               |
| 1336-21-6  | Ammonium hydroxide |                      |         |  |                      |
|            | oral               | LD50 350<br>mg/kg    | Rat     | Journal of Industrial Hygiene and Toxicology | OECD Guideline 401   |
| 12125-02-9 | ammonium chloride  |                      |         |  |                      |
|            | oral               | LD50 1410<br>mg/kg   | Rat     | Other company data (1983)                    | other: not mentioned |
|            | dermal             | LD50 > 2000<br>mg/kg | Rat     | Study report (2010)                          | EU Method B.3        |

**Irritation and corrosivity**

Skin corrosion/irritation: Causes skin irritation.

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

**Sensitising effects**

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

**Carcinogenic/mutagenic/toxic effects for reproduction**

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**

May cause respiratory irritation. (Ammonium hydroxide)

**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.

**Information on likely routes of exposure**

There are no data available on the mixture itself.

**Specific effects in experiment on an animal**

There are no data available on the mixture itself.

**Additional information on tests**

There are no data available on the mixture itself.

**Practical experience**

There are no data available on the mixture itself.

**11.2. Information on other hazards****Endocrine disrupting properties**

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meet the criteria.

**Other information**

Irritant

Cough

Dyspnoea

Risk of serious damage to eyes.

**Further information**

Dermatitis

Mucous membrane irritation in the mouth, throat, esophagus and gastrointestinal tract.

**SECTION 12: Ecological information**

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**12.1. Toxicity**

Very toxic to aquatic life.

Harmful to aquatic life with long lasting effects.

| CAS No     | Chemical name            |                      |           |                            |   |  |
|------------|--------------------------|----------------------|-----------|----------------------------|---|--|
|            | Aquatic toxicity         | Dose                 | [h]   [d] | Species                    | Source                                    | Method                                   |
| 1336-21-6  | Ammonium hydroxide       |                      |           |                            |   |  |
|            | Acute fish toxicity      | LC50 0,75 - 3,4 mg/l | 96 h      | Pimephales promelas        | Trans Amer Fish Soc; 112 (5). 1983. 705-  | Assessment of acute toxicity in the fath |
|            | Acute crustacea toxicity | EC50 101 mg/l        | 48 h      | Daphnia magna              | Environ. Toxicol. Chem. 5: 443-447 (1986) | other: ASTM E729-80                      |
|            | Fish toxicity            | NOEC 1,2 mg/l        | 61 d      | Oncorhynchus gorbuscha     | Fish. Bull. 78(3): 641-648 (1980)         | OECD Guideline 210                       |
| 12125-02-9 | ammonium chloride        |                      |           |                            |   |  |
|            | Acute fish toxicity      | LC50 209 mg/l        | 96 h      | Cyprinus carpio            | Indian J. Environ. Health, 17, 140-146,   | other: E03-05:APHA, AWWA & WPCF          |
|            | Acute crustacea toxicity | EC50 101 mg/l        | 48 h      | Daphnia magna              | Env. Tox. Chem. 5, 443-447 (1986) (1986)  | other: ASTM E729-80                      |
|            | Fish toxicity            | NOEC 11,8 mg/l       | 28 d      | Pimephales promelas        | Env.Tox. Chem. 5, 437-442 (1986) (1986)   | other: - American Society for Testing an |
|            | Algae toxicity           | NOEC mg/l 26,8       | 10 d      | Navicula sp.               | Mar. Biol. 43(4), 307-315, (1977) (1977)  | no data                                  |
|            | Crustacea toxicity       | NOEC mg/l 14,6       | 21 d      | Daphnia magna              | Env. Tox. Chem. 5, 443-447 (1986) (1986)  | other: not mentioned                     |
|            | Acute bacteria toxicity  | EC50 mg/l ( ) 1618   | 0,5 h     | activated sludge, domestic | Study report (1988)                       | OECD Guideline 209                       |

**12.2. Persistence and degradability**

There are no data available on the mixture itself.

**12.3. Bioaccumulative potential**

There are no data available on the mixture itself.

**Partition coefficient n-octanol/water**

| CAS No    | Chemical name      | Log Pow |
|-----------|--------------------|---------|
| 1336-21-6 | Ammonium hydroxide | -1,38   |

**12.4. Mobility in soil**

There are no data available on the mixture itself.

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

The substances in the mixture do not meet the PBT/vPvB criteria according to UK REACH.

**12.6. Endocrine disrupting properties**

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

**12.7. Other adverse effects**

Discharge into the environment must be avoided.

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Harmful effect due to pH shift.  
Forms corrosive mixtures with water even if diluted.

**Further information**

Do not allow to enter into surface water or drains.

**SECTION 13: Disposal considerations****13.1. Waste treatment methods****Disposal recommendations**

Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste.  
Send to a physico-chemical treatment facility under observation of official regulations.  
Do not allow to enter into surface water or drains.

**Contaminated packaging**

Handle contaminated packages in the same way as the substance itself.  
Waste codes/waste designations according to EWC/AVV  
Dispose of waste according to "Kreislaufwirtschaftsgesetz (KrWG)".

**SECTION 14: Transport information****Land transport (ADR/RID)**

|  |  |
|--|--|
| <b>14.1. UN number or ID number:</b>     | No dangerous good in sense of this transport regulation. |
| <b>14.2. UN proper shipping name:</b>    | No dangerous good in sense of this transport regulation. |
| <b>14.3. Transport hazard class(es):</b> | No dangerous good in sense of this transport regulation. |
| <b>14.4. Packing group:</b>              | No dangerous good in sense of this transport regulation. |

**Inland waterways transport (ADN)**

|  |  |
|--|--|
| <b>14.1. UN number or ID number:</b>     | No dangerous good in sense of this transport regulation. |
| <b>14.2. UN proper shipping name:</b>    | No dangerous good in sense of this transport regulation. |
| <b>14.3. Transport hazard class(es):</b> | No dangerous good in sense of this transport regulation. |
| <b>14.4. Packing group:</b>              | No dangerous good in sense of this transport regulation. |

**Marine transport (IMDG)**

|  |  |
|--|--|
| <b>14.1. UN number or ID number:</b>     | No dangerous good in sense of this transport regulation. |
| <b>14.2. UN proper shipping name:</b>    | No dangerous good in sense of this transport regulation. |
| <b>14.3. Transport hazard class(es):</b> | No dangerous good in sense of this transport regulation. |
| <b>14.4. Packing group:</b>              | No dangerous good in sense of this transport regulation. |

**Air transport (ICAO-TI/IATA-DGR)**

|  |  |
|--|--|
| <b>14.1. UN number or ID number:</b>     | No dangerous good in sense of this transport regulation. |
| <b>14.2. UN proper shipping name:</b>    | No dangerous good in sense of this transport regulation. |
| <b>14.3. Transport hazard class(es):</b> | No dangerous good in sense of this transport regulation. |
| <b>14.4. Packing group:</b>              | No dangerous good in sense of this transport regulation. |

**14.5. Environmental hazards**

ENVIRONMENTALLY HAZARDOUS: No

**14.6. Special precautions for user**

No dangerous good in sense of this transport regulation.

**14.7. Maritime transport in bulk according to IMO instruments**

No dangerous good in sense of this transport regulation.

**SECTION 15: Regulatory information****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****EU regulatory information**

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Restrictions on use (REACH, annex XVII):

Entry 3, Entry 75

Information according to Directive  
2012/18/EU (SEVESO III):

E1 Hazardous to the Aquatic Environment

**Additional information**

Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC).

**National regulatory information**

Employment restrictions:

Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC).

Water hazard class (D):

2 - obviously hazardous to water

**SECTION 16: Other information****Changes**

This data sheet contains changes from the previous version in section(s): 2,6,7,8,9,11,13,15.

**Abbreviations and acronyms**

Acute Tox. 4: Acute toxicity, hazard category 4

Skin Corr. 1B: Skin corrosion, sub-category 1B

Skin Irrit. 2: Skin irritation, hazard category 2

Eye Irrit. 2: Eye irritation, hazard category 2

STOT SE 3: Specific target organ toxicity - single exposure, hazard category 3

Aquatic Acute 1: Hazardous to the aquatic environment, hazard category: Acute 1

Aquatic Chronic 2: Hazardous to the aquatic environment, long-term hazard category: Chronic 2

Aquatic Chronic 3: Hazardous to the aquatic environment, long-term hazard category: Chronic 3

**Classification for mixtures and used evaluation method**

| Classification          | Classification procedure |
|-------------------------|--------------------------|
| Skin Irrit. 2; H315     |                          |
| Eye Irrit. 2; H319      |                          |
| STOT SE 3; H335         | Calculation method       |
| Aquatic Acute 1; H400   | Calculation method       |
| Aquatic Chronic 3; H412 | Calculation method       |

**Relevant H and EUH statements (number and full text)**

|      |  |
|------|--|
| H302 | Harmful if swallowed.                              |
| H314 | Causes severe skin burns and eye damage.           |
| H315 | Causes skin irritation.                            |
| H319 | Causes serious eye irritation.                     |
| H335 | May cause respiratory irritation.                  |
| H400 | Very toxic to aquatic life.                        |
| H411 | Toxic to aquatic life with long lasting effects.   |
| H412 | Harmful to aquatic life with long lasting effects. |

**Further Information**

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights.

The receiver of our product is singularly responsible for adhering to existing laws and regulations.

Provide appropriate information, instructions and training to users

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*(The data for the relevant ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)*