

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### Ammonia solution 20 % NH3 technical grade

Revision date: 14.02.2024

Product code: 20073

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

##### 1.1. Product identifier

Ammonia solution 20 % NH3 technical grade

UFI: GCKS-U1NJ-E00T-VMK7

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

###### Use of the substance/mixture

Laboratory chemicals

Industrial uses: Uses of substances as such or in preparations at industrial sites

Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

###### Uses advised against

Do not use for private purposes (household).

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

|                         |                                  |                              |
|-------------------------|----------------------------------|------------------------------|
| Company name:           | AnalytiChem GmbH                 |                              |
|                         | ACD                              |                              |
| Street:                 | Stempelstraße 6                  |                              |
| Place:                  | D-47167 Duisburg                 |                              |
| Telephone:              | 0203/5194-0                      | Telefax: 0203/5194-290       |
| E-mail:                 | info@analytichem.de              |                              |
| Contact person:         | Abteilung Produktsicherheit      | Telephone: 0203/5194-107/117 |
| E-mail:                 | produktsicherheit@analytichem.de |                              |
| Internet:               | www.analytichem.de               |                              |
| Responsible Department: | Abteilung Produktsicherheit      |                              |

##### 1.4. Emergency telephone number:

For Hazardous Materials [or Dangerous Goods] Incidents Spill, Leak, Fire, Exposure, or Accident Call CHEMTREC Day or Night Within USA and Canada: 1-800-424-9300 Outside USA and Canada: +1 703-741-5970 (collect calls accepted)

##### Further Information

This product is a mixture. REACH Registration Number see section 3.

#### SECTION 2: Hazards identification

##### 2.1. Classification of the substance or mixture

###### Regulation (EC) No 1272/2008

Met. Corr. 1; H290  
Skin Corr. 1B; H314  
Eye Dam. 1; H318  
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

Ammonia

Signal word: Danger

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**Pictograms:**



**Hazard statements**

- H290 May be corrosive to metals.
- H314 Causes severe skin burns and eye damage.
- 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 dust/fume/gas/mist/vapours/spray.
- P280 Wear protective gloves and eye/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

**Relevant ingredients**

| CAS No    | Chemical name   |              |                  | Quantity    |
|-----------|---|--------------|------------------|-------------|
|           | EC No   | Index No     | REACH No         |             |
|           | Classification (Regulation (EC) No 1272/2008)                     |              |                  |             |
| 1336-21-6 | Ammonia   |              |                  | 20 - < 25 % |
|           | 215-647-6   | 007-001-01-2 | 01-2119488876-14 |             |
|           | Skin Corr. 1B, Aquatic Acute 1, Aquatic Chronic 2; H314 H400 H411 |              |                  |             |

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   | Ammonia       | 20 - < 25 % |
|           | inhalation: LC50 = 4230 mg/l (vapours); oral: LD50 = 350 mg/kg STOT SE 3; H335: >= 5 - 100<br>Aquatic Acute 1; H400: M=10 |               |             |

**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**

Self-protection of the first aider  
Avoid contact with skin, eyes and clothes.

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Take off immediately all contaminated clothing.

#### After inhalation

Provide fresh air.  
Call a physician immediately.

#### 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  
Corrosion  
Cough  
Dyspnoea  
Gastrointestinal complaints  
gastric perforation  
Unconsciousness  
Vomiting  
Circulatory collapse  
Spasms  
Pulmonary oedema  
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  
Formation of explosive mixtures with: Air  
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.

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#### 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

Corrosive to metals.

##### For non-emergency personnel

Provide adequate ventilation.  
Use personal protection equipment.  
Avoid contact with skin, eyes and clothes.  
Remove persons to safety.  
Emergency procedures  
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.

##### 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.  
Formation of explosive mixtures with: Air

##### Advice on general occupational hygiene

Keep away from food, drink and animal feedingstuffs. Remove contaminated, saturated clothing immediately.

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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.  
Corrosive to metals.  
Unsuitable container/equipment material: Metal

##### Further information on storage conditions

storage temperature +5°C - +25°C  
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

#### Occupational exposure limits

| CAS No    | Substance          | ppm | mg/m <sup>3</sup> | fib/cm <sup>3</sup> | Category      | Origin |
|-----------|--------------------|-----|-------------------|---------------------|---------------|--------|
| 7664-41-7 | Ammonia, anhydrous | 20  | 14                |                     | TWA (8 h)     |        |
|           |                    | 50  | 36                |                     | STEL (15 min) |        |

#### DNEL/DMEL values

| CAS No                   | Substance | Exposure route | Effect   | Value                  |
|--------------------------|-----------|----------------|----------|------------------------|
| 1336-21-6                | Ammonia   |                |          |                        |
| 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       |

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**PNEC values**

| CAS No                             | Substance | Value      |
|------------------------------------|-----------|------------|
| Environmental compartment          |           |            |
| 1336-21-6                          | Ammonia   |            |
| Freshwater                         |           | 0,001 mg/l |
| Freshwater (intermittent releases) |           | 0,007 mg/l |
| Marine water                       |           | 0,001 mg/l |

**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.

Protective gloves are recommended Company KCL GmbH, D-36124 Eichenzell, email: [vertrieb@kcl.de](mailto:vertrieb@kcl.de) With specification (test according to EN374):

By long-term hand contact

Trade name/designation KCL 897 Butoject®

Recommended material: Butyl caoutchouc (butyl rubber) 0,3 mm

Wearing time with permanent contact: > 480 min

By short-term hand contact

Trade name/designation KCL 730 Camatril® Velours

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

Wearing time with occasional contact (splashes): > 240 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)).

**Skin protection**

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

Wash hands before breaks and after work.

**Respiratory protection**

Wear breathing apparatus if exposed to vapours/dusts/aerosols.

Filtering device with filter or ventilator filtering device of type: K

**Environmental exposure controls**

Do not allow to enter into surface water or drains.

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**SECTION 9: Physical and chemical properties**

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

|   |            |                          |
|---|------------|--------------------------|
| Physical state:   | Liquid     |                          |
| Colour:   | colourless |                          |
| Odour:  | stinging   |                          |
| 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:                                   |            | 15,4 vol. %              |
| Upper explosion limits:                                   |            | 33,6 vol. %              |
| Flash point:  |            | No data available        |
| Auto-ignition temperature:                                |            | No data available        |
| Decomposition temperature:                                |            | No data available        |
| pH-Value (at 20 °C):                                      |            | alkaline                 |
| Viscosity / kinematic:                                    |            | No data available        |
| Water solubility:   |            | completely miscible      |
| Solubility in other solvents                              |            |                          |
| No data available   |            |                          |
| Partition coefficient n-octanol/water:                    |            | No data available        |
| Vapour pressure:  |            | No data available        |
| (at 20 °C)  |            |                          |
| Vapour pressure:  |            | No data available        |
| Density:  |            | 0,9228 g/cm <sup>3</sup> |
| Bulk density:   |            | No data available        |
| Relative vapour density:                                  |            | No data available        |

**9.2. Other information**

**Information with regard to physical hazard classes**

|                           |  |                   |
|---------------------------|--|-------------------|
| Explosive properties      |  |                   |
| No data available         |  |                   |
| Sustaining combustion:    |  | No data available |
| 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 |
| 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**

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**10.1. Reactivity**

Corrosive to metals.

**10.2. Chemical stability**

Formation of explosive mixtures with: Air

**10.3. Possibility of hazardous reactions**

Oxidising agent, mercury (Hg), Oxygen, Hydrogen peroxide, Acid, Chlorine, Heavy metals, Nitric acid, Bromine, Hydrogen bromide (HBr), Hydrochloric gas, Nitrogen oxides (NOx), Hydrogen fluoride, Carbon dioxide,

**10.4. Conditions to avoid**

Heat

**10.5. Incompatible materials**

Metal

**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 as defined in Regulation (EC) No 1272/2008**

**Toxicokinetics, metabolism and distribution**

There are no data available on the preparation/mixture itself.

**Acute toxicity**

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

**ATEmix calculated**

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

| CAS No    | Chemical name           |                |         |  |   |
|-----------|-------------------------|----------------|---------|--|---|
|           | Exposure route          | Dose           | Species | Source                                       | Method                                  |
| 1336-21-6 | Ammonia                 |                |         |  |   |
|           | oral                    | LD50 350 mg/kg | Rat     | Journal of Industrial Hygiene and Toxicology | OECD Guideline 401                      |
|           | inhalation (1 h) vapour | LC50 4230 mg/l | Mouse   | Bull. Environm. Contam. Toxicol, 1982, 2     | Assessment of acute inhalation toxicity |

**Irritation and corrosivity**

Causes severe skin burns and eye damage.

Causes serious eye damage.

**Sensitising effects**

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

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

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

**STOT-single exposure**

May cause respiratory irritation. (Ammonia)

**STOT-repeated exposure**

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



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**Aspiration hazard**

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

**Specific effects in experiment on an animal**

There are no data available on the preparation/mixture itself.

**Additional information on tests**

There are no data available on the preparation/mixture itself.

**Practical experience**

There are no data available on the preparation/mixture itself.

**11.2. Information on other hazards**

**Endocrine disrupting properties**

There are no data available on the preparation/mixture itself.

**Other information**

Irritant  
Corrosion  
Cough  
Dyspnoea  
Gastrointestinal complaints  
gastric perforation  
Unconsciousness  
Vomiting  
Circulatory collapse  
Spasms  
Pulmonary oedema  
Risk of serious damage to eyes.

**SECTION 12: Ecological information**

**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 | Ammonia                  |                      |           |                        |   |  |
|           | 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                       |

**12.2. Persistence and degradability**

Not readily biodegradable (according to OECD criteria)

**12.3. Bioaccumulative potential**

No indication of bioaccumulation potential.

**Partition coefficient n-octanol/water**

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

**12.4. Mobility in soil**

There are no data available on the mixture itself.

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

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

**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.

**Further information**

Do not allow to enter into surface water or drains.  
Discharge into the environment must be avoided.

**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.  
The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.  
Dispose of waste according to "Kreislaufwirtschafts- und Abfallgesetz (KrW-/AbfG)".

**SECTION 14: Transport information**

**Land transport (ADR/RID)**

|  |                  |
|--|------------------|
| <b>14.1. UN number or ID number:</b>     | UN 2672          |
| <b>14.2. UN proper shipping name:</b>    | Ammonia solution |
| <b>14.3. Transport hazard class(es):</b> | 8                |
| <b>14.4. Packing group:</b>              | III              |
| Hazard label:                            | 8                |
| Classification code:                     | C5               |
| Special Provisions:                      | 543              |
| Limited quantity:                        | 5 L              |
| Excepted quantity:                       | E1               |
| Transport category:                      | 3                |
| Hazard No:                               | 80               |
| Tunnel restriction code:                 | E                |

**Inland waterways transport (ADN)**

|  |                  |
|--|------------------|
| <b>14.1. UN number or ID number:</b>     | UN 2672          |
| <b>14.2. UN proper shipping name:</b>    | Ammonia solution |
| <b>14.3. Transport hazard class(es):</b> | 8                |
| <b>14.4. Packing group:</b>              | III              |
| Hazard label:                            | 8                |
| Classification code:                     | C5               |
| Special Provisions:                      | 543              |
| Limited quantity:                        | 5 L              |
| Excepted quantity:                       | E1               |

**Marine transport (IMDG)**

|  |                  |
|--|------------------|
| <b>14.1. UN number or ID number:</b>     | UN 2672          |
| <b>14.2. UN proper shipping name:</b>    | Ammonia solution |
| <b>14.3. Transport hazard class(es):</b> | 8                |
| <b>14.4. Packing group:</b>              | III              |
| Hazard label:                            | 8                |

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|                     |          |
|---------------------|----------|
| Marine pollutant:   | P        |
| Special Provisions: | -        |
| Limited quantity:   | 5 L      |
| Excepted quantity:  | E1       |
| EmS:                | F-A, S-B |

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

|  |                  |
|--|------------------|
| <b>14.1. UN number or ID number:</b>     | UN 2672          |
| <b>14.2. UN proper shipping name:</b>    | Ammonia solution |
| <b>14.3. Transport hazard class(es):</b> | 8                |
| <b>14.4. Packing group:</b>              | III              |
| Hazard label:                            | 8                |
| Special Provisions:                      | A64 A803         |
| Limited quantity Passenger:              | 1 L              |
| Passenger LQ:                            | Y841             |
| Excepted quantity:                       | E1               |
| IATA-packing instructions - Passenger:   | 852              |
| IATA-max. quantity - Passenger:          | 5 L              |
| IATA-packing instructions - Cargo:       | 856              |
| IATA-max. quantity - Cargo:              | 60 L             |

#### 14.5. Environmental hazards

|                             |         |
|-----------------------------|---------|
| ENVIRONMENTALLY HAZARDOUS:  | Yes     |
| Danger releasing substance: | Ammonia |

### SECTION 15: Regulatory information

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

##### EU regulatory information

Restrictions on use (REACH, annex XVII):

Entry 3

|   |   |
|---|---|
| Information according to Directive 2012/18/EU (SEVESO III): | E1 Hazardous to the Aquatic Environment |
|---|---|

##### 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): 1,12.

#### Abbreviations and acronyms

Met. Corr: Substance or mixture corrosive to metals  
 Skin Corr: Skin corrosion  
 Eye Dam: Eye damage  
 STOT SE: Specific target organ toxicity - single exposure  
 Aquatic Acute: Acute aquatic hazard  
 Aquatic Chronic: Chronic aquatic hazard

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**Ammonia solution 20 % NH3 technical grade**

Revision date: 14.02.2024

Product code: 20073

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**Classification for mixtures and used evaluation method according to Regulation (EC) No 1272/2008 [CLP]**

| Classification          | Classification procedure |
|-------------------------|--------------------------|
| Met. Corr. 1; H290      | On basis of test data    |
| Skin Corr. 1B; H314     | Calculation method       |
| Eye Dam. 1; H318        | Calculation method       |
| 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)**

|      |  |
|------|--|
| H290 | May be corrosive to metals.                        |
| H314 | Causes severe skin burns and eye damage.           |
| H318 | Causes serious eye damage.                         |
| 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.

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