

Ammonium-Standardlösung 5,000 g NH₄/l

Revision date: 16.05.2022

Product code: 31915

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

1.1. Product identifier

Ammonium-Standardlösung 5,000 g NH₄/l

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: | Fa. Bernd Kraft GmbH | |
| Street: | Stempelstraße 6 | |
| Place: | D-47167 Duisburg | |
| Telephone: | 0203/5194-0 | Telefax: 0203/5194-290 |
| e-mail: | info@berndkraft.de | |
| Contact person: | Abteilung Produktsicherheit | Telephone: 0203/5194-107/117 |
| e-mail: | produktsicherheit@berndkraft.de | |
| Internet: | www.berndkraft.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

This mixture is not classified as hazardous in accordance with Regulation (EC) No 1272/2008.

2.2. Label elements

Regulation (EC) No 1272/2008

Special labelling of certain mixtures

EUH210 Safety data sheet available on request.

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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Hazardous components

| CAS No | Chemical name | | | Quantity |
|------------|---|--------------|------------------|-----------|
| | EC No | Index No | REACH No | |
| | Classification (Regulation (EC) No 1272/2008) | | | |
| 12125-02-9 | ammonium chloride | | | 1 - < 5 % |
| | 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 | | |
| 12125-02-9 | 235-186-4 | ammonium chloride | 1 - < 5 % |
| | 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

After inhalation

Provide fresh air.

After contact with skin

Wash immediately with: Water

After contact with eyes

Rinse immediately carefully and thoroughly with eye-bath or water.

After ingestion

Rinse mouth immediately and drink plenty of water.

Call a doctor if you feel unwell.

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

No data available

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

5.3. Advice for firefighters

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

Additional information

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

SECTION 6: Accidental release measures

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6.1. Personal precautions, protective equipment and emergency procedures

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 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

- Handle and open container with care.
- Keep container tightly closed.
- Avoid contact with skin, eyes and clothes.

Advice on protection against fire and explosion

Usual measures for fire prevention.

Advice on general occupational hygiene

- Wash contaminated clothing prior to re-use.
- Do not breathe vapour/aerosol.
- Avoid contact with skin, eyes and clothes.

Further information on handling

- Wash contaminated clothing before reuse.
- Wash hands before breaks and after work.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Store in a well-ventilated place. Keep container tightly closed.

Hints on joint storage

No data available

Further information on storage conditions

Store in a dry place.

7.3. Specific end use(s)

Laboratory chemicals

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SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

| CAS No | Substance | ppm | mg/m ³ | fib/cm ³ | Category | Origin |
|------------|-------------------------|-----|-------------------|---------------------|---------------|--------|
| 12125-02-9 | Ammonium chloride, fume | - | 10 | | TWA (8 h) | |
| | | - | 20 | | STEL (15 min) | |

DNEL/DMEL values

| CAS No | Substance | Exposure route | Effect | Value |
|--------------------------|-------------------|----------------|----------|------------------------|
| 12125-02-9 | ammonium chloride | | | |
| Consumer DNEL, long-term | | inhalation | systemic | 9,9 mg/m ³ |
| Consumer DNEL, long-term | | dermal | systemic | 114 mg/kg bw/day |
| Consumer DNEL, long-term | | oral | systemic | 11,4 mg/kg bw/day |
| Worker DNEL, long-term | | inhalation | systemic | 33,5 mg/m ³ |
| Worker DNEL, long-term | | dermal | systemic | 190 mg/kg bw/day |

PNEC values

| CAS No | Substance | Value |
|--|-------------------|-------------|
| 12125-02-9 | ammonium chloride | |
| Environmental compartment | | |
| Freshwater | | 1,2 mg/l |
| Freshwater (intermittent releases) | | 1,2 mg/l |
| Marine water | | 11,2 mg/l |
| Micro-organisms 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.

Individual protection measures, such as personal protective equipment

Eye/face protection

goggles

Hand protection

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

By long-term hand contact
KCL 741 Dermatrill® L
NBR (Nitrile rubber) 0,11mm
Wearing time with permanent contact: >480min

By short-term hand contact
KCL 741 Dermatrill® L
NBR (Nitrile rubber) 0,11mm

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

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).

Skin protection

Wear suitable protective clothing.
Wash hands before breaks and after work.

Respiratory protection

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

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: clear
Odour: odourless

Changes in the physical state

Melting point/freezing point: No data available
Boiling point or initial boiling point and boiling range: No data available
Sublimation point: No data available
Softening point: No data available
Pour point: No data available
No data available:
Flash point: No data available

Flammability

Solid/liquid: No data available
Gas: No data available

Explosive properties

No data available

Lower explosion limits: No data available
Upper explosion limits: No data available
Auto-ignition temperature: No data available

Self-ignition temperature

Solid: No data available
Gas: No data available

Decomposition temperature: No data available

pH-Value: No data available

Viscosity / dynamic: No data available

Viscosity / kinematic: No data available

Flow time: No data available

Water solubility: No data available

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Solubility in other solvents

No data available

Partition coefficient n-octanol/water:

No data available

Vapour pressure:

No data available

Vapour pressure:

No data available

Density:

No data available

Bulk density:

No data available

Relative vapour density:

No data available

9.2. Other information

Information with regard to physical hazard classes

Sustaining combustion:

No data available

Oxidizing properties

No data available

Other safety characteristics

Solvent separation test:

No data available

Solvent content:

0

Solid content:

0

Evaporation rate:

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

No data available

10.4. Conditions to avoid

No data available

10.5. Incompatible materials

No data available

10.6. Hazardous decomposition products

No data available

Further information

No data available

SECTION 11: Toxicological information

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

Acute toxicity

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

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| CAS No | Chemical name | | | | | |
|------------|-------------------|---------------|---------|--------|------------------------------|----------------------|
| | Exposure route | Dose | Species | Source | Method | |
| 12125-02-9 | ammonium chloride | | | | | |
| | oral | LD50 mg/kg | 1410 | Rat | Other company data (1983) | other: not mentioned |
| | dermal | LD50 mg/kg | > 2000 | Rat | Study report (2010) | EU Method B.3 |

Irritation and corrosivity

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

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

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

STOT-repeated exposure

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

Aspiration hazard

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

Practical experience

No data available

11.2. Information on other hazards

Other information

No data available

Further information

No data available

SECTION 12: Ecological information

12.1. Toxicity

| CAS No | Chemical name | | | | | |
|------------|--------------------------|-------------|-----------|---------|----------------------------|--|
| | Aquatic toxicity | Dose | [h] [d] | Species | Source | Method |
| 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 mg/l | 11,8 | 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 |

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12.2. Persistence and degradability

No data available

12.3. Bioaccumulative potential

No data available

12.4. Mobility in soil

No data available

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.

No data available

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

No data available

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.

Contaminated packaging

The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.

SECTION 14: Transport information

Land transport (ADR/RID)

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

Inland waterways transport (ADN)

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

Marine transport (IMDG)

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

Air transport (ICAO-TI/IATA-DGR)

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

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

