

## **Safety Data Sheet**

according to Regulation (EC) No 1907/2006

## Ammoniumfluorid-Lösung 1% (m/m) zur Analyse in Wasser

Revision date: 15.08.2023 Product code: 32894 Page 1 of 9

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

## 1.1. Product identifier

Ammoniumfluorid-Lösung 1% (m/m) zur Analyse in Wasser

## 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 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 For Hazardous Materials [or Dangerous Goods] Incidents Spill, Leak, Fire,

<u>number:</u> 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)			
12125-01-8	ammonium fluoride			
	235-185-9	009-006-00-8	01-2119974147-30	
	Acute Tox. 3, Acute Tox. 3, H331 H311 H301			

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		
12125-01-8	235-185-9	ammonium fluoride	1 - < 5 %
inhalation: ATE = 3 mg/l (vapours); inhalation: ATE = 0,5 mg/l (dusts or mists); dermal: LD50 = > 2000 mg/kg; oral: LD50 = ca. 223 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.

### After contact with skin

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

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.



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#### Additional information

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

## 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



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### Further information on storage conditions

Store in a dry place.

### 7.3. Specific end use(s)

Laboratory chemicals

# **SECTION 8: Exposure controls/personal protection**

#### 8.1. Control parameters

# **DNEL/DMEL values**

CAS No	Substance			
DNEL type		Exposure route	Effect	Value
12125-01-8	ammonium fluoride			
Worker DNEL,	long-term	inhalation	systemic	2,5 mg/m³
Worker DNEL,	acute	inhalation	systemic	2,5 mg/m³
Worker DNEL,	long-term	inhalation	local	2,5 mg/m³
Worker DNEL,	long-term	dermal	systemic	0,36 mg/kg bw/day
Worker DNEL,	acute	dermal	systemic	0,36 mg/kg bw/day

### **PNEC** values

CAS No	Substance	
Environmental compartment Value		Value
12125-01-8	ammonium fluoride	
Freshwater		0,89 mg/l
Micro-organisms in sewage treatment plants (STP) 51 mg/l		51 mg/l
Soil 11 mg/kg		11 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

Trade name/designation: KCL 741 Dermatril® L Suitable material: NBR (Nitrile rubber) 0,11mm Wearing time with permanent contact: >480min

By short-term hand contact

Trade name/designation: KCL 741 Dermatril® L Suitable material: NBR (Nitrile rubber) 0,11mm

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



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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

Respiratory protection necessary at: aerosol or mist formation

## **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

Melting point/freezing point:

Boiling point or initial boiling point and

No data available

No data available

boiling range:

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 No data available Decomposition temperature: pH-Value: No data available No data available Viscosity / kinematic: Water solubility: No data available

Solubility in other solvents

No data available

Partition coefficient n-octanol/water:

Vapour pressure:

Vapour pressure:

No data available

Vapour pressure:

No data available

Density (at 20 °C):

1,0033 g/cm³

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:

Solvent separation test:

Solvent content:

Solid content:

No data available

No data available

0

0



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Sublimation point:No data availableSoftening point:No data availablePour point:No data available

No data available:

Viscosity / dynamic:

Flow time:

No data available

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.

### **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
12125-01-8	ammonium fluoride					
	oral	LD50 mg/kg	ca. 223	Rat	' '	EPA OPPTS 870.1100
	dermal	LD50 mg/kg	> 2000	Rat	Study report (2010)	EU Method B.3
	inhalation vapour	ATE	3 mg/l			
	inhalation dust/mist	ATE	0,5 mg/l			

### 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



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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

No data available

CAS No	Chemical name						
	Aquatic toxicity	Dose		[h]   [d]	Species	Source	Method
12125-01-8	ammonium fluoride						
	Acute fish toxicity	LC50	209 mg/l	96 h	Cyprinus carpio	Indian J. Environ. Hlth, 17: 140-146 (19	other: E03-05:APHA, AWWA & WPCF
	Acute algae toxicity	ErC50	43 mg/l	96 h	various algae species	1st Priority List, Volume 8 (EC 793/93)	Methods not detailed in the review.
	Acute crustacea toxicity	EC50 mg/l	2,94	48 h	Daphnia magna	Env. Tox. Chem. 5, 443-447 (1986)	other: ASTM E729-80
	Fish toxicity	NOEC mg/l	11,8	28 d	Pimephales promelas	Env.Tox. Chem. 5: 437-442 (1986)	other: American Society for Testing and
	Algae toxicity	NOEC mg/l	26,8	10 d	Navicula sp.	Mar. Biol. 43(4), 307-315 (1977)	no data
	Crustacea toxicity	NOEC	0,6 mg/l	21 d	Daphnia magna	Env. Tox. Chem. 5, 443-447 (1986)	other: not mentioned
	Acute bacteria toxicity	(EC50 mg/l)	1300	0,5 h	activated sludge, domestic	Study report (1988)	OECD Guideline 209

## 12.2. Persistence and degradability

No data available

## 12.3. Bioaccumulative potential

No data available

### **BCF**

CAS No	Chemical name	BCF	Species	Source
12125-01-8	ammonium fluoride	53 - 58		1st Priority List, V

## 12.4. Mobility in soil

No data available

# 12.5. Results of PBT and vPvB assessment



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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 (A	DR/RID)
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14.1. UN number or ID number:	No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name:	No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es):	No dangerous good in sense of this transport regulation.
14.4. Packing group:	No dangerous good in sense of this transport regulation.

#### Inland waterways transport (ADN)

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

## Marine transport (IMDG)

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

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

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



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**National regulatory information** 

Water hazard class (D): - - non-hazardous to water

Additional information

No data available

### **SECTION 16: Other information**

#### Abbreviations and acronyms

Acute Tox: Acute toxicity

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

H301 Toxic if swallowed.
H311 Toxic in contact with skin.

H331 Toxic if inhaled.

EUH210 Safety data sheet available on request.

#### **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 hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)