

Trade name: Ammonii chloridum

Substance number: 061000

Version: 5 / CH

Date revised: 05.06.2023

Replaces Version: 4 / CH

Print date: 05.06.23

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

### **1.1. Product identifier**

Ammonii chloridum

Item No. 06100000

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

#### **Use of the substance/preparation**

Manufacture of pharmaceutical products, food additive

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

#### **Address/Manufacturer**

Hänseler AG

Industriestrasse 35

9100 Herisau

Telephone no. 0041 (0)71 353 58 58

E-mail address of sdb@haenseler.ch

person responsible

for this SDS

### **1.4. Emergency telephone number**

Switzerland :145 / Abroad +41 (0)44 251 51 51

## **SECTION 2: Hazards identification \*\*\***

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

#### **Classification (Regulation (EC) No. 1272/2008)**

Classification (Regulation (EC) No. 1272/2008)

Acute Tox. 4 H302

Eye Irrit. 2 H319

The product is classified and labelled in accordance with Regulation (EC) No 1272/2008

For explanation of abbreviations see section 16.

### **2.2. Label elements**

#### **Labelling according to regulation (EC) No 1272/2008**

##### **Hazard pictograms**



##### **Signal word**

Warning

##### **Hazard statements**

H302

Harmful if swallowed.

H319

Causes serious eye irritation.

##### **Precautionary statements**

P264.1

Wash hands thoroughly after handling.

P280

Wear protective gloves/protective clothing/eye protection/face protection.

P305+P351+P338

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact

Trade name: Ammonii chloridum

Substance number: 061000

Version: 5 / CH

Date revised: 05.06.2023

Replaces Version: 4 / CH

Print date: 05.06.23

P330 lenses, if present and easy to do. Continue rinsing.  
 Rinse mouth.  
 P337+P313 If eye irritation persists: Get medical advice/attention.  
 P501.3 Disposal in compliance with local and national regulations.

**Hazardous component(s) to be indicated on label (Regulation (EC) No. 1272/2008)**

contains \*\*\* ammonium chloride

**2.3. Other hazards**

The Substance does not meet PBT-criteria. This substance does not meet the vPvB-criteria. This substance does not have endocrine disrupting properties with respect to humans. This substance does not have endocrine disrupting properties with respect to non-target organisms.

**SECTION 3: Composition/information on ingredients \*\*\*****Hazardous ingredients \*\*\*****ammonium chloride**

CAS No.	12125-02-9		
EINECS no.	235-186-4		
Registration no.	01-2119487950-27		
Concentration	>= 70		%
Classification (Regulation (EC) No. 1272/2008)			
	Acute Tox. 4		H302
	Eye Irrit. 2		H319

ATE	oral	1'410	mg/kg
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**SECTION 4: First aid measures****4.1. Description of first aid measures****After inhalation**

Ensure supply of fresh air.

**After skin contact**

Wash off immediately with soap and water and rinse well. Remove contaminated, soaked clothing immediately and dispose of safely.

**After eye contact**

Separate eyelids, wash the eyes thoroughly with water (15 min.). Summon a doctor immediately.

**After ingestion**

Let plenty of water be drunk in small gulps. Summon a doctor immediately.

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

Product itself is non-combustible; adapt fire extinguishing measures to surrounding areas. Water spray jet, Foam, Carbon dioxide, Dry powder

**Non suitable extinguishing media**

Full water jet

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

The product is not combustible. If a fire breaks out nearby evolution of dangerous gases possible.  
 Nitrogen oxides (NOx); Hydrogen chloride (HCl)

**5.3. Advice for firefighters**

Trade name: Ammonii chloridum

Substance number: 061000

Version: 5 / CH

Date revised: 05.06.2023

Replaces Version: 4 / CH

Print date: 05.06.23

**Special protective equipment for fire-fighting**

Use self-contained breathing apparatus. Use personal protective clothing.

**Other information**

Suppress vapours with water spray jet. Collect contaminated fire-fighting water separately, must not be discharged into the drains.

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

Do not inhale dust. Avoid contact with eyes and skin. Avoid dust formation. Ensure supply of fresh air.

**6.2. Environmental precautions**

Do not empty into drains.

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

To pick up dry. Dampen, pick up mechanically and dispose of. Clean up affected area. Avoid raising dust.

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

Do not inhale dust. Avoid dust formation.

**Advice on protection against fire and explosion**

The product is not combustible.

**7.2. Conditions for safe storage, including any incompatibilities****Recommended storage temperature**

Value &lt; 25 °C

**Requirements for storage rooms and vessels**

Keep in a dry place.

**Hints on storage assembly**

Do not store together with: Oxidising agents, Alkalies, Nitrites

**Storage classes**

Storage class according to TRGS 510	13	Non- combustible solids
Storage category (Switzerland)	11/13	Other solid hazardous substances with classification/labelling hazardous

**Further information on storage conditions**

Keep container tightly closed.

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

Manufacture of pharmaceutical products; food additive

**SECTION 8: Exposure controls/personal protection \*\*\*****8.1. Control parameters****Exposure limit values \*\*\*****ammonium chloride**

List	SUVA	
Type	MAK	
Value	3	mg/m <sup>3</sup>
Remarks:	Auge & OAW	

Trade name: Ammonii chloridum

Substance number: 061000

Version: 5 / CH

Date revised: 05.06.2023

Replaces Version: 4 / CH

Print date: 05.06.23

**Derived No/Minimal Effect Levels (DNEL/DMEL)****ammonium chloride**

Type of value	Derived No Effect Level (DNEL)	
Reference group	Worker	
Duration of exposure	Long term	
Route of exposure	inhalative	
Mode of action	Systemic effects	
Concentration	43.97	mg/m <sup>3</sup>

Type of value	Derived No Effect Level (DNEL)	
Reference group	Worker	
Duration of exposure	Long term	
Route of exposure	dermal	
Mode of action	Systemic effects	
Concentration	128.9	mg/kg

Type of value	Derived No Effect Level (DNEL)	
Reference group	Consumer	
Duration of exposure	Long term	
Route of exposure	inhalative	
Mode of action	Systemic effects	
Concentration	9.4	mg/m <sup>3</sup>

Type of value	Derived No Effect Level (DNEL)	
Reference group	Consumer	
Duration of exposure	Long term	
Route of exposure	dermal	
Mode of action	Systemic effects	
Concentration	55.2	mg/kg

Type of value	Derived No Effect Level (DNEL)	
Reference group	Consumer	
Duration of exposure	Long term	
Route of exposure	oral	
Mode of action	Chronic effects	
Concentration	55.2	mg/kg

**Predicted No Effect Concentration (PNEC)****ammonium chloride**

Type of value	PNEC	
Type	Freshwater	
Concentration	0.25	mg/l

Type of value	PNEC	
Type	Saltwater	
Concentration	0.025	mg/l

Type of value	PNEC	
Conditions	Intermittend	
Concentration	0.43	mg/l

Type of value	PNEC	
Type	Freshwater sediment	
Concentration	0.9	mg/kg

Trade name: Ammonii chloridum

Substance number: 061000

Version: 5 / CH

Date revised: 05.06.2023

Replaces Version: 4 / CH

Print date: 05.06.23

Type of value	PNEC		
Type	Marine sediment		
Concentration	0.09		mg/kg
Type of value	PNEC		
Type	Soil		
Concentration	50.7		mg/kg
Type of value	PNEC		
Type	Sewage treatment plant (STP)		
Concentration	13.1		mg/l

## 8.2. Exposure controls

### General protective and hygiene measures

Wash contaminated clothing before reuse. Wash hands and face after work. Preventative skin protection.

### Respiratory protection

Breathing apparatus in the event of aerosol. Particle filter P2

### Hand protection

Appropriate Material	nitrile rubber - NBR
Material thickness	0.4 mm
Breakthrough time	> 480 min

### Eye protection

Tightly fitting safety glasses

### Body protection

Protective clothing

## SECTION 9: Physical and chemical properties

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

<b>Physical state</b>	solid		
<b>Colour</b>	white		
<b>Odour</b>	odourless		
<b>Melting point</b>			
Value	335		°C
<b>Boiling point or initial boiling point and boiling range</b>			
Remarks	Not applicable		
<b>Flash point</b>			
Remarks	Not applicable		
<b>Ignition temperature</b>			
Value	> 400		°C
<b>pH value</b>			
Value	4.5	to	5.5
Concentration/H <sub>2</sub> O	50	g/l	
Temperature	20	°C	
<b>Vapour pressure</b>			
Value	67		hPa
Temperature	250	°C	
<b>Density and/or relative density</b>			

Trade name: Ammonii chloridum

Substance number: 061000

Version: 5 / CH

Date revised: 05.06.2023

Replaces Version: 4 / CH

Print date: 05.06.23

Value	1.52			g/cm <sup>3</sup>
Temperature	20	°C		

**9.2. Other information****Solubility in water**

Value	372			g/l
Temperature	20	°C		

**Bulk density**

Value	600	to	900	kg/m <sup>3</sup>
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**SECTION 10: Stability and reactivity****10.1. Reactivity**

No decomposition if stored and applied as directed.

**10.2. Chemical stability**

Stable under recommended storage and handling conditions (see section 7).

**10.3. Possibility of hazardous reactions**

Possible incompatibility with materials listed under section 10.5.

**10.4. Conditions to avoid**

Protect from heat/overheating.

**10.5. Incompatible materials**

Evolution of ammonia under influence of alkalis. Incompatible with: Oxidising agents, Nitrites, aluminium (Al), lead, Compounds of iron (III), copper (Cu)

**10.6. Hazardous decomposition products**nitrous oxides (NO<sub>x</sub>), Hydrogen chloride (HCl)**SECTION 11: Toxicological information****11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008****Acute oral toxicity**

ATE	1'410	mg/kg
Method	calculated value (Regulation (EC) No. 1272/2008)	

**Acute oral toxicity (Components)****ammonium chloride**

Species	rat		
LD50	1650		mg/kg
Remarks	Harmful if swallowed.		

**ammonium chloride**

Species	rat		
LD50	1410		mg/kg
Remarks	Harmful if swallowed.		

**Acute dermal toxicity (Components)****ammonium chloride**

Species	rat		
LD50	> 2000		mg/kg
Remarks	Test conducted with a similar formulation.		

**Acute inhalative toxicity (Components)****ammonium chloride**

Remarks	Not applicable
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Trade name: Ammonii chloridum

Substance number: 061000

Version: 5 / CH

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Replaces Version: 4 / CH

Print date: 05.06.23

**Skin corrosion/irritation (Components)****ammonium chloride**

Species	rabbit
evaluation	irritant
Method	Draize method

**Serious eye damage/irritation (Components)****ammonium chloride**

Species	rabbit
evaluation	irritant

**Sensitization (Components)****ammonium chloride**

Remarks	No sensitisation effect known.
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**Subacute, subchronic, chronic toxicity (Components)****ammonium chloride**

Remarks	No data available.
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**Mutagenicity (Components)****ammonium chloride**

evaluation	Not considered mutagenic based on several in vitro and in vivo studies.
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**Reproduction toxicity (Components)****ammonium chloride**

Remarks	Indications of toxic effects are available from reproduction studies in animals.
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**Carcinogenicity (Components)****ammonium chloride**

Remarks	No data available.
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**Specific Target Organ Toxicity (STOT) (Components)****ammonium chloride**

Remarks	Not applicable
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**11.2 Information on other hazards****Endocrine disrupting properties with respect to humans**

This substance does not have endocrine disrupting properties with respect to humans.

**Other information**

Observe the usual precautions for handling chemicals.

**SECTION 12: Ecological information \*\*\*****12.1. Toxicity****Fish toxicity (Components)****ammonium chloride**

Species	carp (Cyprinus carpio)	
LC50	209	mg/l
Duration of exposure	96	h

**ammonium chloride**

Species	rainbow trout (Oncorhynchus mykiss)	
LC50	3.98	mg/l
Duration of exposure	96	h

**ammonium chloride**

Trade name: Ammonii chloridum

Substance number: 061000

Version: 5 / CH

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Replaces Version: 4 / CH

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Species	rainbow trout (Oncorhynchus mykiss)	
NOEC	57	mg/l
Duration of exposure	96	h

**ammonium chloride**

Species	rainbow trout (Oncorhynchus mykiss)	
LC50	42.91	mg/l
Duration of exposure	96	h

**Daphnia toxicity (Components)****ammonium chloride**

Species	Daphnia magna	
LC50	161	mg/l
Duration of exposure	48	h

**ammonium chloride**

Species	Daphnia magna	
NOEC	0.1	mg/l
Duration of exposure	216	h

**ammonium chloride**

Species	Daphnia magna	
EC50	136.6	mg/l
Duration of exposure	48	h

**ammonium chloride**

Species	Ceriodaphnia spec	
EC50	98.5	mg/l
Duration of exposure	48	h

**Algae toxicity (Components)****ammonium chloride**

Species	Chlorella vulgaris	
EC50	1300	mg/l
Duration of exposure	5	d
Remarks	Test conducted with a similar formulation.	

**ammonium chloride**

Species	Chlorella vulgaris	
EC50	2700	mg/l
Duration of exposure	18	d
Remarks	Test conducted with a similar formulation.	

**Bacteria toxicity (Components)****ammonium chloride**

Species	activated sludge	
EC20	appr. 850	mg/l
Method	OECD 209	

**12.2. Persistence and degradability****Biodegradability (Components)****ammonium chloride**

Remarks	Inorganic product, cannot be eliminated from the water by biological purification processes.
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**12.3. Bioaccumulative potential****Octanol/water partition coefficient (log Pow) (Components)****ammonium chloride**

log Pow	-4.37
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Substance number: 061000

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Replaces Version: 4 / CH

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**12.4. Mobility in soil****Mobility in soil (Components)**

ammonium chloride

Adsorbs on soil.

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

The Substance does not meet PBT-criteria.

This substance does not meet the vPvB-criteria.

**12.6 Endocrine disrupting properties****Endocrine disrupting properties with respect to the environment**

This substance does not have endocrine disrupting properties with respect to non-target organisms.

**12.7. Other adverse effects****General information / ecology**

Do not allow it to reach ground water, water bodies or sewage system.

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

Disposal in compliance with local and national regulations.

**Disposal recommendations for packaging**

Dispose of as unused product.

**SECTION 14: Transport information**

	Land transport ADR/RID	Marine transport IMDG/GGVSee	Air transport ICAO/IATA
<b>14.1. UN number</b>	The product does not constitute a hazardous substance in land transport.	The product does not constitute a hazardous substance in sea transport.	The product does not constitute a hazardous substance in air transport.

**SECTION 15: Regulatory information****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****Water Hazard Class (Germany)**

Water Hazard Class (Germany) WGK 1

Remarks Derivation of WGK according to Annex 1 No. 5.2 AwSV

**SECTION 16: Other information****Hazard statements listed in Chapter 3**H302 Harmful if swallowed.  
H319 Causes serious eye irritation.**CLP categories listed in Chapter 3**

Acute Tox. 4 Acute toxicity, Category 4

Trade name: Ammonii chloridum

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Eye Irrit. 2

Eye irritation, Category 2

**Supplemental information**

Relevant changes compared with the previous version of the safety data sheet are marked with: \*\*\*  
This information is based on our present state of knowledge. However, it should not constitute a guarantee for any specific product properties and shall not establish a legally valid relationship.