

Trade name: Ammonii hydroxidi sol 25%

Substance number: 208251

Version: 7 / CH

Date revised: 11.07.2025

Replaces Version: 6 / CH

Print date: 11.07.25

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

### **1.1. Product identifier**

Ammonii hydroxidi sol 25%

Item No. 20825100

### **Substance / product identification**

UFI RNJD-V19R-C00F-K04A

### **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)

Skin Corr. 1B H314

Eye Dam. 1 H318

STOT SE 3 H335

Aquatic Acute 1 H400

Aquatic Chronic 2 H411

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**

Danger

#### **Hazard statements**

H314 Causes severe skin burns and eye damage.

H335 May cause respiratory irritation.

H400 Very toxic to aquatic life.

H411 Toxic to aquatic life with long lasting effects.

#### **Precautionary statements**

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P261 Avoid breathing dust/fume/gas/mist/vapours/spray.  
 P273 Avoid release to the environment.  
 P280 Wear protective gloves/protective clothing/eye protection/face protection.  
 P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
 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 or doctor.

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

contains ammonia ....%

**2.3. Other hazards**

The product contains no PBT substances. The product contains no vPvB substances. This product does not contain a substance that has endocrine disrupting properties with respect to human. The product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms.

**SECTION 3: Composition/information on ingredients****Chemical characterization**

Mixture of the following listed substances with harmless admixtures.

**Hazardous ingredients****ammonia ....%**

CAS No.	1336-21-6
EINECS no.	215-647-6
Registration no.	01-2119488876-14-XXXX
Concentration	>= 25 < 50 %
Classification (Regulation (EC) No. 1272/2008)	
Skin Corr. 1B	H314
Eye Dam. 1	H318
STOT SE 3	H335
Aquatic Acute 1	H400
Aquatic Chronic 2	H411

Concentration limits (Regulation (EC) No. 1272/2008)

STOT SE 3	H335	>= 5
Aquatic Acute 1	H400	M = 10

ATE oral 43 mg/kg

Additional remarks:

CLP Regulation (EC) No 1272/2008, Annex VI, Note B

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

Remove contaminated, soaked clothing immediately and dispose of safely. Take medical treatment.  
 Remove affected person from danger area.

**After inhalation**

Remove the casualty into fresh air and keep him calm. Irregular breathing/no breathing: artificial respiration. Summon a doctor immediately.

**After skin contact**

Wash off immediately with soap and water and rinse well. Summon a doctor immediately.

**After eye contact**

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

**After ingestion**

Do not induce vomiting. Summon a doctor immediately. Ensure supply of fresh air. Never give anything by mouth to an unconscious person. Rinse out mouth and give plenty of water to drink.

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

Chemical burn, Important or other important known symptoms and effects are described in the GHS labelling of the product (see section 2) and in section 11.

**4.3. Indication of any immediate medical attention and special treatment needed****Hints for the physician / treatment**

Treat symptomatically

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

Product itself is non-combustible; adapt fire extinguishing measures to surrounding areas.

**Non suitable extinguishing media**

Full water jet

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

Ammonia (NH<sub>3</sub>); In the event of fire the following can be released: Nitrogen oxides (NO<sub>x</sub>)

**5.3. Advice for firefighters****Special protective equipment for fire-fighting**

Use self-contained breathing apparatus. Wear full protective suit.

**Other information**

Suppress vapours with water spray jet. Cool endangered containers 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**

Wear protective equipment. Keep away unprotected persons. Ensure adequate ventilation. Avoid contact with eyes and skin. Do not inhale vapours.

**6.2. Environmental precautions**

Dilute with lot of water. Do not discharge into the drains/surface waters/groundwater.

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

Pick up with absorbent material (eg sand, kieselgur, acid binder, universal binder). Ensure adequate ventilation. Send in suitable containers for recovery or disposal.

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

Keep container tightly closed. Handle and open container with care. Ensure adequate ventilation. For personal protection see Section 8. Avoid inhaling dusts/ billows/ steams. Avoid contact with skin, eyes and clothing.

**Advice on protection against fire and explosion**

Substance/product does not ignite spontaneously.

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## 7.2. Conditions for safe storage, including any incompatibilities

### Requirements for storage rooms and vessels

Do not use aluminium containers. Do not use containers, lines etc. made of copper or copper alloys. Do not use zinc containers. Keep in a cool place. Keep tightly closed in a dry and cool place. Provide alkali-resistant floor. Use polyethylene or polypropylene containers. Use stainless steel containers.

### Hints on storage assembly

Do not store with acids. Do not store with oxidizing agents.

### Storage classes

Storage class according to TRGS 510	8B	Non-combustible corrosive hazardous substances
Storage category (Switzerland)	8	Caustic and corrosive substances

### Further information on storage conditions

Keep containers tightly closed in a dry, cool and well-ventilated place. Protect from direct sunlight.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### Derived No/Minimal Effect Levels (DNEL/DMEL)

##### ammonia ....%

Type of value	Derived No Effect Level (DNEL)	
Reference group	Worker	
Duration of exposure	Acute	
Route of exposure	dermal	
Mode of action	Systemic effects	
Concentration	6.8	mg/kg

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	6.8	mg/kg

Type of value	Derived No Effect Level (DNEL)	
Reference group	Worker	
Duration of exposure	Acute	
Route of exposure	inhalative	
Mode of action	Systemic effects	
Concentration	47.6	mg/m <sup>3</sup>

Type of value	Derived No Effect Level (DNEL)	
Reference group	Worker	
Duration of exposure	Acute	
Route of exposure	inhalative	
Mode of action	Local effects	
Concentration	36	mg/m <sup>3</sup>

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	47.6	mg/m <sup>3</sup>

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Type of value	Derived No Effect Level (DNEL)	
Reference group	Worker	
Duration of exposure	Long term	
Route of exposure	inhalative	
Mode of action	Local effects	
Concentration	14	mg/m <sup>3</sup>

Type of value	Derived No Effect Level (DNEL)	
Reference group	Consumer	
Duration of exposure	Acute	
Route of exposure	dermal	
Mode of action	Systemic effects	
Concentration	68	mg/kg

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	68	mg/kg

Type of value	Derived No Effect Level (DNEL)	
Reference group	Consumer	
Duration of exposure	Acute	
Route of exposure	inhalative	
Mode of action	Systemic effects	
Concentration	23.8	mg/m <sup>3</sup>

Type of value	Derived No Effect Level (DNEL)	
Reference group	Consumer	
Duration of exposure	Acute	
Route of exposure	inhalative	
Mode of action	Local effects	
Concentration	7.2	mg/m <sup>3</sup>

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	23.8	mg/m <sup>3</sup>

Type of value	Derived No Effect Level (DNEL)	
Reference group	Consumer	
Duration of exposure	Long term	
Route of exposure	inhalative	
Mode of action	Local effects	
Concentration	2.8	mg/m <sup>3</sup>

Type of value	Derived No Effect Level (DNEL)	
Reference group	Consumer	
Duration of exposure	Acute	
Route of exposure	oral	
Mode of action	Systemic effects	
Concentration	6.8	mg/kg

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Type of value	Derived No Effect Level (DNEL)	
Reference group	Consumer	
Duration of exposure	Long term	
Route of exposure	oral	
Mode of action	Systemic effects	
Concentration	6.8	mg/kg

**Predicted No Effect Concentration (PNEC)****ammonia ....%**

Type of value	PNEC	
Type	Freshwater	
Concentration	0.0011	mg/l
Type of value	PNEC	
Type	Saltwater	
Concentration	0.00011	mg/l

**8.2. Exposure controls****General protective and hygiene measures**

Keep away from food-stuffs, beverages and feed-stocks. Remove contaminated, soaked clothing immediately and dispose of safely. Wash hands before breaks and after work. Avoid contact with skin and eyes. Do not eat, drink or smoke during work time. Wash hands before breaks and after work.

**Respiratory protection**

Short term: filter apparatus, filter K; At intensive and longer exposition use self-contained breathing apparatus. Respiratory protection according to EN141

**Hand protection**

Protective gloves

Appropriate Material

The glove material must be sufficient impermeable and resistant to the substance. Check the tightness before wear. Gloves should be well cleaned before being removed, then stored in a well ventilated location.

Hand protection must comply with EN 374.

Appropriate Material

Butyl rubber - Butyl

Material thickness 0.5 mm

Breakthrough time &gt; 8 h

Appropriate Material

Fluoro carbon rubber - FKM

Material thickness 0.4 mm

Breakthrough time &gt; 8 h

Not suitable: rubber gloves

Not suitable: PVC gloves

**Eye protection**

Safety glasses with side protection shield; Eye protection must comply with EN 166.

**Body protection**

Alkali-resistant protective clothing; Clothing as usual in the chemical industry. Protective shoes

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

Physical state	liquid
Colour	light yellow, clear
Odour	of ammonia
Freezing point	
Value	-44 °C

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**Boiling point or initial boiling point and boiling range**

Value	44	°C
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**Upper and lower explosive limits**

Lower explosion limit	16	%(V)
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Upper explosion limit	27	%(V)
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**Flash point**

Value	°C
Remarks	Not applicable

**pH value**

Value	12	to	13
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Concentration/H <sub>2</sub> O	100	%
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**Vapour pressure**

Value	358	hPa
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Temperature	20	°C
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**Density and/or relative density**

Value	0.90	g/cm <sup>3</sup>
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Temperature	20	°C
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**9.2. Other information****Odour threshold**

Value	5	to	25	mg/l
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**Solubility in water**

Remarks	Completely miscible
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**Auto-ignition temperature**

Value	651	°C
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**Efflux time**

Remarks	No data available
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**Explosive properties**

evaluation	no
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**Oxidising properties**

evaluation	Not oxidising
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**Other information**

The product is not dangerous for explosions. Forms explosive mixture with air are possible.

**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).

**10.4. Conditions to avoid**

Heat

**10.5. Incompatible materials**

Corrodes copper and brass. Strong exothermic reaction with acids. Avoid contact with: Bases, Acids, aluminium (Al), zinc (Zn), copper (Cu), Strong oxidising agents, Hypochlorite

**10.6. Hazardous decomposition products**

Ammonia

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## SECTION 11: Toxicological information

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

#### Acute oral toxicity

ATE	153.571	mg/kg
	4	
Method	calculated value (Regulation (EC) No. 1272/2008)	

#### Acute oral toxicity (Components)

##### ammonia ....%

Species	rat	
LD50	350	mg/kg
Source	GESTIS-Stoffdatenbank	

##### ammonia ....%

Species	Human	
LDLo	43	mg/kg

#### Acute dermal toxicity (Components)

##### ammonia ....%

Remarks	No data available.
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#### Acute inhalative toxicity (Components)

##### ammonia ....%

Remarks	No data available.
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#### Skin corrosion/irritation

Remarks	Corrosive action on the skin and mucous membrane.
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#### Skin corrosion/irritation (Components)

##### ammonia ....%

Species	rabbit
evaluation	strongly irritant
Method	OECD 404

#### Serious eye damage/irritation

evaluation	irritant - risk of serious damage to eyes
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#### Serious eye damage/irritation (Components)

##### ammonia ....%

Species	rabbit
evaluation	strongly irritant
Remarks	Influence of the product with the eyes can lead to blindness.

#### Sensitization

Remarks	No sensitisation effect known.
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#### Sensitization (Components)

##### ammonia ....%

Species	guinea pig
evaluation	non-sensitizing

#### Subacute, subchronic, chronic toxicity (Components)

##### ammonia ....%

Route of exposure	inhalative	
Species	rat	
NOAEL	0.035	mg/l
Duration of exposure	50	Days



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**Mutagenicity (Components)****ammonia ....%**

Species	mouse
evaluation	No experimental indications on genotoxicity in vivo found.
Method	OECD 474

**ammonia ....%**

Species	Salmonella typhimurium
evaluation	No experimental information on genotoxicity in vitro available.
Method	Ames test

**Reproduction toxicity (Components)****ammonia ....%**

Route of exposure	oral
Species	rat
Dose	408 mg/kg
evaluation	No negative effects
Method	OECD 422

**Carcinogenicity (Components)****ammonia ....%**

Route of exposure	oral
Species	rat
Dose	67 mg/kg
Duration of exposure	104 Weeks
Method	OECD 453
Remarks	negative

**Specific Target Organ Toxicity (STOT) (Components)****ammonia ....%****Single exposure**

evaluation	May cause respiratory irritation. Route of exposure inhalative
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**ammonia ....%****Repeated exposure**

Source	Nicht eingestuft, basierend auf der Berechnungsmethode der CLP Verordnung.
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**11.2 Information on other hazards****Endocrine disrupting properties with respect to humans**

The product does not contain a substance that has endocrine disrupting properties with respect to humans.

**Experience in practice**

After Swallowing: burns in mouth, throat, oesophagus and gastrointetinal tract. Risk of perforation in the oesophagus and stomach.

**SECTION 12: Ecological information****12.1. Toxicity****Fish toxicity (Components)****ammonia ....%**

Species	rainbow trout (Oncorhynchus mykiss)
LC50	0.89 mg/l
Duration of exposure	96 h

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**ammonia ....%**

Species	rainbow trout ( <i>Oncorhynchus mykiss</i> )	
LOEC	0.022	mg/l
Duration of exposure	73	d
Method	Flow test; FIFRA Guideline 72-1	

**ammonia ....%**

Species	<i>Ictalurus punctatus</i>	
NOEC	0.06	mg/l
Duration of exposure	27	d
Method	Flow test; FIFRA Guideline 72-1	

**ammonia ....%**

Species	Fathead minnow ( <i>Pimephales promelas</i> )	
LC50	0.068	mg/l
Duration of exposure	96	h
Method	Flow test; FIFRA Guideline 72-1	

**ammonia ....%**

Species	<i>Ictalurus punctatus</i>	
NOEC	0.048	mg/l
Duration of exposure	31	d
Method	OECD 215	

**Daphnia toxicity (Components)****ammonia ....%**

Species	<i>Daphnia magna</i>	
LC50	101	mg/l
Duration of exposure	48	h

**ammonia ....%**

Species	<i>Daphnia magna</i>	
NOEC	0.79	mg/l
Duration of exposure	96	h

**ammonia ....%**

Species	<i>Daphnia magna</i>	
NOEC	0.42	mg/l
Duration of exposure	21	d

**ammonia ....%**

Species	<i>Daphnia magna</i>	
LC50	4.07	mg/l
Duration of exposure	96	h
Method	US-EPA	

**ammonia ....%**

Species	<i>Daphnia magna</i>	
NOEC	0.79	mg/l
Duration of exposure	96	h
Method	US-EPA	

**Algae toxicity (Components)****ammonia ....%**

Species	<i>Chlorella vulgaris</i>	
EC50	2700	mg/l
Duration of exposure	18	d

**Bacteria toxicity (Components)****ammonia ....%**

Remarks	No data available.
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**12.2. Persistence and degradability**

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### **Biodegradability (Components)**

ammonia ....%

evaluation

Readily biodegradable

### **Ready degradability (Components)**

ammonia ....%

## **12.4. Mobility in soil**

### **Mobility in soil (Components)**

ammonia ....%

Adsorbs on soil.

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

### **Results of PBT and vPvB assessment**

The product contains no PBT substances

The product contains no vPvB substances.

## **12.6 Endocrine disrupting properties**

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

The product does not contain a substance that has 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. The product causes changes in the pH value in the test system. The result relates to the unneutralized sample.

## **SECTION 13: Disposal considerations**

### **13.1. Waste treatment methods**

#### **Disposal recommendations for the product**

EWC waste code

No not dispose with rubbish.

EWC waste code

Should not be released into the sanitary sewer system.

Disposal in compliance with local and national regulations.

#### **Disposal recommendations for packaging**

Contaminated packaging should be emptied as far as possible and after appropriate cleansing may be taken for reuse.

Disposal in compliance with local and national regulations.

## **SECTION 14: Transport information**

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	Land transport ADR/RID	Marine transport IMDG/GGVSee	Air transport ICAO/IATA
Tunnel restriction code	E		
14.1. UN number	2672	2672	2672
14.2. UN proper shipping name	AMMONIA SOLUTION	AMMONIA SOLUTION	AMMONIA SOLUTION
14.3. Transport hazard class(es)	8	8	8
Label			
14.4. Packing group	III	III	III
Limited Quantity	5 l		
Transport category	3		
14.5. Environmental hazards	 ENVIRONMENTALLY HAZARDOUS	Marine Pollutant 	 ENVIRONMENTALLY HAZARDOUS

## 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 2

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

#### National regulations Switzerland

 Swiss Toxicity Class 2  
 SFOPH T no. G-1100

## SECTION 16: Other information

### Hazard statements listed in Chapter 3

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.

### CLP categories listed in Chapter 3

Aquatic Acute 1	Hazardous to the aquatic environment, acute, Category 1
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Aquatic Chronic 2

Hazardous to the aquatic environment, chronic, Category 2

Aquatic Chronic 2

Hazardous to the aquatic environment, chronic, Category 2

Eye Dam. 1

Serious eye damage, Category 1

Skin Corr. 1B

Skin corrosion, Category 1B

STOT SE 3

Specific target organ toxicity - single exposure, Category 3

**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.