

Trade name: Ammonii hydroxidi sol 10%

Substance number: 208121

Version: 5 / CH

Date revised: 04.07.2022

Replaces Version: 4 / CH

Print date: 04.07.22

SECTION 1: Identification of the substance/mixture and of the company/undertaking *****1.1. Product identifier**

Ammonii hydroxidi sol 10%

Item No. 20812100

Registration no.

EC No.: 215-647-6

CAS No. 1336-21-6

1.2. Relevant identified uses of the substance or mixture and uses advised against**Use of the substance/preparation *****

Manufacture of pharmaceutical products, Manufacture of cosmetics

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 3 H412

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 ***

Trade name: Ammonii hydroxidi sol 10%

Substance number: 208121

Version: 5 / CH

Date revised: 04.07.2022

Replaces Version: 4 / CH

Print date: 04.07.22

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 ***

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%

SECTION 3: Composition/information on ingredients *****Hazardous ingredients *******ammonia%**

CAS No.	1336-21-6				
EINECS no.	215-647-6				
Registration no.	01-2119488876-14-XXXX				
Concentration	>= 10	<	17		%
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

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

Further ingredients *****water**

CAS No.	7732-18-5				
EINECS no.	231-791-2				
Concentration		>=	50		%
Advice: [4]					

Note

[4] Voluntary information

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

Adhere to personal protective measures when giving first aid

After inhalation

Remove the casualty into fresh air and keep him calm. Irregular breathing/no breathing: artificial respiration. Seek medical advice immediately.

Trade name: Ammonii hydroxidi sol 10%

Substance number: 208121

Version: 5 / CH

Date revised: 04.07.2022

Replaces Version: 4 / CH

Print date: 04.07.22

After skin contact

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

After eye contact

In case of contact with the eyes, rinse immediately for at least 15 minutes with plenty of water. Seek medical advice immediately.

After ingestion

Do not induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth thoroughly with water. Seek medical advice immediately.

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

Irritation of respiratory organs, Coughing, Shortness of breath, Unconsciousness, Vomiting, Nausea, Convulsions, Death, Danger of blindness.

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

Extinguishing measures to suit surroundings

Non suitable extinguishing media

not applicable

5.2. Special hazards arising from the substance or mixture

In the event of fire the following can be released: Nitrogen oxides (NOx)

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

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

Other information

Cool endangered containers with water spray jet. Suppress gases/vapours/mists with water spray jet. Fire residues and contaminated fire-fighting water must be disposed of in accordance with the local regulations.

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

Wear protective equipment. Do not inhale vapours. Ensure adequate ventilation. Remove persons to safety.

6.2. Environmental precautions

Do not empty into drains.

6.3. Methods and material for containment and cleaning up

Contain and collect spillage with non-combustible absorbent materials, e.g. sand, earth, vermiculite, diatomaceous earth and place in container for disposal according to local regulations (see section 13). Send in suitable containers for recovery or disposal.

6.4. Reference to other sections

Information regarding waste disposal, see Section 13.

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

Trade name: Ammonii hydroxidi sol 10%

Substance number: 208121

Version: 5 / CH

Date revised: 04.07.2022

Replaces Version: 4 / CH

Print date: 04.07.22

Advice on safe handling

Avoid contact with skin and eyes. Avoid inhaling dusts/ billows/ steams.

7.2. Conditions for safe storage, including any incompatibilities**Requirements for storage rooms and vessels**

Keep container tightly closed and dry. Keep container tightly closed in a well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

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. Observe label precautions.

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 ³

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 ³

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 ³

Trade name: Ammonii hydroxidi sol 10%

Substance number: 208121

Version: 5 / CH

Date revised: 04.07.2022

Replaces Version: 4 / CH

Print date: 04.07.22

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 ³
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 ³
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 ³
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 ³
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 ³
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
Type of value	Derived No Effect Level (DNEL)	

Trade name: Ammonii hydroxidi sol 10%

Substance number: 208121

Version: 5 / CH

Date revised: 04.07.2022

Replaces Version: 4 / CH

Print date: 04.07.22

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**

Observe the usual precautions for handling chemicals. Wash hands before breaks and after work.

Respiratory protection ***

necessary; Full mask, filter K

Hand protection ***

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.

Appropriate Material	Butyl rubber - Butyl
Material thickness	0.7 mm
Breakthrough time	> 480 min
Appropriate Material	nitrile rubber - NBR
Material thickness	0.40 mm
Breakthrough time	> 240 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**

Form	liquid, clear
Colour	colourless
Odour threshold	
Remarks	No data available
pH value	
Remarks	No data available
Melting point	
Remarks	No data available
Initial boiling point and boiling range	
Remarks	No data available

Trade name: Ammonii hydroxidi sol 10%

Substance number: 208121

Version: 5 / CH

Date revised: 04.07.2022

Replaces Version: 4 / CH

Print date: 04.07.22

Flash point

Value	°C
Remarks	Not applicable

Upper/lower flammability or explosive limits

Remarks	No data available
---------	-------------------

Vapour pressure

Remarks	No data available
---------	-------------------

Density

Value	0.957	to	0.961	g/cm ³
Remarks	Relative Density according specification			

Solubility in water

Remarks	No data available
---------	-------------------

Partition coefficient: n-octanol/water

Reference substance	ammonia%
Remarks	No data available

Minimum ignition energy

Remarks	No data available
---------	-------------------

9.2. Other information**Other information**

The product is not dangerous for explosions.

SECTION 10: Stability and reactivity *****10.1. Reactivity**

Risk of explosion with: Oxidising agents, Mercury, oxygen, Silvercompounds, hydrogen peroxide (H₂O₂). Halogens, Acids, Sodium hypochlorite, Salts of heavy metals, Reactions with reducing agents, heavy metals. Risk of ignition or formation of inflammable gases or vapours with: Boron, phosphorus, Reaction with nitric acid.

10.2. Chemical stability

Vapours can form an explosive mixture with air.

10.3. Possibility of hazardous reactions

Vapours can form an explosive mixture with air.

10.4. Conditions to avoid

Protect from heat/overheating.

10.5. Incompatible materials

aluminium (Al), lead, Silvercompounds, Zinc, copper (Cu), Metals

10.6. Hazardous decomposition products

Toxic gases/vapours

SECTION 11: Toxicological information**11.1. Information on toxicological effects****Acute oral toxicity**

ATE	2'917.63	mg/kg
	92	
Method	calculated value (Regulation (EC) No. 1272/2008)	

Trade name: Ammonii hydroxidi sol 10%

Substance number: 208121

Version: 5 / CH

Date revised: 04.07.2022

Replaces Version: 4 / CH

Print date: 04.07.22

Acute oral toxicity (Components)**ammonia%**

Species	rat	
LD50	350	mg/kg
Source	GESTIS-Stoffdatenbank	

Acute dermal toxicity (Components)**ammonia%**

Remarks No data available.

Acute inhalative toxicity (Components)**ammonia%**

Remarks No data available.

Skin corrosion/irritation

Remarks No data available.

Skin corrosion/irritation (Components)**ammonia%**

Species	rabbit
evaluation	corrosive
Method	OECD 404

Serious eye damage/irritation

Remarks No data available.

Serious eye damage/irritation (Components)**ammonia%**

Species	rabbit
evaluation	irritant - risk of serious damage to eyes

Sensitization

Remarks No data available

Sensitization (Components)**ammonia%**

Species	guinea pig
evaluation	non-sensitizing

Subacute, subchronic, chronic toxicity (Components)**ammonia%**

Remarks No data available.

Mutagenicity

Remarks No data available

Mutagenicity (Components)**ammonia%**

evaluation No experimental indications on genotoxicity in vivo found.

ammonia%

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

Reproductive toxicity

Remarks No data available

Reproduction toxicity (Components)**ammonia%**

Remarks Indications of toxic effects are available from reproduction studies in animals.

Trade name: Ammonii hydroxidi sol 10%

Substance number: 208121

Version: 5 / CH

Date revised: 04.07.2022

Replaces Version: 4 / CH

Print date: 04.07.22

Carcinogenicity

Remarks No data available

Carcinogenicity (Components)**ammonia%**

Remarks No evidence available on carcinogenicity.

Specific Target Organ Toxicity (STOT)

Remarks No data available

Specific Target Organ Toxicity (STOT) (Components)**ammonia%**

Remarks No data available

SECTION 12: Ecological information**12.1. Toxicity****General information**

No data available

Fish toxicity

Remarks No data available.

Fish toxicity (Components)**ammonia%**

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

Daphnia toxicity (Components)**ammonia%**

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

Algae toxicity (Components)**ammonia%**

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

Bacteria toxicity (Components)**ammonia%**

Remarks No data available.

12.2. Persistence and degradability**Biodegradability**

Remarks No data available.

Biodegradability (Components)**ammonia%**

evaluation Readily biodegradable

Ready degradability (Components)**ammonia%****12.3. Bioaccumulative potential**

Partition coefficient: n-octanol/water

Trade name: Ammonii hydroxidi sol 10%

Substance number: 208121

Version: 5 / CH

Date revised: 04.07.2022

Replaces Version: 4 / CH

Print date: 04.07.22

Reference substance ammonia%
Remarks No data available

12.4. Mobility in soil**General information**

No data available

Mobility in soil (Components)

ammonia%

Adsorbs on soil.

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

There is no data available on the product apart from the information given in this subsection.

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

Very toxic for aquatic organisms.




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
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		

SECTION 15: Regulatory information ***

Trade name: Ammonii hydroxidi sol 10%

Substance number: 208121

Version: 5 / CH

Date revised: 04.07.2022

Replaces Version: 4 / CH

Print date: 04.07.22

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

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
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.