

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Ammonia solution 25%, 1 l

Print date: 14.04.2015

Product code: 9991064

Page 1 of 8

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

1.1. Product identifier

Ammonia solution 25%, 1 l

CAS No: 1336-21-6
Index No: 007-001-01-2
EC No: 215-647-6

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

Use of the substance/mixture

Laboratory chemicals

1.3. Details of the supplier of the safety data sheet

Seller

Company name: CONATEX-DIDACTIC Lehrmittel GmbH
Street: Im Forstgarten 1
Place: D-66459 Kirkel
Internet: www.conatex.com

Supplier

Company name: Carbolution Chemicals GmbH
Street: Im Stadtwald, Gebäude A1.2
Place: D-66123 Saarbrücken
Contact person: Dr. Michael Bauer Telephone: +49 (0)681 302-71232
e-mail: michael.bauer@carbolution-chemicals.de
Internet: www.carbolution-chemicals.de

1.4. Emergency telephone number:

+49 (0)681 302-71232

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Directive 67/548/EEC or 1999/45/EC

Indications of danger: C - Corrosive, N - Dangerous for the environment
R phrases:
Causes burns.
Very toxic to aquatic organisms.

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Hazard categories:
Skin corrosion/irritation: Skin Corr. 1B
Hazardous to the aquatic environment: Aquatic Acute 1 (M-Factor = 1)
Hazard Statements:
Causes severe skin burns and eye damage.
Very toxic to aquatic life.

2.2. Label elements

Hazardous components which must be listed on the label

Ammonia ... %

Signal word: Danger
Pictograms: GHS05-GHS07-GHS09

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Ammonia solution 25%, 1 l

Print date: 14.04.2015

Product code: 9991064

Page 2 of 8



Hazard statements

- H314 Causes severe skin burns and eye damage.
H335 May cause respiratory irritation.
H400 Very toxic to aquatic life.

Precautionary statements

- P273 Avoid release to the environment.
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 lenses, if present and easy to do. Continue rinsing.

SECTION 3: Composition/information on ingredients

3.1. Substances

Sum formula: H5NO
Molecular weight: 35,05

Hazardous components

EC No	Chemical name	Quantity
CAS No	Classification according to Directive 67/548/EEC	
Index No	Classification according to Regulation (EC) No. 1272/2008 [CLP]	
215-647-6	Ammonia ... %	25 - < 30 %
1336-21-6	C - Corrosive, N - Dangerous for the environment R34-50	
007-001-01-2	Skin Corr. 1B, Aquatic Acute 1; H314 H400	

Full text of R-, H- and EUH-phrases: see section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

After inhalation

Provide fresh air.

After contact with skin

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation occurs: Get medical advice/attention.

After contact with eyes

In case of contact with eyes, rinse immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Subsequently consult an ophthalmologist.

After ingestion

Rinse mouth immediately and drink plenty of water. Do NOT induce vomiting. Potential hazards: Stomach perforation. Call a physician immediately. Do not allow a neutralisation agent to be drunk.

4.3. Indication of any immediate medical attention and special treatment needed

No data available

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Ammonia solution 25%, 1 l

Print date: 14.04.2015

Product code: 9991064

Page 3 of 8

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Co-ordinate fire-fighting measures to the fire surroundings.

5.2. Special hazards arising from the substance or mixture

The product itself does not burn.

5.3. Advice for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing. Full protective suit.

Additional information

Use water spray jet to protect personnel and to cool endangered containers. Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Provide adequate ventilation. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes. Wear personal protection equipment.

6.2. Environmental precautions

Do not allow to enter into surface water or drains.

6.3. Methods and material for containment and cleaning up

The product needs to apply neutralizing agents before draining to wastewater treatment plants. Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray.

Advice on protection against fire and explosion

Only use the material in places where open light, fire and other flammable sources can be kept away.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed. Keep locked up. Store in a place accessible by authorized persons only. Provide adequate ventilation as well as local exhaustion at critical locations.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m ³	fibres/ml	Category	Origin
7664-41-7	Ammonia, anhydrous	25	18		TWA (8 h)	WEL
		35	25		STEL (15 min)	WEL

8.2. Exposure controls

Appropriate engineering controls

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Ammonia solution 25%, 1 l

Print date: 14.04.2015

Product code: 9991064

Page 4 of 8

gas/fumes/vapour/spray.

Protective and hygiene measures

Remove contaminated, saturated clothing immediately. Protect skin by using skin protective cream.
After work, wash hands and face. When using do not eat or drink.

Eye/face protection

Eye protection: Tightly sealed safety glasses. German Industry Norms (DIN) / European Norms (EN):
DIN EN 166

Hand protection

Hand protection: Single-use gloves. Before using check leak tightness / impermeability. Use gloves
only once. German Industry Norms (DIN) / European Norms (EN): DIN EN 374

Skin protection

Body protection: Lab apron. Only wear fitting, comfortable and clean protective clothing.

Respiratory protection

With correct and proper use, and under normal conditions, breathing protection is not required. If
technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must
be worn. Suitable respiratory protective equipment: particulates filter device (DIN EN 143).

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	liquid
Colour:	colourless
Odour:	No data available

	Test method
pH-Value:	11,7

Changes in the physical state

Initial boiling point and boiling range:	38 °C
Sublimation point:	No data available
Softening point:	No data available
Flash point:	No data available

Flammability

Solid:	No data available
Gas:	No data available

Lower explosion limits:	16 vol. %
Upper explosion limits:	27 vol. %
Ignition temperature:	No data available

Auto-ignition temperature

Solid:	No data available
Gas:	No data available

Vapour pressure: (at 20 °C)	153 hPa
Vapour pressure:	No data available
Density:	0,9 g/cm³
Water solubility:	No data available
Partition coefficient:	No data available
Viscosity / dynamic:	No data available
Viscosity / kinematic:	No data available

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Ammonia solution 25%, 1 l

Print date: 14.04.2015

Product code: 9991064

Page 5 of 8

Flow time:	No data available
Vapour density:	1,21
Evaporation rate:	No data available
Solvent separation test:	No data available
Solvent content:	No data available

9.2. Other information

Solid content:	No data available
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SECTION 10: Stability and reactivity

10.1. Reactivity

No data available

10.3. Possibility of hazardous reactions

No data available

10.4. Conditions to avoid

No data available

10.5. Incompatible materials

Oxidizing agents, strong.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicokinetics, metabolism and distribution

Toxicological data are not available.

Acute toxicity

Toxicological data are not available.

Irritation and corrosivity

after ingestion: Irritant and corrosive effects. Potential hazards: Stomach perforation.

Sensitising effects

No data available

Severe effects after repeated or prolonged exposure

No data available

Carcinogenic/mutagenic/toxic effects for reproduction

Due to missing data no statement can be made whether the substance fulfills the criteria of CMR categories 1 or 2. Practical experiences do not give any evidence for CMR activity of categories 1 or 2.

Specific effects in experiment on an animal

No data available

Additional information on tests

The classification was carried out according to the calculation method of the Preparations Directive (1999/45/EC).

Practical experience

Observations relevant to classification

No data available

SECTION 12: Ecological information

12.1. Toxicity

Very toxic to aquatic life.

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Ammonia solution 25%, 1 l

Print date: 14.04.2015

Product code: 9991064

Page 6 of 8

CAS No	Chemical name				
	Aquatic toxicity	Method	Dose	[h] [d]	Species
1336-21-6	Ammonia ... %				
	Acute fish toxicity	LC50	0,53 mg/l	96 h	Onchorhynchus mykiss
	Acute crustacea toxicity	EC50	24 mg/l	48 h	Daphnia magna

12.2. Persistence and degradability

No data available

12.3. Bioaccumulative potential

No data available

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
1336-21-6	Ammonia ... %	-1,38

12.4. Mobility in soil

No data available

12.5. Results of PBT and vPvB assessment

No data available

12.6. Other adverse effects

No data available

Further information

Do not allow to enter into surface water or drains. The classification was carried out according to the calculation method of the Preparations Directive (1999/45/EC).

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Advice on disposal

Do not allow to enter into surface water or drains. Dispose of waste according to applicable legislation.

Waste disposal number of waste from residues/unused products

- 160506 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; laboratory chemicals, consisting of or containing dangerous substances, including mixtures of laboratory chemicals
Classified as hazardous waste.

Waste disposal number of used product

- 160506 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; laboratory chemicals, consisting of or containing dangerous substances, including mixtures of laboratory chemicals
Classified as hazardous waste.

Waste disposal number of contaminated packaging

- 150110 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); packaging containing residues of or contaminated by dangerous substances
Classified as hazardous waste.

Contaminated packaging

Non-contaminated packages may be recycled. Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information

Land transport (ADR/RID)

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Ammonia solution 25%, 1 I

Print date: 14.04.2015

Product code: 9991064

Page 7 of 8

14.1. UN number:	UN2672
14.2. UN proper shipping name:	AMMONIA SOLUTION relative density between 0.880 and 0.957 at 15 °C in water, with more than 10% but not more than 35% ammonia by mass
14.3. Transport hazard class(es):	8
14.4. Packing group:	III
Hazard label:	8
Classification code:	C5
Special Provisions:	543
Limited quantity:	5 L
Transport category:	3
Hazard No:	80
Tunnel restriction code:	E

Other applicable information (land transport)

E1

Inland waterways transport (ADN)

14.1. UN number:	UN2672
14.2. UN proper shipping name:	AMMONIA SOLUTION relative density between 0.880 and 0.957 at 15 °C in water, with more than 10% but not more than 35% ammonia by mass
14.3. Transport hazard class(es):	8
14.4. Packing group:	III
Hazard label:	8
Classification code:	C5
Special Provisions:	543
Limited quantity:	5 L

Other applicable information (inland waterways transport)

E1

Marine transport (IMDG)

14.1. UN number:	UN 2672
14.2. UN proper shipping name:	AMMONIA SOLUTION relative density between 0.880 and 0.957 at 15°C in water, with more than 10 % but not more than 35 % ammonia by mass
14.3. Transport hazard class(es):	8
14.4. Packing group:	III
Hazard label:	8
Special Provisions:	-
Limited quantity:	5 L
EmS:	F-A, S-B

Other applicable information (marine transport)

E1

Air transport (ICAO)

14.1. UN number:	UN 2672
14.2. UN proper shipping name:	AMMONIA SOLUTION relative density between 0.880 and 0.957 at 15°C in water, with more than 10 % but not more than 35 % ammonia by mass
14.3. Transport hazard class(es):	8
14.4. Packing group:	III
Hazard label:	8
Special Provisions:	A64 A803
Limited quantity Passenger:	1 L

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Ammonia solution 25%, 1 l

Print date: 14.04.2015

Product code: 9991064

Page 8 of 8

IATA-packing instructions - Passenger:	852
IATA-max. quantity - Passenger:	5 L
IATA-packing instructions - Cargo:	856
IATA-max. quantity - Cargo:	60 L

Other applicable information (air transport)

E1
: Y841

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: yes

SECTION 15: Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****EU regulatory information****Additional information**

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH)

National regulatory information

Water contaminating class (D): 3 - highly water contaminating

SECTION 16: Other information**Relevant R-phrases (Number and full text)**

34	Causes burns.
50	Very toxic to aquatic organisms.

Relevant H- and EUH-phrases (Number and full text)

H314	Causes severe skin burns and eye damage.
H335	May cause respiratory irritation.
H400	Very toxic to aquatic life.