


Material Safety Data Sheet	
AMMONIA SOLUTION 25% LR	VERSION : 03 DATE OF ISSUE : 31-01-2022 SUPERSEDES : 02
Product Code : 11860	Page 1 of 9

1. Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Trade name : AMMONIA SOLUTION 25% LR
Product code : 11860
Identification of the product : Ammonia solution
CAS No : 1336-21-6

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

Identified uses : Reagent for analysis, Chemical production

1.3. Details of the supplier of the safety data sheet

Company identification : MOLYCHEM
 Office: 78/80 Babu Genu Road, Souri Bldg., 2nd Floor,
 Mumbai – 400 002 (INDIA)
 Tel: +91 22 4066 8111, 2205 7772 . Fax: + 91 22 2203 4442.
 Email : info@molychem.net
 Works: Plot No. B/9, Badlapur M.I.D.C., OPP. Shobhavat
 Textile Co., Kulgaon, Badlapur (E), Dist.-Thane-421 503.

1.4. Emergency telephone number

Emergency number : +91 22 4066 8111 (10:00am - 6:00 pm).

2. Hazards identification -DSD

2.1. Classification of the substance or mixture

Hazard Class and Category Code(s), Regulation (EC) No 1272/2008

Skin corrosion (Sub-category 1B), H314
 Serious eye damage (Category 1), H318
 Short-term (acute) aquatic hazard (Category 1), H400
 Long-term (chronic) aquatic hazard (Category 2), H411

2.2. Label elements

Labelling EC 67/548 or EC 1999/45

Symbol(s) : C : Corrosive
N : Dangerous for the environment




R Phrase(s) :

R34 : Causes burns.
R50 : Very toxic to aquatic organisms.

S Phrase(s) :

S1/2 : Keep locked up and out of reach of children.

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S7 : Keep container tightly closed.
S26 : In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S36/37/39 : Wear suitable protective clothing, gloves and eye/face protection.
S45 : In case of accident or if you feel unwell, seek medical advice immediately (show the label when possible).
S61 : Avoid release to the environment. Refer to special instructions/Safety data sheets.

Labelling Regulation EC 1272/2008 (CLP)

Hazard pictograms



Signal words :

Danger

Hazard statements :

H314 : Causes severe skin burns and eye damage.
H335 : May cause respiratory irritation.
H410 : Very toxic to aquatic life with long lasting effects

Precautionary statements

P261 : Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.
P271 : Use only outdoors or in a well-ventilated area.
P273 : Avoid release to the environment.
P280 : Wear protective gloves/ protective clothing/ eye protection/ face protection.
P303 + P361 + P353 : IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.
P305 + P351 + P338 : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Supplemental Hazard statements : none


2.3. Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

3. Composition/information on ingredients

3.2 Mixtures Component

Formula : H_3N

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Molecular weight : 17.03 g/mol
CAS-No. : 7664-41-7

4. First aid measures

4.1. Description of first aid measures

General advice

First aiders need to protect themselves.

If inhaled

After inhalation: fresh air.

In case of skin contact

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/shower. Call a physician immediately.

In case of eye contact

After eye contact: rinse out with plenty of water. Immediately call in ophthalmologist. Remove contact lenses.

If swallowed

After swallowing: make victim drink water (two glasses at most), avoid vomiting (risk of perforation). Call a physician immediately. Do not attempt to neutralise.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

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

No data available

5. Fire-fighting measures

5.1. Extinguishing media

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media

For this substance/mixture no limitations of extinguishing agents are given

5.2. Special hazards arising from the substance or mixture

Nitrogen oxides (NO_x)


Not combustible.

Ammonia solution itself is not flammable, but can form an ignitable ammonia/air-mixture by outgassing.

Ambient fire may liberate hazardous vapours.

Fire may cause evolution of : nitrogen oxides

5.3. Advice for fire-fighters

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Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

5.4 Further information

Cool closed containers exposed to fire with water spray. Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Do not breathe vapors, aerosols. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert. For personal protection see section 8.

6.2 Environmental precautions

Do not empty into drains.

6.3. Methods and material for containment and cleaning up

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up with liquid-absorbent and neutralising material (e.g. Chemizorb® OH⁻, Merck Art. No. 101596). Dispose of properly. Clean up affected area.

6.4 Reference to other sections

For disposal see section 13.

7. Handling and storage

7.1. Precautions for safe handling

Hygiene measures

Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance. For precautions see section 2.2.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions

No metal or light-weight-metal containers. Tightly closed.

Storage class

Storage class (TRGS 510): 8B: Non-combustible, corrosive hazardous materials

7.3. Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated


8. Exposure controls/personal protection

8.1. Exposure controls

Personal protection : Avoid all unnecessary exposure.

Respiratory protection : Wear approved mask.

Hand protection : Wear protective gloves.

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Skin protection : Wear suitable protective clothing.

Eye protection : Chemical goggles or face shield.

Others : When using, do not eat, drink or smoke.

8.2. Control parameters

Occupational Exposure Limits : No data available.


9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

a) Physical state	liquid
b) Color	colorless
c) Odor	stinging
d) Melting point/freezing point	No data available
e) Initial boiling point and boiling range	37.7 °C at 1.013 hPa
f) Flammability (solid, gas)	No data available
g) Upper/lower flammability or explosive limits	Upper explosion limit: 33.6%(V) Lower explosion limit: 15.4%(V)
h) Flash point	No data available
i) Autoignition temperature	No data available
j) Decomposition temperature	No data available
k) pH	at 20 °C strongly alkaline
l) Viscosity	Viscosity, kinematic: No data available Viscosity, dynamic: No data available
m) Water solubility	at 20 °C soluble
n) Partition coefficient: n-octanol/water	Not applicable for inorganic substances
o) Vapor pressure	483 hPa at 20 °C
p) Density	0.91 g/cm ³ at 20 °C
Relative density	No data available
q) Relative vapor density	No data available
r) Particle characteristics	No data available
s) Explosive properties	No data available
t) Oxidizing properties	none

9.2. Other information

No data available

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10. Stability and reactivity

10.1. Reactivity

No data available

10.2. Chemical stability

Ammonia solution itself is not flammable, but can form an ignitable ammonia/air-mixture by outgassing.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Heating.

10.5. Incompatible materials

Aluminum, Lead, Nickel, silver, Zinc, Copper, metal alloys, various metals

10.6. Hazardous decomposition products

In the event of fire: see section 5

11. Toxicological information

11.1. Information on toxicological effects

Acute toxicity	: Oral: Harmful if swallowed.
ATE CLP (oral)	500 mg/kg bodyweight
Skin corrosion/irritation	: Causes severe skin burns and eye damage. pH: 11.7
Serious eye damage/irritation	: Serious eye damage, category 1, implicit pH: 11.7
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: May cause respiratory irritation.
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified

12. Ecological information

12.1. Toxicity


Ecology - general	: Very toxic to aquatic life.
Ecology – water	: Very toxic to aquatic life

12.2. Persistence - degradability

Persistence and degradability	: Rapidly degradable
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12.3. Bioaccumulative potential

No data available

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12.4 Mobility in soil

No data available

12.5. Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Endocrine disrupting properties

No data available

12.7 Other adverse effects

No additional information available

13. Disposal considerations

13.1. Waste treatment methods

Regional waste regulation	: Disposal must be done according to official regulations.
Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
Sewage disposal recommendations	: Disposal must be done according to official regulations.
Product/Packaging disposal recommendations	: Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation. Disposal must be done according to official regulations.
Additional information	: Do not re-use empty containers.

14. Transport information

14.1. UN number

ADR/RID: 2672	IMDG: 2672	IATA: 2672
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14.2. UN proper shipping name

ADR/RID:	AMMONIA SOLUTION
IMDG:	AMMONIA SOLUTION
IATA:	Ammonia solution

14.3. Transport hazard class(es)

ADR/RID: 8	IMDG: 8	IATA: 8
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14.4 Packaging group


ADR/RID: III	IMDG: III	IATA: III
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14.5 Environmental hazards

ADR/RID: yes	IMDG Marine pollutant: yes	IATA: no
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14.6 Special precautions for user

Tunnel restriction code : (E)

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Further information : No data available

15. Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

National legislation

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances : ENVIRONMENTAL HAZARDS

15.2. Chemical Safety Assessment

A Chemical Safety Assessment has been carried out for this substance.

16. Other information

Abbreviations and acronyms :

PBT : persistent, bioaccumulative and toxic.

vPvB: very persistent and very bioaccumulative

Sources of key data used : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006

Further information : None.


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