

## MATERIAL SAFETY DATA SHEET (MSDS)

### AMMONIA SOLUTION AR ABT 25%

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

##### 1.1. Product identifier

Trade name : AMMONIA SOLUTION AR ABT 25%

Product code : SM0050900500

Identification of the product : Ammonia solution  
CAS No :1336-21-6  
EC No :215-647-6  
Annex No :007-001-01-2

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

Use : Industrial. For professional use only.

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

Company identification : SUVCHEM  
Chaitanya Tower, 2nd Floor, Office # 206,  
Siddharth Nagar, S.V. Road,  
Goregaon (West), Mumbai - 400062,  
Maharashtra, India.  
Contact: +91 22 28725393 / 94 / 95  
Email ID: info@suvchem.com/care@suvchem.com

##### 1.4. Emergency telephone number

Phone no. : + 91 22 28725393 / 94 / 95 (9:00am - 6:00 pm) [ Office hours ]

#### 2. Hazards identification -DSD

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

##### Classification EC 67/548 or EC 1999/45

Classification : C; R34  
N; R50

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

Health hazards : Serious eye damage - Category 1 - Danger (CLP : Eye Dam. 1) H318  
Skin corrosion - Category 1B - Danger (CLP : Skin Corr. 1B) H314

Environmental hazards : Hazardous to the aquatic environment - Acute hazard - Category 1 - Warning (CLP : Aquatic Acute 1) H400

##### 2.2. Label elements

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**AMMONIA SOLUTION AR ABT 25%**
**2. Hazards identification -DSD (continued)**
Labelling EC 67/548 or EC 1999/45
**Symbol(s)**

**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.  
 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.

**Contains**

: Ammonia solution

Labelling Regulation EC 1272/2008 (CLP)
**Hazard pictograms**

**Signal words**

: Danger

**Hazard statements**

: H302 : Harmful if swallowed  
 H314 : Causes severe skin burns and eye damage.

**Precautionary statements**

H335 : May cause respiratory irritation.  
 H400 : Very toxic to aquatic life.

**• General**

: P102: Keep out of reach of children.

P103: Read label before use.

**• Prevention**

P101: If medical advice is needed, have product container or label at hand.

: P280: Wear protective gloves, protective clothing, eye protection, face protection.

P260: Do not breathe dust, fume, gas, mist, vapours, spray.

P273: Avoid release to the environment.

**• Response**

: P304 + P340 + P310 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor/ physician.

P391: Collect spillage.

P305+P351+P338: IF IN EYES : Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

P303+P361+P353: IF ON SKIN (or hair) : Remove immediately all contaminated clothing. Rinse skin with water/shower.

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#### 2. Hazards identification -DSD (continued)

- **Storage** : P405: Store locked up.
  - **Disposal considerations** : P501: Dispose of this material and its container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.
- Contains** : Ammonia solution

#### 2.3. Other hazards

- Other hazards** : The substance does not fulfil the criteria to be identified as PBT substance or vPvB substance according to Annex XIII of Regulation REACH.

#### 3. Composition/information on ingredients

**Substance / Preparation** : Ammonia solution  
CAS No :1336-21-6  
EC No :215-647-6  
Annex No :007-001-01-2  
Substance.

Substance name	Contents	CAS No	EC No	Annex No	REACH Ref.	Classification
Ammonia solution	25-50 %	1336-21-6	215-647-6	007-001-01-2	----	C; R34 N; R50 ----- Skin Corr. 1B _ H314 Eye Dam 1 _ R318 Aquatic Acute 1 _ H400

Contains no other components or impurities which will influence the classification of the product.

#### 4. First aid measures

##### 4.1. Description of first aid measures

- Inhalation** : Immediately call a POISON CENTER or doctor. Remove to fresh air and keep at rest in a position comfortable for breathing.
- Skin contact** : Remove/Take off immediately all contaminated clothing. Wash with plenty of soap and water. Immediately call a POISON CENTER or doctor.
- Eye contact** : Immediately call a POISON CENTER or doctor. Remove contact lenses, if present and easy to do. Continue rinsing. Rinse cautiously with water for several minutes.
- Ingestion** : Immediately call a POISON CENTER or doctor. Do NOT induce vomiting. Rinse mouth.

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

- Symptoms relating to use** : Causes severe skin burns and eye damage.  
Causes serious eye damage.

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

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**4. First aid measures (continued)**

**General information** : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

**5. Fire-fighting measures**
**5.1. Extinguishing media**

**Suitable extinguishing media** : Foam. Dry powder. Carbon dioxide. Water spray. Sand.  
**Unsuitable extinguishing media** : Do not use a heavy water stream.  
**Surrounding fires** : Use water spray or fog for cooling exposed containers.

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

**Hazardous combustion products** : Under fire conditions, hazardous fumes will be present.  
 Thermal decomposition generates : Corrosive vapours.

**5.3. Advice for fire-fighters**

**Protection against fire** : Do not enter fire area without proper protective equipment, including respiratory protection.  
**Special procedures** : Exercise caution when fighting any chemical fire. Avoid (reject) fire-fighting water to enter environment.

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

**For emergency responders** : Equip cleanup crew with proper protection.  
 Ventilate area.  
**For non-emergency personnel** : Evacuate unnecessary personnel.

**6.2. Environmental precautions**

**Environmental precautions** : Prevent entry to sewers and public waters. Notify authorities if product enters sewers or public waters.  
 Avoid release to the environment.

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

**Clean up methods** : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

**6.4. Reference to other sections**

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**6. Accidental release measures (continued)**

See section 8. Exposure controls/personal protection

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

**Handling** : Wash contaminated clothing before reuse. Wash thoroughly after handling. Do not breathe dust, fume, gas, mist, vapours, spray.

**Technical protective measures** : Provide good ventilation in process area to prevent formation of vapour.

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

**Storage** : Keep only in the original container in a cool, well ventilated place. Keep container closed when not in use.

**Storage regulation** : Comply with applicable regulations.

**Storage - away from** : Strong bases. Strong acids. Sources of ignition. Direct sunlight.

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

**Specific end use(s)** : None.

**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.
- **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**

**Physical state at 20 °C** : Liquid.

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**9. Physical and chemical properties (continued)**

Colour	: Clear Colorless
Odour	: Ammonia odour
Odour threshold	: No data available.
pH value	: No data available.
Melting point [°C]	: -60 °C
Decomposition point [°C]	: N/A
Critical temperature [°C]	: N/A
Auto-ignition temperature [°C]	: 6510C
Flammability (solid, gas)	: N/A
Flash point [°C]	: N/A
Boiling point [°C]	: 38 - 100 °C
Initial boiling point [°C]	: 38°C
Final boiling point [°C]	: 100 °C
Evaporation rate	: N/A
Vapour pressure [20°C]	: 153 hPa at 20 °C
Vapour pressure mm/Hg	: N/A
Vapour density	: 1,21
Density [g/cm <sup>3</sup> ]	: 0,9
Relative density, gas (air=1)	: N/A
Relative density, liquid (water=1)	: N/A
Solubility in water [% weight]	: Infinitely soluble
Solubility in water	: N/A
Log Pow octanol / water at 20°C	: No data available.
Solubility	: 11.7
Viscosity at 40°C [mm <sup>2</sup> /s]	: N/A

**9.2. Other information**

Explosive properties	: N/A
Explosion limits - upper [%]	: 27%
Explosion limits - lower [%]	: 16%
Oxidising properties	: No data available.

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

Reactivity	: Not established.
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**10.2. Chemical stability.**

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#### 10. Stability and reactivity (continued)

**Chemical stability** : Stable under recommended storage conditions.

#### 10.3. Possibility of hazardous reactions

**Hazardous reactions** : Not established.

#### 10.4. Conditions to avoid

**Conditions to avoid** : Direct sunlight. Extremely high or low temperatures.

#### 10.5. Incompatible materials

**Materials to avoid** : Strong acids. Strong bases.

#### 10.6. Hazardous decomposition products

**Hazardous decomposition products** : Fumes. Carbon monoxide. Carbon dioxide.  
Thermal decomposition generates : Corrosive vapours.

#### 11. Toxicological information

##### 11.1. Information on toxicological effects

##### **Acute toxicity**

- **Inhalation** : Based on available data, the classification criteria are not met.
- **Dermal** : Based on available data, the classification criteria are not met.
- **Ingestion** : Based on available data, the classification criteria are not met.

**Corrosion** : Causes severe skin burns and eye damage.  
Causes serious eye damage.

**Irritation** : Based on available data, the classification criteria are not met.

**Sensitization** : Based on available data, the classification criteria are not met.

**Mutagenicity** : Based on available data, the classification criteria are not met.

**Carcinogenicity** : Based on available data, the classification criteria are not met.

**Toxic for reproduction** : Based on available data, the classification criteria are not met.

**STOT-single exposure** : Based on available data, the classification criteria are not met.

**STOT-repeated exposure** : Based on available data, the classification criteria are not met.

**Aspiration hazard** : Based on available data, the classification criteria are not met.

#### 12. Ecological information

##### 12.1. Toxicity.

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**12. Ecological information (continued)**

**Toxicity information** : Very toxic to aquatic life.

**12.2. Persistence - degradability**

**Persistence - degradability** : Biodegradable.

**12.3. Bioaccumulative potential**

**Bioaccumulative potential** : Not established.

**12.4. Mobility in soil**

**Mobility in soil** : Not established.

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

**Results of PBT and vPvB assessment** : The substance does not fulfil the criteria to be identified as PBT substance or vPvB substance according to Annex XIII of Regulation REACH.

**12.6. Other adverse effects**

**Environmental precautions** : Avoid release to the environment.

**13. Disposal considerations**
**13.1. Waste treatment methods**

**General** : Avoid release to the environment. Dispose in a safe manner in accordance with local/national regulations.  
 Dispose of this material and its container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

**14. Transport information**
**14.1. Land transport (ADR-RID)**

**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

**UN N°** : 2672

**H.I. nr** : 80

**ADR - Class** : 8

**Labelling - Transport** : 8 : Corrosive substance.



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#### 14. Transport information (continued)



ADR - Classification code	: C5 C5 C5
ADR - Group	: III
ADR - Packing instructions	: P001 R001 LP001
ADR - Limited Quantity	: 5 L
ADR - Tunnel code	: E : Passage forbidden through tunnels of category E.



#### 14.2. Sea transport (IMDG) [English only]

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
UN N°	: 2672
IMO-IMDG - Class or division	: 8 : Corrosive substance.
IMO-IMDG - Packing group	: III
IMO-IMDG - Packing instructions	: P001 LP01
IMO-IMDG - Limited quantities	: 5 L
IMO-IMDG - Marine pollution	: Yes
EMS-Nr	: F-A S-B

#### 14.3. Air transport (ICAO-IATA) [English only]

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
UN N°	: 2672
IATA - Class or division	: 8 : Corrosive substance.
IATA - Packing group	: III
IATA - Passenger and Cargo Aircraft	: ALLOWED
- Passenger and Cargo - Packing instruction	: 852
- Passenger and Cargo - Maximum Quantity/Packing	: 5 L
IATA - Cargo only	: ALLOWED

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**14. Transport information (continued)**

- Cargo only - Packing instruction	: 856
- Cargo only - Maximum Quantity/ Packing	: 60 L
IATA - Limited Quantities	: 1 L
ERG-Nr	: 8L

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

Safety, health and environmental regulations/legislation specific for the substance or mixture	: Ensure all national/local regulations are observed.
REACH Restrictions - Annex XVII	: The components of this product are not subject to restrictions.
REACH Authorisation - Annex XIV	: The components of this product are not subject to authorization.

**15.2. Chemical Safety Assessment**

Chemical Safety Assessment	: It has not been carried out.
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**16. Other information**

Revision	: Revision - See : *
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
List of relevant R phrases (heading 3)	: R34 : Causes burns. R50 : Very toxic to aquatic organisms.
List of full text of H-statements in section 3	: H314 : Causes severe skin burns and eye damage. H335 : May cause respiratory irritation. H400 : Very toxic to aquatic life.
Further information	: None.

**MATERIAL SAFETY DATA SHEET (MSDS)**

**AMMONIA SOLUTION AR ABT 25%**

In accordance with REACH Regulation (CE) N° 1907/2006 and with CLP Regulation (CE) N° 1272/2008

**DISCLAIMER:**

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- **SUVCHEM** shall not be responsible for any damage resulting from handling or from contact with the above product.
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