

CHAITANYA CHS, 2nd FLOOR, OFFICE # 206, SIDDHARTH NAGAR, S.V.ROAD, GOREGAON (W), MUMBAł 400062, MH, INDIA. CONTACT: +9122 28725393 /94/ 95 | EMAILID: CARE@SUVCHEM.COM

MATERIAL SAFETY DATA SHEET (MSDS)

AMMONIA SOLUTION LR ABT 25%

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

<u>1.1. Product identifier</u> Trade name	: AMMONIA SOLUTION LR ABT 25%
Product code Identification of the product	: SM0050802500 : Ammonia solution CAS No :1336-21-6 FC No :215-647-6
1.2. Polovant identified uses of the s	Annex No :007-001-01-2
Use	ubstance or mixture and uses advised against : Industrial. For professional use only.
1.3. Details of the supplier of the safe	ety 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
1.4. Emergency telephone number	Email ID: info@suvchem.com/care@suvchem.com
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

Labelling EC 67/548 or EC 1999/45



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Hazards identification -DSD (continued)

2.

Symbol(s) Symbol(s) : C : Corrosive N : Dangerous for the environment R Phrase(s) : R34 : Causes burns. R50 : Very toxic to aquatic organisms. : S1/2 : Keep locked up and out of reach of children. S Phrase(s) 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 : H314 : Causes severe skin burns and eye damage. **Hazard statements** H400 : Very toxic to aquatic life. **Precautionary statements** : P102: Keep out of reach of children. General P103: Read label before use. P101: If medical advice is needed, have product container or label at hand. Prevention : 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. P264: Wash thoroughly after handling. : P301+P330+P331: IF SWALLOWED : Rinse mouth. Do NOT induce vomiting. Response 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. P363: Wash contaminated clothing before reuse. : P405: Store locked up. Storage 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.



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2. Hazards identification -DSD (continued)			
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		

		An	nex No :007-0 bstance.	-			
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 _ H318 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	: Remove to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor.		
Skin contact	: Immediately call a POISON CENTER or doctor. Remove/Take off immediately all contaminated clothing. Wash with plenty of soap and water.		
Eye contact	: Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor. Rinse cautiously with water for several minutes.		
Ingestion	: Rinse mouth. Immediately call a POISON CENTER or doctor. Do NOT induce vomiting.		
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			
General information	: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).		



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5. Fire-fighting measures

<u>5.1. Extinguishing media</u>			
Suitable extinguishing media Unsuitable extinguishing media Surrounding fires	: Foam. Dry powder. Carbon dioxide. Water spray. Sand. : Do not use a heavy water stream. : 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, protectiv	ve 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

See section 8. Exposure controls/personal protection

7. Handling and storage

7.1. Precautions for safe handling



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7. Handling and storage (continued)				
Handling	: Do not breathe dust, fume, gas, mist, vapours, spray. Wash thoroughly after handling. Wash contaminated clothing before reuse.			
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.
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



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9. Physical and chemical properties (continued)

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/cm3]	: 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 [mm2/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.
10.2. Chemical stability	
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	



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10. Stability and reactivity (continued)

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

<u>12.1. Toxicity</u>	
Toxicity information	: Very toxic to aquatic life.
<u> 12.2. Persistence - degradability</u>	
Persistence - degradability	: Biodegradable.
12.3. Bioaccumulative potential	
Bioaccumulative potential	: Not established.
<u>12.4. Mobility in soil</u>	
Mobility in soil	: Not established.



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12. Ecological information (continued)

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.



ADR - Classification code

C5 : III

: C5

:5L

- ADR Group
- ADR Packing instructions ADR - Limited Quantity
- ADR Tunnel code

: E : Passage forbidden through tunnels of category E.



: P001 R001 LP001



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14. Transport information (continued)

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	: 111
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) [Englis	<u>sh only]</u>
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	: 111
IATA - Passenger and Cargo Aircraft	: ALLOWED
- Passenger and Cargo - Packing instruction	: 852
- Passenger and Cargo - Maximum Quantity/Packing	: 5 L
IATA - Cargo only	: ALLOWED
- Cargo only - Packing instruction	: 856
- Cargo only - Maximum Quantity/	: 60 L
Packing	
IATA - Limited Quantites	: 1L
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 th substance or mixture	: Ensure all national/local regulations are observed. e
REACH Restrictions - Annex XVII REACH Authorisation - Annex XIV	: The components of this product are not subject to restrictions. : The components of this product are not subject to authorization.
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15.2. Chemical Safety Assessment



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Chemical Safety Assessment	: It has not been carried out.
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. H318 : Causes serious eye damage. H400 : Very toxic to aquatic life.
Further information	: None.

storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This MSDS was prepared and is to be used only for this product. If the product is used as a component in another product, this MSDS information may not be applicable.

In accordance with REACH Regulation (CE) Nº 1907/2006 and with CLP Regulation (CE) Nº 1272/2008

15. Regulatory information (continued)

DISCLAIMER:

- SUVCHEM Products are to be used as Lab Chemicals for R&D only. Not for drug, medicinal, household or other uses.
- SUVCHEM shall not be responsible for any damage resulting from handling or from contact with the above product.
- SUVCHEM provides the information contained herein in good faith but makes no representation as to its comprehensiveness
 or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly
 trained person using this product.

End of document

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