



Serving Scientific Community  
Since 1985



**TECHNO PHARMCHEM**

An ISO 9001 : 2008 Certified Company

Registered Off. : 101-A, Deep Enclave, Pocket 'D', Ashok Vihar, Phase-III, Delhi-110 052 (India)  
Corporate Off. : 152, Vardhman City Centre, Near Shakti Nagar Underbridge, Delhi-110052 (India)  
Works : Plot No.1022, Modern Industrial Estate, Bahadurgarh-124507, Haryana (India)  
Telephone : 0091 - 11 - 23646422 E-mail : tecpharm@gmail.com  
Website : www.technopharmchem.com

## AMMONIA SOLUTION MATERIAL SAFETY DATA SHEET

### SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

#### 1.1. Product Identifier

Product form : Mixture  
CAS-No. : 1336-21-6  
Product code : 29275, 29277

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

##### 1.2.1. Relevant identified uses

Industrial/professional use spec : Industrial  
For professional use only :  
Use of the substance/mixture : Laboratory Reagent

##### 1.2.2. Uses advised against

No additional information available

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

Techno Pharmchem  
Plot No.1022, Modern Industrial Estate,  
Bahadurgarh-124507, India  
T +91 11 23646422  
info@technopharmchem.com

#### 1.4. Emergency telephone number

Emergency number: +91 11 23646422 (9:30am – 5.30pm)

### SECTION 2: HAZARDS IDENTIFICATION

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

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

Acute toxicity (oral), H302  
Category 4  
Skin corrosion/irritation, H314  
Category 1B  
Specific target organ  
toxicity — Single  
exposure, Category 3,  
Respiratory tract irritation  
Hazardous to the aquatic  
environment — Acute  
Hazard, Category 1



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Full text of H statements : see section 16

Full text of classification categories and H statements : see section 16

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

Xn; R20/21/22

C; R34

Full text of R-phrases: see section 16

### Adverse physicochemical, human health and environmental effects

No additional information available

### 2.2. Label elements

Labelling according to regulation (EC) No. 1272/2008 [CLP]

Signal word (CLP)	:	Danger
Hazard statements (CLP)	:	H302-Harmful if swallowed H314-Corrosive H335 - May cause respiratory irritation. H400 - Toxic to aquatic life
Precautionary statements (CLP)	:	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/shower. P304+P340 - IF INHALED: Remove person to fresh air and keep 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. P391 - Collect spillage.

### 2.3. Other hazards

No additional information available

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1. Substance

Not applicable

### 3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Water	(CAS-No.7732-18-5)	75	Not classified
Ammonia	(CAS-No.1336-21-6)	25	Not classified

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## SECTION 4: FIRST AID MEASURES

### 4.1. Description of first aid measures

First-aid measures after inhalation	:	Remove person to fresh air and keep comfortable for breathing. Immediately call a doctor.
First-aid measures after skin contact	:	Take off immediately all contaminated clothing. Rinse skin with water/shower. Immediately call a doctor.
First-aid measures after eye contact	:	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a doctor.
First-aid measures after ingestion	:	Rinse mouth. Do NOT induce vomiting. Immediately call a doctor.

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

Symptoms/injuries	:	Corrosive
Symptoms/injuries after inhalation	:	May cause respiratory irritation.
Symptoms/injuries after ingestion	:	Harmful if swallowed.

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

Treat symptomatically.

## SECTION 5: FIRE FIGHTING MEASURES

### 5.1. Extinguishing media

Suitable extinguishing media	:	dry chemical powder, alcohol-resistant foam, carbon dioxide (CO <sub>2</sub> ).
Unsuitable extinguishing media	:	Do not use a heavy water stream.

### 5.2. Special Hazards arising from the substance or mixture

No additional information available

### 5.3. Advice for firefighters

Protection during firefighting	:	Do not attempt to take action without suitable protective equipment.
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## SECTION 6: ACCIDENTAL RELEASE MEASURES

### 6.1. Personal precautions, protective equipment and emergency procedures

#### 6.1.1. For non-emergency personnel

Emergency procedures	:	Evacuate unnecessary personnel.
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#### 6.1.2. For emergency responders

Protective equipment	:	Use personal protective equipment as required.
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### 6.2. Environmental precautions

Toxic to aquatic life

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

Methods for cleaning up : Collect spillage. On land, sweep or shovel into suitable container. Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible.

### 6.4. Reference to other sections

No additional information available

## SECTION 7: HANDLING AND STORAGE

### 7.1. Precautions for safe handling

Precautions for safe handling : Do not breath dust/fume/gas/mis/vapors/spray.  
Hygiene measures : Wash hands, forearms and face thoroughly after handling.  
Wash contaminated clothing before reuse.

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

Storage conditions : Store in original container. Keep container tightly closed.  
Store in a dry place. Store in a well-ventillated place

### 7.3. Specific end use(s)

No additional information available

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1. Control Parameters

No additional information available

### 8.2. Exposure controls

Hand protection : Protective gloves  
Eye protection : Chemical goggles or face shield  
Skin and body protection : Wear suitable protective clothing  
Respiratory protection : Wear appropriate mask

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1. Information on basic physical and chemical properties

Physical state : Liquid  
Colour : Clear Colorless  
Odour : Ammonia odor  
Odour threshold : No data available  
pH : 11.7  
Relative evaporation rate (butyl acetate=1): No data available  
Melting Point : -60°C  
Freezing point : No data available  
Boiling point : 38-100  
Flash point : No data available

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Auto-ignition temperature	:	6510°C
Decomposition temperature	:	No data available
Flammability (Solid,gas)	:	No data available
Vapour pressure	:	153 hPa at 20°C
Relative vapour density at 20°C	:	1.21
Relative density	:	No data available
Density	:	0.9 g/cm <sup>3</sup>
Solubility	:	Water: Infinitely soluble
Log pow	:	No data available
Viscosity, kinematic	:	No data available
Viscosity, dynamic	:	No data available
Explosive properties	:	No data available
Oxidising properties	:	No data available
Explosive limits	:	No data available

## 9.2. Other Information

No additional information available

## SECTION 10: STABILITY AND REACTIVITY

### 10.1. Reactivity

No additional information available

### 10.2. Chemical Stability

Stable under normal conditions

### 10.3. Possibility of hazardous reactions

No additional information available

### 10.4. Conditions to avoid

Direct sunlight. Open flame. Heat. Overheating. Sparks.

### 10.5. Incompatible materials

No additional information available

### 10.6. Hazardous decomposition products

No additional information available

## SECTION 11: TOXICOLOGICAL INFORMATION

### 11.1. Information on toxicological effects

Acute toxicity	:	Oral: Harmful if swallowed.
Skin corrosion/irritation	:	Corrosive pH : 11.7
Serious eye damage/irritation	:	Serious eye damage, category 1, implicit pH : 11.7

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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

## SECTION 12: ECOLOGICAL INFORMATION

### 12.1. Toxicity

Ecology – water : Toxic to aquatic life.

### 12.2. Persistence and degradability

No additional information available

### 12.3. Bioaccumulative potential

No additional information available

### 12.4. Mobility in soil

No additional information available

### 12.5. Results of PBT and vPvB assessment

No additional information available

### 12.6. Other adverse effects

No additional information available

## SECTION 13: DISPOSAL CONSIDERATIONS

### 13.1. Waste treatment methods

Product/package disposal recommendations : Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

## SECTION 14: TRANSPORT INFORMATION

### 14.1 UN number

ADR/RID: - 2672

IMDG: - 2672

IATA: - 2672

### 14.2 UN Proper shipping name

ADR/RID : Ammonia Solution

IMDG : Ammonia Solution

IATA : Ammonia Solution



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- |             |  |                           |             |
|-------------|--|---------------------------|-------------|
| <b>14.3</b> | <b>Transport Hazard class(es)</b><br>ADR/RID: - 8        | IMDG: - 8                 | IATA: - 8   |
| <b>14.4</b> | <b>Packaging group</b><br>ADR/RID: - III                 | IMDG: - III               | IATA: - III |
| <b>14.5</b> | <b>Environmental hazards</b><br>ADR/RID: No              | IMDG Marine pollutant: No | IATA: No    |
| <b>14.6</b> | <b>Special precautions for user</b><br>No data available |                           |             |

## SECTION 15: REGULATORY INFORMATION

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**  
Ensure all local, regional, national and/or international regulations are observed.
- 15.2 Chemical safety Assessment**  
For this product a chemical safety assessment was not carried out.

## SECTION 16: OTHER INFORMATION

### Full text of H-Statements referred to under sections 2 and 3.

- |      |                                   |
|------|-----------------------------------|
| H302 | Harmful if swallowed              |
| H314 | Corrosive                         |
| H335 | May cause respiratory irritation. |
| H400 | Toxic to aquatic life             |

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