

SAFETY DATA SHEET

Product Name : AMMONIA SOLUTION

CAS No. : 1336-21-6

Revision No. : 00

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1 Product identifiers**

Product name : AMMONIA SOLUTION SP. GR 0.91
Product Number : 10055 , 10212
Brand : AZYTUS MATERIAL SCIENCES PVT. LTD
CAS No. : 1336-21-6

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

Identified Uses : Laboratory chemicals, Manufacturer of substances

1.3 Details of the supplier of the Safety Data Sheet

Company : AZYTUS MATERIAL SCIENCES PVT. LTD.
Block C, Survey No. 156, 157 & 174, Dhulapally Road, Kompally,
Secunderabad – 500014, India

1.4 Emergency telephone number

Emergency Number, # : **+91-8418-232316**

SECTION 2: Hazards Identification**2.1 Classification of the substance or mixture**

Classification (REGULATION (EC) No 1272/2008)
Acute toxicity Oral (Category 4), H302
Skin Corrosion (Category 1B), H314
Serious Eye Damage (Category 1), H318
Specific target organ toxicity - Single exposure (Category 3), Respiratory system, H335
Short-term (acute) aquatic hazard (Category 1), H400
Long-term (chronic) aquatic hazard (Category 2), H411
Chronic aquatic toxicity, Category 3, H412
For the full text of the H-Statements mentioned in this Section, see Section 16.

2.2 Label elements

Labeling (REGULATION (EC) No 1272/2008)

Hazard pictograms



Signal word: Danger

Hazard statements

H302:Harmful if swallowed.
H314 Causes severe skin burns and eye damage
H318 Causes serious eye damage
H335 May cause respiratory irritation
H410 Very toxic to aquatic life with long lasting effects
H411 Toxic to aquatic life with long lasting effects

Precautionary statements

Prevention

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/ hearing protection
Avoid release to the environment

Response

P302 + P361 + P353 IF ON SKIN: Take off immediately all contaminated clothing. Rinse skin with water.
P304 + P340 + P310 IF INHALD: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/ doctor
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 persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

Substances	
Formula	: NH3
Molecular Weight	: 35.05
CAS-No.	: 1336-21-6
Weight %	: 25 - 30

SECTION 4: First aid measures

- 4.1 Description of first aid measures
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|-------------------------|--|
| General advice | : Consult a physician. Show this safety data sheet to the doctor in attendance. |
| If inhaled | : If breathed in, move person into fresh air. If not breathing, give artificial respiration. |
| In case of skin contact | : Wash off with soap and plenty of water. |

- In case of eye contact : Flush eyes with water as a precaution.
- If swallowed : Never give anything by mouth to an unconscious person. Rinse mouth with water.
- 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

SECTION 5: Firefighting measures

- 5.1 Extinguishing media
Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment
- 5.2 Special hazards arising from the substance or mixture : 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 firefighters : 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.

SECTION 6: Accidental release measures

- 6.1 **Personal precautions, protective equipment and emergency procedures** : Advice for non-emergency personnel: Do not breathe vapours, aerosols. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, and consult an expert. Advice for emergency responders: Protective equipment see section 8.
- 6.2 **Environmental precautions** : Avoid release to the environment.
- 6.3 **Methods and materials 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. Dispose of properly. Clean up affected area.
- 6.4 **Reference to other sections** : For disposal see Sections 13.

SECTION 7: Handling and storage

- 7.1 **Precautions for safe handling** : Avoid contact with skin and eyes. Avoid dust formation. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.
- 7.2 **Conditions for safe storage, including any incompatibilities** : Store in a well-ventilated place. Keep container tightly closed.
- 7.3 **Specific end use(s)** : No additional information available

SECTION 8: Exposure controls/personal protection

- 8.1 **Control parameters**
Components with workplace control parameters
- 8.2 **Exposure controls**
Eye/face protection : Chemical goggles or safety glasses.

- Skin protection** : Wear suitable protective clothing.
- Hand protection : Protective gloves.
- Respiratory protection** : [In case of inadequate ventilation] wear respiratory protection.
- Control of environmental exposure** : Do not let product enter drains.

SECTION 9: Physical and chemical properties

- Appearance: Form: Liquid Color: Colorless
- Odour: Strong Ammonia
 - pH: 11.6 at 20 °C Strongly Alkaline
 - Melting Point: -57.5°C
 - Boiling Point/Range: 37.7 °C at 1.013 hPa
 - Vapor Pressure: 483 hPa at 20 °C
 - Vapor Density: No data available
 - Relative Density: 0.903 g/cm³ at 20 °C
 - Water Solubility: At 20°C Soluble
 - Viscosity Dynamic: No data available
 - Viscosity Kinematic: No data available
 - Lower Explosive Limit: 15.4 % (V)
 - Upper Explosive Limit: 33.6 % (V)
 - Decomposition Temperature: No data available
 - Volatility: No data available
 - Bulk Density: No data available
 - Partition coefficient n-octanol/water: No data available
 - Flash Point: No data available
 - Evaporation rate: No data available
 - Autoignition Temperature: No data available

SECTION 10: Stability and reactivity

- 10.1 Reactivity** : No data available
- 10.2 Chemical stability** : Stable under recommended storage conditions
- 10.3 Possibility of hazardous reactions** : No data available
- 10.4 Conditions to avoid** : Direct sunlight. Air contact. Moisture.
- 10.5 Incompatible materials** : Strong oxidizing agents , Aluminum, Lead, Nickel, silver, Zinc, Copper, metal alloys, various metal
- 10.6 Hazardous decomposition products** : Hazardous decomposition products formed under fire conditions. Nitrogen oxides (NO_x) In the event of fire: see section 5

SECTION 11: Toxicological information

- 11.1 Acute toxicity** : No data available
Symptoms: mucosal irritations, Cough, Shortness of breath, bronchitis,
Possible damages:, damage of respiratory tract
- Skin corrosion/irritation** : Skin - Rabbit

	Result: Severe irritations Remarks: (29% solution) (RTECS) Dermatitis Necrosis. Causes skin burns
Serious eye damage/eye irritation	: Eyes - Rabbit Result: Severe irritations Remarks: (29% solution) (RTECS) Mixture causes serious eye damage. Risk of blindness
Respiratory or skin sensitisation	: No data available
Germ cell mutagenicity	: No data available
Carcinogenicity	: IARC: No ingredient of this product presents at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC
Reproductive toxicity	: No data available
Specific target organ toxicity - single exposure	: Mixture may cause respiratory irritation - Respiratory system Acute inhalation toxicity - Mucosal irritations, Cough, Shortness of breath, bronchitis Possible damages- Damage of respiratory tract
Specific target organ toxicity - repeated exposure	: No data available
Aspiration hazard	: No data available
Additional Information	: No data available

SECTION 12: Ecological information

12.1 Toxicity to Fish	: flow-through test LC50 - Pimephales promelas (fathead minnow) - 0,068 mg/l - 96 h Remarks: (in analogy to similar products) (ECHA) The value is given in analogy to the following substances: ammonium sulphate
12.2 Persistence and degradability	: No data available
12.3 Bioaccumulative potential	: No data available
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 Other adverse effects	: Biological effects: Harmful effect due to pH shift. Forms toxic and corrosive mixtures with water even if diluted. Discharge into the environment must be avoided. No data available

SECTION 13: Disposal considerations

13.1 Waste treatment methods	: General Information The generation of waste should be minimized or avoided wherever possible. Reuse or recycle products wherever possible. This material and its container must be disposed of in a safe way. Disposal of this product, process solutions, residues and by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any local authority requirements. When handling waste, the safety precautions applying to handling of the product should be considered. Care should be taken when handling emptied containers that have not been thoroughly cleaned or rinsed out. Empty containers or liners may retain some
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product residues and hence be potentially hazardous.

Disposal methods

Do not empty into drains. Dispose of surplus products and those that cannot be recycled via a licensed waste disposal contractor. Waste, residues, empty containers, discarded work clothes and contaminated cleaning materials should be collected in designated containers, labeled with their contents. Incineration or landfill should only be considered when recycling is not feasible.

SECTION 14: Transport information

	Land transport (ADR/RID)	Air transport (IATA)	Sea transport (IMDG)
14.1 UN Number	2672	2672	2672
14.2 Proper shipping name	AMMONIA SOLUTION	AMMONIA SOLUTION	AMMONIA SOLUTION
14.3 Class	8	8	8
14.4 Packing group	III	III	III
14.5 Environmentally hazardous	Yes	No	Yes
14.6 Special precautions for user	No data available	No data available	No data available

SECTION 15: Regulatory information

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

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006. REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, preparations and articles (Annex XVII) 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. E1 – Environmental Hazards

15.2 Chemical safety assessment:

For this product, a chemical safety assessment was not carried out

SECTION 16: Other information

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Disclaimer:

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