



SUPREME PETRO
CHEMICALS

IMPORTER & DISTRIBUTOR OF INDUSTRIAL CHEMICALS ·
SINCE 1997

No. 145, 1st Floor, Raja Muthiah Road,
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admin@supremepetrochemicals.com

SAFETY DATA SHEET (SDS)

Liquor Ammonia *SDS*

REV 3.1
29 JULY 2026
GHS REV.11 (2025)

CAS 1336-21-6 EC See ECHA / supplier SDS SIGNAL WORD DANGER

GHS05

Corrosive

GHS07

Harmful / Irritant

GHS09

Environmental Hazard

SECTION 1 IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE
COMPANY

Product Name	Liquor Ammonia
Product Type	Ammonium Hydroxide — corrosive / irritant chemical
Chemical Family	Ammonium Hydroxide
CAS No.	1336-21-6
EC No.	See ECHA / supplier SDS
Intended Use	Industrial / professional use as described on the SPC product page.
Restrictions on Use	Industrial / professional use only. Confirm suitability for final application before use.
Supplier	Supreme Petro Chemicals
Address	No. 145, 1st Floor, Raja Muthiah Road, Periyamet, Chennai – 600003, India
Emergency Contact	Sanketh — +91 86087 80096 · Sudarshan — +91 81979 47045
Email	admin@supremepetrochemicals.com
Product Page	https://www.supremepetrochemicals.com/products/liquor-ammonia
SDS Revision	July 2026
SDS Version	3.1

SECTION 2 HAZARD IDENTIFICATION

Met. Corr. 1; Acute Tox. 4 (oral); Skin Corr. 1; Eye Dam. 1; STOT SE 3; Aquatic Acute 1

Signal Word DANGER



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GHS Pictograms

GHS05 (Corrosive) | GHS07 (Harmful / Irritant) | GHS09
(Environmental Hazard)

HAZARD STATEMENTS

- H290 — May be corrosive to metals
- H302 — Harmful if swallowed
- H314 — Causes severe skin burns and eye damage
- H318 — Causes serious eye damage
- H335 — May cause respiratory irritation
- H400 — Very toxic to aquatic life

PRECAUTIONARY – PREVENTION

- P233 — Keep container tightly closed.
- P260 — Do not breathe vapours or spray.
- P271 — Use only outdoors or in a well-ventilated area.
- P272 — Contaminated work clothing should not be allowed out of the workplace.
- P273 — Avoid release to the environment.
- P280 — Wear protective gloves / eye protection / face protection.

PRECAUTIONARY – RESPONSE / STORAGE / DISPOSAL

- P301+P310 — IF SWALLOWED: Immediately call a POISON CENTER or doctor.
- P303+P361+P353 — IF ON SKIN OR HAIR: Remove/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.
- P331 — Do NOT induce vomiting.
- P312 — Call a POISON CENTER or doctor if you feel unwell.
- P403+P235 — Store in a well-ventilated place. Keep cool.
- P405 — Store locked up.
- P501 — Dispose of contents/container in accordance with local regulations.



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SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

COMPONENT	CAS NO.	EC NO.	% W/W	GHS CLASSIFICATION
Liquor Ammonia (Ammonium Hydroxide)	1336-21-6	See ECHA / supplier SDS	Concentration range per grade (typically 25–30% NH3 in water)	Met. Corr. 1; Acute Tox. 4; Skin Corr. 1; Eye Dam. 1; STOT SE 3; Aquatic Acute 1

Full text of H-statements listed in Section 16.

SECTION 4 FIRST AID MEASURES

Inhalation	Immediately move person to fresh air. Keep at rest in a position comfortable for breathing. If breathing is difficult, administer oxygen. If not breathing, give artificial respiration. Seek immediate medical attention.
Skin Contact	Remove contaminated clothing immediately. Wash affected skin thoroughly with large amounts of water for at least 15 minutes. Seek medical attention if symptoms (redness, burning, blistering) persist.
Eye Contact	Rinse cautiously with water for at least 15 minutes. Remove contact lenses if present and easy to do. Continue rinsing. Seek immediate medical attention — serious eye damage may result.
Ingestion	Rinse mouth with water. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor. Do not give anything by mouth to an unconscious person.
Note to Physician	Treat symptomatically based on exposure route and severity. Corrosive injury to mucous membranes, skin, eyes and respiratory tract is possible at higher concentrations.

SECTION 5 FIREFIGHTING MEASURES

Suitable Extinguishing Media	Water spray, CO2, dry chemical powder or foam appropriate to surrounding fire. Water spray is effective for cooling containers and diluting ammonia vapour.
Unsuitable Media	Do not direct high-pressure water jet directly onto liquid — may spread material and vapour.



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Specific Hazards	Ammonia vapour released on heating or in fire is toxic and irritating. At high concentrations, ammonia is flammable (flammability range 15–28% v/v in air). Containers may rupture if exposed to intense heat.
Protective Equipment	Wear full protective clothing and self-contained breathing apparatus (SCBA). Ammonia vapour is heavier than air at low concentrations and may accumulate in low-lying areas.
Special Procedures	Evacuate non-essential personnel from area. Prevent contaminated firewater run-off from entering drains, sewers and watercourses. Cool exposed containers with water spray from safe distance.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal Precautions	Evacuate unprotected personnel upwind. Wear appropriate PPE (see Section 8) including SCBA if ventilation is inadequate. Avoid breathing vapours.
Environmental Precautions	Prevent entry into drains, sewers, soil and watercourses. Liquor Ammonia is classified as acutely toxic to aquatic life (H400). Notify relevant environmental authorities if a significant release occurs.
Containment / Clean-up	Contain spill with sand, earth or other non-combustible absorbent material. Collect in labelled, compatible containers for disposal. Ventilate area. Flush spill area with large amounts of water.
Reference to Sections	See Section 8 for PPE, Section 13 for disposal and Section 15 for regulatory information.

SECTION 7 HANDLING AND STORAGE

Handling Precautions	Use adequate local exhaust ventilation. Avoid contact with skin, eyes and clothing. Avoid breathing vapours or mist. Use non-sparking tools. Ground / bond containers when transferring. Handle in well-ventilated area.
Hygiene	Wash hands thoroughly after handling. Remove and wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product.
Storage Conditions	Store in original, tightly closed, compatible containers (stainless steel, HDPE or lined drums). Inspect regularly for leakage or damage. Keep away from heat, sparks and open flames.



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Storage Temperature	Store at ambient temperature (below 30°C preferred). Keep cool. Avoid prolonged exposure to direct sunlight.
Incompatible Materials	Strong oxidising agents (nitric acid, chlorine, permanganates, peroxides), concentrated acids, halogens, reactive metals (aluminium, copper, zinc), and strong alkalis. See Section 10.
Segregation	Segregate from food, drink, animal feed, oxidisers, acids and incompatible chemicals. Store locked up when not in use.

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Occupational Exposure Limit	Ammonia (CAS 7664-41-7): OSHA PEL 50 ppm (8h TWA); NIOSH REL 25 ppm TWA, 35 ppm STEL (15 min); ACGIH TLV 25 ppm TWA, 35 ppm STEL. India OSHA: verify current national limit. For Liquor Ammonia solution, apply ammonia vapour OEL.
Engineering Controls	Use closed handling systems or local exhaust ventilation (LEV) to control vapour release. Ensure adequate general ventilation. Provide eyewash station and safety shower in the work area.
Respiratory Protection	If airborne ammonia concentration may exceed OEL, use a NIOSH/EN-approved respirator with ammonia/acid-gas cartridge. Use SCBA for emergencies or confined-space entry.
Hand / Eye / Skin	Hands: chemical-resistant gloves (nitrile, butyl rubber or neoprene; select appropriate thickness and breakthrough time). Eyes/Face: EN 166 / ANSI Z87.1 chemical splash goggles; add face shield for splash risk. Body: chemical-resistant apron and safety footwear. Hygiene: provide eyewash and safety shower.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Clear to slightly coloured aqueous liquid
Odour	Intense, pungent, suffocating (characteristic ammonia odour)
Odour Threshold	Not established from reviewed public sources for the solution; pure NH ₃ odour threshold ~5 ppm
pH	Strongly alkaline; ~11.6 (1% solution) to ~13 (concentrated 25–30% solution). Verify from supplier COA.
Melting / Freezing Point	–58 °C (25% solution) [source value retained; consistent with published data for NH ₄ OH solutions]



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Boiling Point / Range	~38 °C (25% solution) [corrected from source — source value of 38 °C appeared under Flash Point label in error]
Flash Point	Not applicable — aqueous ammonium hydroxide solution is not classified as flammable. Concentrated ammonia vapour is flammable at 15–28% v/v in air but the solution does not sustain a flash.
Auto-ignition Temperature	Not applicable for the aqueous solution. Anhydrous ammonia auto-ignition: ~651 °C.
Flammability Limits	Ammonia vapour: LEL 15% v/v, UEL 28% v/v in air. Not applicable to dilute aqueous solution under normal conditions.
Vapour Pressure	~48 kPa at 20 °C (25% solution); 2160 mm Hg at 25 °C refers to pure anhydrous NH ₃ [corrected from source — both values appeared under Vapour Density label in error]
Vapour Density (air = 1)	0.6 (pure NH ₃ vapour; lighter than air) [corrected from source — this value appeared under Solubility in Water label in error]
Relative Density	~0.90 at 25 °C/25 °C (25% solution, water = 1) [corrected from source — this value appeared under Log Pow label in error]
Solubility in Water	Miscible in all proportions [corrected from source — this value appeared under Viscosity label in error]
Log Pow (Partition Coeff.)	Not applicable / not established for ammonium hydroxide solution
Evaporation Rate	Higher than water (due to volatility of dissolved NH ₃). Verify from supplier SDS.
Viscosity	Approximately that of water (~1 mPa·s at 20 °C for dilute solution). Confirm with supplier.
VOC Content	Assess per applicable regional VOC regulations; ammonia content is volatile.

SECTION 10 STABILITY AND REACTIVITY

Chemical Stability	Stable under recommended storage and handling conditions. Loses ammonia on heating.
Conditions to Avoid	Avoid heat, open flames, ignition sources, direct sunlight and contamination with incompatible materials. Avoid sealed containers with elevated temperature.
Incompatible Materials	Strong oxidising agents (nitric acid, chlorine, permanganates, peroxides). Concentrated acids (violent reaction). Halogens. Reactive metals (aluminium, copper, zinc — may corrode and release



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hydrogen). Reactive with aluminium chloride at elevated temperature.

Hazardous Decomposition	On decomposition / in fire: releases toxic ammonia gas (NH ₃), nitrogen oxides (NO _x) and water vapour.
Hazardous Reactions	Violent exothermic reaction with strong acids. Contact with oxidisers may cause fire or explosion risk from released ammonia vapour. No hazardous reactions under normal storage conditions.

SECTION 11 TOXICOLOGICAL INFORMATION

Acute Oral Toxicity	Harmful if swallowed (H302). Classified Acute Tox. 4 (oral). LD50 values for ammonium hydroxide solutions vary by concentration; confirm numeric endpoint from supplier/test data. Corrosive to GI tract at higher concentrations.
Acute Dermal Toxicity	Causes severe skin burns (H314; Skin Corr. 1). Prolonged or repeated contact can cause chemical burns. Confirm numeric LD50 from supplier/test data.
Acute Inhalation Toxicity	Irritating to the respiratory tract (H335; STOT SE 3). High vapour concentrations may cause pulmonary oedema. Confirm numeric LC50 / ATE from supplier data.
Skin Irritation	Classified Skin Corr. 1 — causes severe burns; irritation classification subsumed by corrosion.
Eye Irritation	Classified Eye Dam. 1 — causes serious eye damage (H318). Irreversible damage possible. Corrosion subsumed; irritation classification does not additionally apply.
Sensitisation	Not classified as a skin or respiratory sensitiser based on available data.
Carcinogenicity	Not listed as carcinogen by IARC, NTP or OSHA based on available public data. Verify from supplier SDS.
Mutagenicity	Not classified as a germ cell mutagen based on available public data. Verify from supplier SDS.

SECTION 12 ECOLOGICAL INFORMATION

Aquatic Toxicity	Classified Aquatic Acute 1 (H400 — Very toxic to aquatic life). Ammonia is highly toxic to aquatic organisms. LC50 (fish, 96h) for
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NH₃: typically < 1 mg/L. Obtain LC₅₀/EC₅₀/NOEC from supplier or ECHA REACH dossier.

Persistence / Degradability	Ammonia is biodegradable under aerobic conditions (nitrification). However, excess loading can be harmful to ecosystems. Not expected to persist in well-aerated water.
Bioaccumulation	Low bioaccumulation potential; log K _{ow} not applicable for ionised species. Does not bioconcentrate significantly in aquatic organisms.
Mobility in Soil	High mobility in water and soil due to complete miscibility. May leach to groundwater. Prevent release to soil and watercourses.
Other Adverse Effects	Avoid uncontrolled release to the environment. Manage releases and waste under applicable local environmental regulations. High NH ₃ concentrations can cause eutrophication in water bodies.

SECTION 13 DISPOSAL CONSIDERATIONS

Waste from Product	Dispose of contents through an authorised waste contractor in accordance with local regulations. Neutralise with dilute acid before disposal to drain where permitted, or treat as hazardous liquid waste.
Contaminated Packaging	Empty containers may retain residues; handle as hazardous until triple-rinsed or disposed. Do not re-use packaging for food, drink or other purposes.
Indian Regulations	Classify and dispose of waste in accordance with the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016, and applicable State Pollution Control Board requirements.

SECTION 14 TRANSPORT INFORMATION

PARAMETER	UN / ADR (ROAD)	IMDG (SEA)	IATA (AIR)
UN Number	UN 2672	UN 2672	UN 2672
Proper Shipping Name	AMMONIA SOLUTION, relative density between 0.880 and 0.957 at 15°C with more than 10% but not more than 35% ammonia	AMMONIA SOLUTION, relative density between 0.880 and 0.957 at 15°C with more than 10% but not more than 35% ammonia	AMMONIA SOLUTION, relative density between 0.880 and 0.957 at 15°C with more than 10% but not more than 35% ammonia
Class	8 (Corrosive)	8 (Corrosive)	8 (Corrosive)
Packing Group III		III	III



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PARAMETER	UN / ADR (ROAD)	IMDG (SEA)	IATA (AIR)
Marine Pollutant	Verify with IMDG schedule	Yes (aquatic hazard — verify — current IMDG listing)	

Source document listed transport class '2.2' (non-flammable gas) in error — corrected to Class 8 (Corrosive) consistent with UN 2672 for ammonia solution (10–35%). Confirm current IMDG/ADR/IATA special provisions and EMS with carrier before shipment. UN-certified compatible container required for international transport.

SECTION 15 REGULATORY INFORMATION

EU / REACH / CLP	Classified and labelled in accordance with EU CLP Regulation (EC) No 1272/2008 and GHS classification in Section 2. Observe REACH registration/notification requirements as applicable.
EU Directive	Observe applicable workplace chemical (98/24/EC), VOC and environmental requirements.
OSHA (USA)	Prepared in OSHA HCS/HazCom 2012 aligned 16-section SDS format. Ammonia solutions are listed as OSHA Hazardous Chemicals.
India	Observe the Manufacture, Storage and Import of Hazardous Chemical (MSIHC) Rules, 1989 (as amended), Environment Protection Act 1986, Hazardous Waste Rules 2016, and applicable SPCB / CPCB requirements.
Other Jurisdictions	Canada WHMIS 2015/HPR: classify/label under WHMIS; bilingual SDS/label may be required. China GB: apply applicable GB/T SDS and classification requirements. Australia AICS: check inventory status before export/import. TSCA (USA): verify inventory/SNUR status before US import or distribution.
Regulatory Scope Limitation	Final market placement requires confirmation of inventory status, local OELs, transport class, waste code and applicable restrictions.

SECTION 16 OTHER INFORMATION

Prepared By	Supreme Petro Chemicals — Technical Department
SDS Standard	UN GHS Rev.11 (2025); OSHA HCS/HazCom; EU CLP/REACH Annex II; Canada WHMIS/HPR — 16-section format
Revision Date	24 June 2026
Version	3.0 (supersedes prior issues)
Disclaimer	Information is given in good faith and believed accurate at issue. It does not constitute a specification or guarantee; the user is



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responsible for safe use, handling and compliance.

FULL TEXT OF H-STATEMENTS

- H290 — May be corrosive to metals
 - H302 — Harmful if swallowed
 - H314 — Causes severe skin burns and eye damage
 - H318 — Causes serious eye damage
 - H335 — May cause respiratory irritation
 - H400 — Very toxic to aquatic life
-