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Section I - Product Identification

Product: A dilute aqueous solution of Ammonium hydroxide.
Intended Uses: A general laboratory reagent.
Uses advised against: Not for food use. Intended for laboratory use only.
Country of origin: United States.

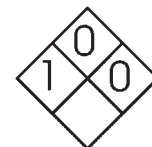
Manufacturer Identification

Medical Chemical Corp.
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Torrance, CA 90501

Customer Service: Phone (310)787-6800
Email. Customerservice@med-chem.com
FAX (310)787-4464

Emergency Telephone Number

CHEMTREC Emergency Response Telephone Number: (800)424-9300. Note: The CHEMTREC phone number is only for emergencies involving spills, leaks, fire, exposure or accident. Please direct all other inquiries to our customer service phone number.



Section II - Hazard Identification

This item is not considered hazardous by 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200) or EU, Regulation 1272/2008.

Acute toxicity (Oral): Category 5 (H303). May be harmful if swallowed.
Acute toxicity (Dermal): Category 5 (H313). May be harmful in contact with skin.
Eye damage/eye irritation: Category 2B (H320). May cause eye irritation.

The manufacturer is unaware of any chemical hazard associated with this product. The product may cause skin or eye irritation and may be harmful if swallowed.

Precautionary Statements

P102 Keep out of reach of children.
P103 Read label before use.
P270 Do not eat, drink or smoke when using this product.

Safety Ratings

Health: None *Flammability:* None *Reactivity:* None *Contact:* None
Recommended safety equipment: Not normally required.
Storage: General storage

NFPA Ratings

Health = 1. Can cause significant irritation.
Flammability = 0. Will not burn.
Reactivity = 0. Stable.

Potential Health Effects

The manufacturer is not aware of any hazards associated with this product..

Inhalation: May be Irritating to respiratory tract.
Ingestion: While the toxicity of this compound is low, large doses may cause nausea, vomiting, diarrhea, etc
Skin contact: Ammonia water, 0.3% v/v can cause skin irritation or aggravation of existing dermatitis.
Eye contact: Can cause eye irritation.
Chronic Exposure: Not likely to be an issue.
Aggravation of preexisting conditions: Unknown.

Section III - Composition/Information on Components

Ingredient	CAS#	EC-No.	%
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Ammonium hydroxide	1336-21-6	215-647-6	0.3% v/v
Reagent grade water	7732-18-5	231-791-2	100% w/w

Section IV - First Aid Measures

Inhalation: Unlikely to be an issue.

Ingestion: Unlikely to be an issue. Get medical advise for exceptional cases.

Skin Contact: Unlikely to be an issue. Wash affected area with soap and water. Get medical advice if irritation develops.

Eye Contact: Rinse thoroughly with running water. Get medical advice if irritation develops.

Section V - Fire Fighting Measures

Fire: Not normally a fire hazard.

Explosion: Not normally an explosion hazard.

Fire Extinguishing Media: Any means suitable for surrounding fire.

Special information: Nothing exceptional.

Section VI - Accidental Release Measures

Absorb with a suitable absorbent and store in a suitable container for disposal.

Section VII - Handling and Storage

P403+P233+P102; Store in a well-ventilated place. Keep container tightly closed. Keep out of reach of children.

Section VIII - Exposure Control/Personal Protection

Component	ACGIH STEL	OSHA PEL	NIOSH	NIOSH IDLH
Ammonium hydroxide	25 ppm (NH ₃) TWA	50 ppm (NH ₃) TWA	25 ppm (NH ₃) TWA	300 ppm (NH ₃)
Reagent grade water	Not applicable	Not applicable	Not applicable	Not applicable

Legend

ACGIH: American Conference of Governmental Industrial Hygienists.

OSHA: Occupational Safety and Health Administration.

NIOSH: National Institute for Occupational Safety and Health.

IDLH: Immediately dangerous to life or health.

Ventilation System: Usually not required. When required, Refer to the ACGIH document, "Industrial Ventilation, a Manual of Recommended Practices" for details about ventilation.

Personal Respirator: Usually not required. In case of emergency, or when exposure levels are unknown, use a positive pressure, full face piece, air supplied respirator.

Skin protection: Protective gloves are not required but may be used as part of good laboratory practice.

Eye Protection: Laboratory safety goggles or similar products are not required but recommended as part of good laboratory practices

Section IX - Physical and Chemical Properties

Appearance and Odor: A clear, colorless reagent with a intense pungent odor.

Flash point: Not applicable.

Auto ignition temperature: Not applicable

Boiling point range: No data

Decomposition temperature: Not applicable

Melting point: About 0 °C

pH: >9

Vapor pressure (mm Hg): 18 @ 20 °C

Viscosity: ~ 0.01 poise

Flammable Limits: Not applicable

Boiling Point: 100 °C (212 °F)

Density: 1.00 g/ml @ 22.5 °C (72.5 °F)

Evaporation Rate (water = 1): 1

Octanol/water partition coefficient: Not applicable

Solubility: Infinitely miscible with water

Vapor Density (air = 1): 0.6

VOC: Not applicable

Section X - Stability and Reactivity

Stability: Stable under normal conditions.

Hazardous Decomposition Products: No known hazardous decomposition products..

Hazardous polymerization: Will not occur.

Incompatibilities: Nothing unusual

Conditions to avoid: Nothing unusual.

Section XI - Toxicological Information

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Ammonium hydroxide	350mg/kg (Rat)	No data	11 mg/l/4h
Reagent grade water	Not applicable	Not applicable	Not applicable

Cancer lists

Ingredient	Known Carcinogenicity?	NTP?	Anticipated?	IARC Category
Ammonium hydroxide	No	No	No	None

Section XII - Ecological Information

This product is not expected to bioaccumulate. The material is removed from the air by dry and liquid adsorption. The product biodegrades quickly and does not contain endocrine disruptors, persistent organic pollutants or ozone depleters.

Soil Mobility: Unknown

Environmental Fate: Biodegradable

Environmental Toxicity: The product has low environmental toxicity.

For ammonia

Toxicity to freshwater fish (fathead minnow): LC50 = 8.2 mg/l, 96 h

Toxicity to freshwater fish (bluegill): LC50 = 8.4 mg/l, 96 h

Toxicity to invertebrates (water flea): EC50 = 0.66 mg/l, 48 h

Toxicity to freshwater algae: No data

Section XIII - Disposal Considerations

Not normally restricted but ultimate authority resides with local government agencies. Insure compliance with all government regulations

Section XIV - Transportation Information

Not regulated by DOT or IATA.

Section XV - Regulatory Information

Chemical Inventory Status

Ingredient	TSCA	EC
Ammonium hydroxide	Yes	Yes

Federal, State and International Regulations

Ingredient	SARA 302		SARA 313		RCRA	TSCA	
	RQ	TPQ	List	Category	261.33	8(D)	Ca. Prop 65
Ammonium hydroxide	No	No	No	No	No	No	No

Chemical Weapons Convention: No TSCA 12(b): No CDTA: No

SARA 311/312

Acute: No

Chronic: No

Fire: No

Pressure: No

Section XVI - Other Information

This information is believed to be correct at the time of publication but is not guaranteed as such, nor does it purport to be all inclusive. Medical Chemical Corp. assumes no liability for the accuracy or completeness of the information. The user assumes all responsibility for compliance with federal, state and local laws.

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