

PRODUCT IDENTIFICATION



Product Name: Ammonium Hydroxide 5% ACS Grade

CAS Number: 1336-21-6

Molecular Formula: H_5NO

Molecular Weight: 35.046 g/mol

Grade: ACS Grade

Purity / Concentration: 5%

Synonyms: Not Available

PRODUCT OVERVIEW

Ammonium Hydroxide 5% ACS Grade is a high-purity, clear aqueous solution formulated to meet stringent laboratory standards. With a specific gravity of 0.979, this reagent is ideal for precise analytical procedures and general industrial applications requiring reliable chemical consistency.

Grade Significance: ACS Grade signifies that the product meets the rigorous purity specifications set by the American Chemical Society, ensuring the reliability and accuracy required for sensitive analytical work.

CERTIFICATE OF ANALYSIS — TYPICAL VALUES

Certificate of Analysis data not available for this product.

PHYSICAL & CHEMICAL PROPERTIES

Appearance	Clear, colorless liquid with mild ammonia odor	Form	Liquid
Boiling Point	38°C (100°F)	Melting / Freezing Point	-58°C (-72°F)
Specific Gravity	0.979	Solubility	Fully soluble in water
Molecular Formula	H_5NO	Molecular Weight	35.046 g/mol

APPLICATIONS

- Analytical Chemistry** — Used as a precise reagent for pH adjustment and as a complexing agent in various titration procedures.
- Water Treatment** — Functions as a pH buffering agent to neutralize acidic components in water purification systems.
- Electronics Manufacturing** — Utilized in cleaning processes for semiconductor components where high-purity reagents are required to prevent surface contamination.
- Pharmaceuticals** — Serves as an essential precursor or pH adjuster in the synthesis of active pharmaceutical ingredients.
- Educational Research** — Provides a standardized, stable concentration for university-level chemistry experiments and demonstrations.

STORAGE & HANDLING

Ammonium hydroxide must be stored in a cool, well-ventilated area to prevent pressure buildup and the release of pungent vapors. Proper containment is critical because the chemical causes severe skin burns and eye damage, necessitating secondary containment to manage accidental leaks.

AVAILABLE PACKAGING

- 1 Quart
- 1 Gallon
- 5 Gallon
- 15 Gallon
- 55 Gallon
- 275 Gallon
- 330 Gallon

SAFETY SUMMARY (CROSS-REFERENCE TO SDS)

Signal Word: Danger



Hazard Statements:

- H314: Causes severe skin burns and eye damage
- H335: May cause respiratory irritation
- H400: Very toxic to aquatic life

Emergency Contact: CHEMTEL - 800-255-3924 (24 Hours/Day, 7 Days/Week)

For complete safety information, refer to the Safety Data Sheet (SDS) for this product.

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