

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 designed for precise laboratory and industrial applications. This reagent-grade chemical meets stringent quality standards, ensuring consistency and reliability for sensitive analytical procedures.

Grade Significance: ACS Grade signifies that the product meets the rigorous specifications set by the American Chemical Society, ensuring it is suitable for laboratory and analytical use where high purity is required.

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 high-purity reagent in laboratory titration and pH adjustment procedures. Its controlled concentration ensures predictable reaction outcomes.
- Semiconductor Manufacturing** — Utilized in specialized cleaning processes for silicon wafers. The ACS purity level is critical for preventing trace metal contamination on sensitive surfaces.
- Pharmaceutical Production** — Serves as a pH buffer and chemical intermediate in the synthesis of active pharmaceutical ingredients. High-grade purity is essential for maintaining strict regulatory compliance.
- Environmental Testing** — Employed in sample preparation for water and soil analysis. Reliable chemical concentrations are required to ensure the accuracy of detection limits for environmental pollutants.

STORAGE & HANDLING

Ammonium Hydroxide must be stored in a cool, well-ventilated area to prevent pressure buildup and the release of ammonia vapors. Because the substance causes severe skin burns and respiratory irritation, secure storage is essential to protect personnel and maintain chemical integrity.

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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