

PRODUCT IDENTIFICATION



Product Name: Ammonium Hydroxide 20% ACS Grade

CAS Number: 1336-21-6

Molecular Formula: H₅NO

Molecular Weight: 35.046 g/mol

Grade: ACS Grade

Purity / Concentration: 20%

Synonyms: Not Available

PRODUCT OVERVIEW

Ammonium Hydroxide 20% ACS Grade is a high-purity, clear liquid solution essential for precise laboratory and industrial applications. This ACS-certified reagent meets rigorous quality standards, ensuring consistency and reliability for sensitive analytical procedures.

Grade Significance: ACS Grade signifies that the product meets the strict purity standards set by the American Chemical Society, ensuring it is suitable for demanding analytical and laboratory applications where high quality is non-negotiable.

CERTIFICATE OF ANALYSIS — TYPICAL VALUES

Certificate of Analysis data not available for this product.

PHYSICAL & CHEMICAL PROPERTIES

Appearance	Clear, colorless liquid with strong ammonia odor	Form	Liquid
Boiling Point	38°C (100°F)	Melting / Freezing Point	-58°C (-72°F)
Specific Gravity	0.92	Solubility	Fully soluble in water
Molecular Formula	H ₅ NO	Molecular Weight	35.046 g/mol

APPLICATIONS

- Analytical Chemistry** — Used as a primary reagent for pH adjustment and chemical precipitation in complex laboratory testing.
- Semiconductor Manufacturing** — Utilized in precision cleaning processes to remove organic contaminants from silicon wafers.
- Water Treatment** — Applied for pH control and as a nitrogen source in specialized water purification systems.
- Pharmaceutical Production** — Serves as a critical buffering agent and reactant in the synthesis of various active pharmaceutical ingredients.
- Industrial Cleaning** — Acts as an effective degreasing and surface preparation agent for specialized industrial equipment.

STORAGE & HANDLING

Proper storage is critical because ammonium hydroxide is corrosive and releases pungent, irritating vapors. Containers must be kept in a cool, well-ventilated area to prevent pressure buildup and exposure, while ensuring the integrity of the chemical remains stable for laboratory use.

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:

- H290: May be corrosive to metals
- 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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