

PRODUCT IDENTIFICATION



Product Name: Ammonium Hydroxide 10% ACS Grade

CAS Number: 1336-21-6

Molecular Formula: H₅NO

Molecular Weight: 35.046 g/mol

Grade: ACS Grade

Purity / Concentration: 10%

Synonyms: Not Available

PRODUCT OVERVIEW

Ammonium Hydroxide 10% ACS Grade is a high-purity, aqueous solution designed for precise laboratory and industrial applications. This clear, colorless liquid provides a consistent concentration of 10% ammonia, ensuring reliable performance in analytical testing and chemical processing.

Grade Significance: ACS Grade signifies that the product meets the rigorous purity standards set by the American Chemical Society, ensuring it is suitable for use in high-precision laboratory and analytical work. This designation provides end users with the confidence that the chemical's composition is consistent and free from significant impurities.

CERTIFICATE OF ANALYSIS — TYPICAL VALUES

Certificate of Analysis data not available for this product.

PHYSICAL & CHEMICAL PROPERTIES

| | | | |
|--------------------------|--|---------------------------------|------------------------|
| Appearance | Clear, colorless liquid with moderate ammonia odor | Form | Liquid |
| Boiling Point | 38°C (100°F) | Melting / Freezing Point | -58°C (-72°F) |
| Specific Gravity | 0.958 | Solubility | Fully soluble in water |
| Molecular Formula | H ₅ NO | Molecular Weight | 35.046 g/mol |

APPLICATIONS

- Analytical Chemistry** — Utilized as a high-purity reagent in laboratory titration and pH adjustment procedures. The ACS grade ensures consistent results for sensitive analytical workflows.
- Semiconductor Manufacturing** — Used in the cleaning and etching of silicon wafers during the fabrication process. Its controlled purity helps prevent contamination in delicate electronic components.
- Environmental Testing** — Applied in water quality analysis and wastewater treatment labs to facilitate specific chemical reactions. It is essential for standardizing testing protocols where precision is required.
- Pharmaceutical Production** — Serves as a pH buffer and chemical intermediate in the synthesis of various pharmaceutical compounds. Its standardized grade meets the strict regulatory requirements for raw material quality.

STORAGE & HANDLING

Ammonium Hydroxide must be stored in a cool, well-ventilated area to prevent the buildup of ammonia gas and to maintain product concentration. Proper containment is critical because the chemical is classified as corrosive, posing significant risks of skin burns and eye damage if leaked or handled improperly.

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 [Danger Skin corrosion/irritation]
- H400: Very toxic to aquatic life [Warning Hazardous to the aquatic environment, acute hazard]

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.

Alliance Chemical | 204 South Edmond St, Taylor, Texas 76574 | 512-365-6838 | www.alliancechemical.com

Disclaimer: The information contained herein is believed to be accurate and represents the best information currently available to us. However, Alliance Chemical makes no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes.