

PRODUCT IDENTIFICATION

**Product Name:** Hydrochloric Acid 10% ACS Grade**CAS Number:** 7647-01-0**Molecular Formula:** ClH**Molecular Weight:** 36.46 g/mol**Grade:** ACS Grade**Purity / Concentration:** 10%**Synonyms:** Not Available

PRODUCT OVERVIEW

Alliance Chemical offers 10% Hydrochloric Acid in a high-purity ACS grade, ensuring consistent performance for precise laboratory and industrial applications. This clear, colorless solution is manufactured to meet rigorous quality standards, providing reliable chemical properties for sensitive analytical procedures.

Grade Significance: ACS Grade signifies that the product meets the stringent purity standards set by the American Chemical Society, making it suitable for demanding laboratory and analytical work. This certification guarantees that the chemical meets specific impurity limits, ensuring reproducible results for the end user.

CERTIFICATE OF ANALYSIS — TYPICAL VALUES

Certificate of Analysis data not available for this product.

PHYSICAL & CHEMICAL PROPERTIES

Appearance	Clear, colorless liquid with faint HCl odor	Form	Liquid
Boiling Point	108°C (20.2% azeotrope)	Melting / Freezing Point	-74°C (-101°F)
Flash Point	Not applicable	Specific Gravity	1.047
Solubility	Fully soluble in water	Molecular Formula	ClH
Molecular Weight	36.46 g/mol		

APPLICATIONS

- Analytical Chemistry** — Used as a standardized reagent for pH adjustment and titration in laboratory settings. Its controlled concentration ensures accuracy in chemical analysis.
- Water Treatment** — Utilized for controlling the pH levels of water systems to prevent scaling and corrosion. It helps maintain optimal water chemistry in industrial cooling towers.
- Metal Processing** — Employed in pickling processes to remove oxides and impurities from metal surfaces. This prepares the material for subsequent coating or plating operations.
- Pharmaceutical Manufacturing** — Acts as a key reagent in the synthesis of active pharmaceutical ingredients. The ACS grade purity is essential for maintaining strict regulatory compliance.
- Food and Beverage** — Used in the processing of food additives and for sanitation purposes in facility cleaning. It must be handled with extreme care to ensure safety protocols are met.

STORAGE & HANDLING

Due to its corrosive nature, this acid must be stored in a cool, well-ventilated area away from incompatible materials like strong bases and oxidizing agents. Proper containment prevents the release of hazardous vapors and minimizes the risk of severe skin burns or damage to metal infrastructure.

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

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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