

PRODUCT IDENTIFICATION

**Product Name:** Hydrochloric Acid 5% ACS Grade**CAS Number:** 7647-01-0**Molecular Formula:** ClH**Molecular Weight:** 36.46 g/mol**Grade:** ACS Grade**Purity / Concentration:** 5%**Synonyms:** Not Available

PRODUCT OVERVIEW

Alliance Chemical offers high-quality Hydrochloric Acid 5% in ACS grade, providing a reliable and stable solution for precise laboratory and industrial applications. This clear, colorless liquid is formulated for consistent performance where chemical accuracy is critical to your processes.

Grade Significance: ACS Grade signifies that the product meets the stringent purity standards set by the American Chemical Society, ensuring reliability for analytical and research-grade procedures. This grade provides the end user with documented confidence that contaminants are kept to a minimum, preventing interference with sensitive chemical reactions.

CERTIFICATE OF ANALYSIS — TYPICAL VALUES

Certificate of Analysis data not available for this product.

PHYSICAL & CHEMICAL PROPERTIES

Appearance	Clear, colorless liquid	Form	Liquid
Boiling Point	~101-103 °C	Melting / Freezing Point	< -10 °C
Flash Point	Not applicable	Specific Gravity	1.025
Solubility	Fully soluble in water	Molecular Formula	ClH
Molecular Weight	36.46 g/mol		

APPLICATIONS

- Analytical Laboratories** — Used as a standard reagent for pH adjustment and chemical titrations requiring high-purity inputs.
- Water Treatment** — Utilized in small-scale processes to balance alkalinity and maintain optimal water chemistry parameters.
- Metal Processing** — Applied in surface preparation to remove oxides and prepare metal surfaces for plating or coating operations.
- Pharmaceutical Manufacturing** — Serves as an essential component in the synthesis of pharmaceutical intermediates and strict quality-controlled chemical reactions.
- Educational Research** — Provides a safe, diluted concentration for university-level chemistry instruction and fundamental analytical experiments.

STORAGE & HANDLING

Proper storage is essential because Hydrochloric Acid is corrosive to many metals and can release irritating vapors if not contained in appropriate, acid-resistant vessels. Maintaining a cool, well-ventilated environment prevents pressure buildup and ensures the safety of facility personnel by mitigating the risk of skin and respiratory exposure.

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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