

PRODUCT IDENTIFICATION

**Product Name:** Hydrochloric Acid 31% ACS Grade**CAS Number:** 7647-01-0**Molecular Formula:** ClH**Molecular Weight:** 36.46 g/mol**Grade:** ACS Grade**Purity / Concentration:** 31%**Synonyms:** Not Available

PRODUCT OVERVIEW

Alliance Chemical offers high-purity Hydrochloric Acid 31% in ACS Grade, formulated to meet stringent laboratory standards. This clear, colorless liquid is a versatile reagent widely used in industrial and analytical applications requiring high precision and consistency.

Grade Significance: ACS Grade indicates that this product meets the high-purity specifications established by the American Chemical Society, ensuring reliability for critical analytical and research applications.

CERTIFICATE OF ANALYSIS — TYPICAL VALUES

Certificate of Analysis data not available for this product.

PHYSICAL & CHEMICAL PROPERTIES

Appearance	Clear, colorless to slightly yellow liquid	Form	Liquid
Boiling Point	~85-90 °C (fumes)	Melting / Freezing Point	< -40 °C
Flash Point	Not applicable	Specific Gravity	1.155
Solubility	Fully soluble in water	Molecular Formula	ClH
Molecular Weight	36.46 g/mol		

APPLICATIONS

- Analytical Chemistry** — Utilized as a primary reagent for titration and the preparation of standardized laboratory solutions.
- Water Treatment** — Applied for pH adjustment and neutralization processes to maintain water quality standards.
- Metal Processing** — Used in the pickling process to remove rust and scale from steel and other metal surfaces.
- Pharmaceutical Manufacturing** — Serves as a critical catalyst or reactant in the synthesis of complex active pharmaceutical ingredients.
- Food Production** — Employed in food processing for the hydrolysis of proteins and the production of specific food additives.

STORAGE & HANDLING

Hydrochloric acid must be stored in a cool, well-ventilated area to manage its corrosive fumes and prevent degradation of containers. Proper containment is essential to prevent severe skin burns and respiratory irritation, as well as to protect surrounding equipment from metal corrosion.

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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