

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

Hydrochloric Acid 10% ACS Grade is a high-purity, clear liquid solution formulated for precise laboratory and industrial applications. This grade ensures strict adherence to established chemical standards, making it an essential reagent for controlled chemical processing and analysis.

Grade Significance: ACS Grade signifies that this product meets the rigorous purity standards set by the American Chemical Society, ensuring reliability for sensitive analytical and scientific work.

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

- Laboratory Research** — Utilized as a standardized reagent for pH adjustment and acid-base titration procedures in analytical testing.
- Water Treatment** — Used for the careful neutralization of alkaline water streams to maintain optimal pH levels in industrial wastewater systems.
- Metal Processing** — Applied in pickling processes to remove surface oxides and scale from metal parts prior to coating or finishing.
- Chemical Manufacturing** — Serves as a reliable precursor in the synthesis of various organic and inorganic compounds requiring precise acid concentrations.

STORAGE & HANDLING

Proper storage is critical because this acid is highly corrosive and presents a severe inhalation risk if containers are compromised. It must be kept in a cool, well-ventilated area in secondary containment to prevent dangerous reactions or hazardous leaks that could damage equipment or endanger personnel.

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]
- H331: Toxic if inhaled [Danger Acute toxicity, inhalation]

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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