

PRODUCT IDENTIFICATION



Product Name: Hydrochloric Acid 10% Technical Grade

CAS Number: 7647-01-0

Molecular Formula: ClH

Molecular Weight: 36.46 g/mol

Grade: Technical Grade

Purity / Concentration: 10%

Synonyms: Not Available

PRODUCT OVERVIEW

Hydrochloric Acid 10% Technical Grade is a versatile, clear liquid solution designed for general industrial and laboratory applications. With a specific gravity of 1.047, this concentration provides a controlled acidity level suitable for various chemical processes.

Grade Significance: Technical Grade indicates that this product is formulated for industrial efficiency and cost-effectiveness where high analytical purity is not required. It is ideal for large-scale operations that prioritize consistent performance in standard chemical processes.

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

- Water Treatment** — Used effectively for pH adjustment and neutralization in industrial wastewater systems to ensure compliance with environmental standards.
- Metal Processing** — Applied in pickling processes to remove scale and rust from metal surfaces, preparing them for further manufacturing or coating.
- Laboratory Research** — Serves as a standard reagent for acidification, titration, and general cleaning of glassware in controlled laboratory settings.
- Chemical Manufacturing** — Acts as a precursor or reactant in the synthesis of various organic and inorganic compounds for industrial production.
- Mining and Metallurgy** — Utilized in mineral processing and metal extraction techniques to help dissolve impurities or process ore samples.

STORAGE & HANDLING

Proper storage is critical because this acid is corrosive to many metals and poses severe burn risks upon contact. It must be kept in compatible, corrosion-resistant containers to prevent leaks and structural damage, while maintaining a secure environment to avoid accidental 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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