

PRODUCT IDENTIFICATION



Product Name: Hydrochloric Acid 25% Technical Grade

CAS Number: 7647-01-0

Molecular Formula: ClH

Molecular Weight: 36.46 g/mol

Grade: Technical Grade

Purity / Concentration: 25%

Synonyms: Not Available

PRODUCT OVERVIEW

Hydrochloric Acid 25% Technical Grade is a versatile, high-strength mineral acid essential for various industrial and laboratory applications. This clear, colorless to slightly yellow liquid is formulated for consistent performance and reliability in demanding chemical processes.

Grade Significance: Technical Grade indicates that the product is manufactured for general industrial utility where high efficiency is required but pharmaceutical or food-grade purity standards are not necessary.

CERTIFICATE OF ANALYSIS — TYPICAL VALUES

Certificate of Analysis data not available for this product.

PHYSICAL & CHEMICAL PROPERTIES

Appearance	Clear, colorless to slightly yellow liquid with HCl odor	Form	Liquid
Boiling Point	108°C (20.2% azeotrope)	Melting / Freezing Point	-74°C (-101°F)
Flash Point	Not applicable	Specific Gravity	1.124
Solubility	Fully soluble in water	Molecular Formula	ClH
Molecular Weight	36.46 g/mol		

APPLICATIONS

- Water Treatment** — Used effectively for pH adjustment and alkalinity control in industrial wastewater management.
- Metal Processing** — Applied in pickling processes to remove rust, scale, and impurities from steel surfaces before further manufacturing.
- Chemical Synthesis** — Serves as a fundamental reagent in the production of various organic and inorganic compounds.
- Laboratory Research** — Utilized for precise acid-base titrations and as a catalyst in controlled laboratory environments.
- Mining** — Employed in the processing of ores and mineral extraction where precise chemical reactivity is required.

STORAGE & HANDLING

Due to its corrosive nature and potential to damage metals, this acid must be stored in specialized, compatible containers to prevent structural failure and leaks. Proper ventilation is critical to manage hazardous vapors, ensuring a safe environment and preventing respiratory irritation for 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:

- 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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