TECHNICAL DATA SHEET

Hydrochloric Acid 20% Technical Grade

Revised: 08/27/2026

PRODUCT IDENTIFICATION

Product Name: Hydrochloric Acid 20% Technical Grade
CAS Number: 7647-01-0
Molecular Formula: ClH
Molecular Weight: 36.46 g/mol
Grade: Technical Grade
Purity / Concentration: 20%
Synonyms: Not Available

PRODUCT OVERVIEW

Alliance Chemical offers Hydrochloric Acid 20% Technical Grade, a clear, high-quality solution suitable for a wide range of industrial and laboratory applications. With a specific gravity of 1.098 and a concentration of 20%, this product provides reliable performance for processes requiring consistent acidity.

Grade Significance: Technical Grade indicates that this product is formulated for industrial and manufacturing purposes where high performance is required, though it is not intended for food, drug, or medicinal use.

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	108°C (20.2% azeotrope)	**Melting / Freezing Point**	-74°C (-101°F)
Flash Point	Not applicable	**Specific Gravity**	1.098
Solubility	Fully soluble in water	**Molecular Formula**	ClH
Molecular Weight	36.46 g/mol		

APPLICATIONS

1. **Water Treatment** — Utilized for pH adjustment in municipal and industrial water systems to ensure compliance with environmental standards.
2. **Metal Processing** — Commonly used for the pickling of steel to remove rust, scale, and impurities from metal surfaces before further processing.
3. **Chemical Manufacturing** — Acts as a vital reagent in the production of various organic and inorganic compounds, including chlorides and fertilizers.
4. **Laboratory Research** — Serves as a standard acidifying agent for analytical testing, sample preparation, and various chemical synthesis experiments.
5. **Textile Industry** — Employed in the processing and finishing of fabrics, specifically for bleaching and neutralising alkaline residues.

STORAGE & HANDLING

Proper storage is critical because this acid is corrosive to many metals and can release irritating vapors. It must be stored in a cool, well-ventilated area in its original, compatible container to prevent structural damage to storage facilities and protect personnel from severe skin and respiratory hazards.

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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