

## Certificate of Analysis

**Product Name:** Hydrochloric Acid

### Product Information

Product Number: HCl-20260203 Batch Number: HCl-B2026020301 Brand: SIGALD CAS Number: 7647-01-0 Formula: HCl Molecular Weight: 36.46 g/mol Purity Grade:  $\geq 31.0\%$  (w/w, Industrial Grade, Aqueous Solution) Quality Release Date: 03 FEB 2025

Test Item	Specification (Industrial Grade, GB/T 320-2023)	Result	Test Method
Appearance	Colorless to pale yellow transparent liquid, no mechanical impurities	Colorless transparent liquid, no mechanical impurities	Visual Inspection
Purity (HCl Content)	$\geq 31.0\%$	31.5%	Titration Method (GB/T 320-2023)
Density (20°C, g/cm <sup>3</sup> )	1.15-1.18	1.16	Density Meter Method
Iron (Fe) Content	$\leq 0.0005\%$	0.0002%	Atomic Absorption Spectrometry
Heavy Metals (Pb) Content	$\leq 0.0001\%$	0.00005%	Atomic Absorption Spectrometry
Sulfate (SO <sub>4</sub> <sup>2-</sup> ) Content	$\leq 0.0005\%$	0.0003%	Barium Sulfate Turbidimetry
Free Chlorine (Cl <sub>2</sub> ) Content	$\leq 0.0005\%$	0.0001%	Iodometric Titration Method

This batch of product has been tested in accordance with GB/T 320-2023 and ASTM D1193 standards, meeting all specified requirements for Hydrochloric Acid. It is qualified for use in chemical synthesis, metal processing, pharmaceutical and water treatment scenarios.

Issue Date: 03 FEB 2025