

# Certificate of Analysis

## Hydrochloric Acid, 0.200 Normal (N/5) in Isopropyl Alcohol

**Lot Number:** 4405C28

**Product Number:** 3802

**Manufacture Date:** MAY 02, 2024

**Expiration Date:** APR 2025

Name	CAS#	Grade
Water	7732-18-5	ACS
Hydrochloric Acid	7647-01-0	ACS
Isopropyl Alcohol	67-63-0	ACS

Test	Specification	Result	NIST SRM#
Appearance	Colorless liquid	Passed	
Assay (vs. Sodium Hydroxide/Phenolphthalein)	0.1995-0.2005 N at 20°C	0.2003 N at 20°C	84

Specification	Reference
Hydrochloric Acid Solution, Standard Alcoholic (0.2 mol/L)	ASTM (D 664)
Hydrochloric Acid, Standard Alcoholic (0.2 M)	ASTM (D 974)
Hydrochloric Acid, Standard Alcoholic Solution (0.2 N)	ASTM (D 3242)

Volumetric glassware complies with Class A tolerance requirements of ASTM E 288 and NIST Circular 434; it is calibrated before first use and recalibrated regularly in accordance with ASTM E 542 and NIST Procedure NBSIR 74-461. Balances are calibrated regularly with weights certified traceable to the NIST national mass standard. Thermometers and temperature probes are calibrated before first use and recalibrated regularly with a thermometer traceable to NIST standards. All products are prepared according to master documents that assure manufacture according to validated methods. Batch records document raw material traceability and production and testing history for each lot manufactured.

Part Number	Size / Package Type	Shelf Life (Unopened Container)
3802-16	500 mL natural poly	12 months
3802-32	1 L natural poly	12 months
3802-5	20 L Cubitainer®	12 months

**Recommended Storage:** 15°C - 30°C (59°F - 86°F)



Paul Brandon (05/02/2024)

Production Manager

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