

Certificate of Analysis

Chromium AA Standard, 1000 ppm Cr in 3% HCl

Lot Number: 4312B53

Product Number: ACR1KH

Manufacture Date: DEC 05, 2023

Expiration Date: NOV 2025

This is a single element solution that was prepared volumetrically to contain the certified value reported. The uncertainty associated with the certified value is the sum of the estimated errors due to the purity of the raw material, the volumetric preparation of the solution, and transpiration of the solution through the container wall.

The final solution concentration is confirmed by AA, ICP, or ICP-MS, and is traceable to NIST Standard Reference Material 3112.

Name	CAS#	Grade
Water	7732-18-5	ACS/ASTM/USP/EP
Hydrochloric Acid	7647-01-0	Trace Metals
Chromium	7440-47-3	High Purity

Test	Specification	Result	NIST SRM#
Appearance	Blue-green liquid	Passed	
Chromium (Cr)	995-1005 ppm	1000 ppm	3112

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)
ACR1KH-500	500 mL natural poly	24 months

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



Paul Brandon (12/05/2023)

Production Manager

This document is designed to comply with ISO Guide 31 "Reference Materials -- Contents of Certificates and Labels."

This test report shall not be reproduced, except in full, without the written approval of Ricca Chemical Company.