448 West Fork Dr Arlington, TX 76012 http://www.riccachemical.com 1-888-GO-RICCA

customerservice@riccachemical.com

Certificate of Analysis

Perchloric Acid, 0.5 N in Ethylene Glycol

Lot Number: 1403K47 Product Number: R5516500

Manufacture Date: MAR 25, 2024

Expiration Date: MAR 2026

Name	CAS#	Grade	
Ethylene Glycol	107-21-1	Reagent	
Perchloric Acid	7601-90-3	ACS	
Water	7732-18-5	ACS	

Test	Specification	Result	NIST SRM#
Appearance	clear, colorless	Passed	
Assay (vs. Sodium Hydroxide/Thymol Blue)	0.495-0.505	0.500 N at 20°C	84

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)
R5516500-1C	1 L amber glass	24 months

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

Heidi J Green (03/25/2024)

Operations 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.

Version: 1.1 Lot Number: 1403K47 Product Number: R5516500 Page 1 of 1