A48 West Fork Dr Arlington, TX 76012 http://www.riccachemical.com 1-888-GO-RICCA customerservice@riccachemical.com Buffer, Reference Standard, pH 9.00 ± 0.01 at 25°C Lot Number: 1310N22 Product Number: 1590 448 West Fork Dr Arlington, TX 76012 http://www.riccachemical.com 100 ± 0.01 at 25°C Manufacture Date: OCT 10, 2023 Expiration Date: SEP 2025

The certified value for this product is confirmed in independent testing by a second qualified chemist. The NIST Traceable pH value is certified to ± 0.01 at 25 °C only. All other pH values at their corresponding temperatures are accurate to ± 0.05 .

°C	10	15	20	25	30	35	40	45	50
pН	9.14	9.10	9.05	9.00	8.97	8.93	8.91	8.89	8.87

Name	CAS#	Grade
Water	7732-18-5	ACS/ASTM/USP/EP
Potassium Chloride	7447-40-7	ACS
Boric Acid	10043-35-3	ACS
Sodium Hydroxide	1310-73-2	Reagent
Preservative	Proprietary	
Test	Specification	Result

Appearance		Colorless liquid	Passed	*Not a certified value.	
	Test	Certified Value	Uncertainty	NIST SRM#	
	pH at 25°C (Method: SQCP027, SQCP033)	9.009	0.02	186-I-g, 186-II-g, 191d	

pH measurements were performed in our Arlington, TX laboratory under ISO/IEC 17025 accreditation (ANAB Certificate L2387) and are certified traceable to National Institute of Standards and Technology (NIST) Standard Reference Material as indicated above via an unbroken chain of comparisons. The uncertainty is calculated from the uncertainty of the measurement variation from sample to sample, the uncertainty in the NIST Standard Reference Material, and the uncertainty of the measurement process. The uncertainty is multiplied by k=2, corresponding to 95% coverage in a normal distribution. 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 before first use and recalibrated 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)		
1590-1	4 L natural poly	24 months		
1590-16	500 mL natural poly	24 months		
1590-32	1 L natural poly	24 months		
1590-5	20 L Cubitainer®	24 months		
D some model \mathbf{G} to see the 15° C = 20° C (50° E = 20° E)				

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

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Heidi J Green (10/10/2023) Operations Manager This document is designed to comply with ISO Guide 31 "Reference Materials --Contents of Certificates and Labels."

This product was tested in an ISO 17025 Accredited Laboratory

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