

Certificate of Analysis

Buffer, Reference Standard, pH 10.00 ± 0.01 at 25°C

Lot Number: 1112539

Product Number: 1600

Manufacture Date: DEC 14, 2021

Expiration Date: JUN 2023

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	0	5	10	15	20	25	30	35	40	50
pH	10.31	10.23	10.17	10.11	10.05	10.00	9.95	9.91	9.87	9.81

Name	CAS#	Grade
Water	7732-18-5	ACS/ASTM/USP/EP
Sodium Carbonate	497-19-8	ACS
Sodium Bicarbonate	144-55-8	ACS
Sodium Hydroxide	1310-73-2	Reagent
Preservative	Proprietary	

Test	Specification	Result	NIST SRM#
Appearance	Colorless liquid	Passed	
pH at 25°C (Method: SQCP027, SQCP033)	9.990-10.010	10.006	186-I-g, 186-II-g, 191d
pH at 25°C (Method: SQCP027, SQCP033)	0.01	0.01	
Uncertainty			

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 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)
1600-1	4 L natural poly	18 months
1600-16	500 mL natural poly	18 months
1600-1CT	4 L Cubitainer®	18 months
1600-32	1 L natural poly	18 months

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



Israel Alamudun (12/14/2021)

Quality Control Supervisor

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



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