

Certificate of Analysis

Buffer, Reference Standard, pH 4.00 ± 0.01 at 25°C (Color Coded Red)

Lot Number: 1502A40

Product Number: 1501

Manufacture Date: FEB 26, 2015

Expiration Date: FEB 2017

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	45	50
pH	4.00	4.00	4.00	4.00	4.00	4.00	4.01	4.02	4.03	4.04	4.06

Name	CAS#	Grade
Water	7732-18-5	ACS/ASTM/USP/EP
Potassium Acid Phthalate	877-24-7	Buffer
Preservative	Proprietary	Commercial
Red Dye	Proprietary	Purified

Test	Specification	Result	NIST SRM#
Appearance	Red liquid	Passed	
pH at 25°C	3.990-4.010	4.003	185 & 186

Specification	Reference
Commercial Buffer Solutions	ASTM (D 1293 B)
Buffer B	ASTM (D 5464)
Buffer B	ASTM (D 5128)

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)
1501-2.5	10 L Cubitainer®	24 months
1501-4	120 mL natural poly	24 months
1501-32CS	12 x 1L natural poly	24 months
1501-16CS	12 x 500 mL natural poly	24 months
1501-32	1 L natural poly	24 months
1501-32CT	1 L Cubitainer®	24 months
1501-20B	200 x 20 mL pack	24 months
1501-5	20 L Cubitainer®	24 months
1501-20	20 mL pouch	24 months
1501-20	20 x 20 mL pack	24 months
1501-1	4 L natural poly	24 months
1501-1CT	4 L Cubitainer®	24 months
1501-1CS	4 x 4 L natural poly	24 months
1501-16	500 mL natural poly	24 months
1501-55	55 gal drum	24 months

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

A handwritten signature in black ink on a light yellow rectangular background. The signature reads "Katie Schnur" in a cursive script.

Katie Schnur
Quality Control Manager

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