

Product Specification

Buffer Assortment Pack - pH 4, 7, and 10

Lot Number: SAMPLE**Product Number:** 1480**Manufacture Date:** N/A**Expiration Date:** N/A

Consult the individual product lot Certificates of Analysis for specifications and test results.

Kit Component Part Number	Kit Component Lot Number	Kit Component Product Name
Z1501000	SAMPLE	Buffer, Reference Standard, pH 4.00 ± 0.01 at 25°C (Color Coded Red)
Z1551000	SAMPLE	Buffer, Reference Standard, pH 7.00 ± 0.01 at 25°C (Color Coded Yellow)
Z1601000	SAMPLE	Buffer, Reference Standard, pH 10.00 ± 0.01 at 25°C (Color Coded Blue)
Z6648000	SAMPLE	Rinse Solution, High Purity Water for Rinsing Electrodes and other Laboratory Instruments

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)
1480-16	1 Kit of 500 mL bottles	18 months
1480-20	20 x 20 mL pack	18 months
R1480000-3x4A	3 x 4 L natural poly	18 months

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

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

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Product Specification

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

Lot Number: SAMPLE

Product Number: Z1501000

Manufacture Date: N/A

Expiration Date: N/A

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
Appearance	Red liquid	Red liquid *Not a certified value.

Test	Certified Value	Uncertainty	NIST SRM#
pH at 25°C (Method: SQCP027, SQCP033)	3.990-4.010	0.02	185i, 186-I-g, 186-II-g

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)
R1501000-20F1	20 mL pouch	24 months

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

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Product Specification

Buffer, Reference Standard, pH 7.00 ± 0.01 at 25°C (Color Coded Yellow)

Lot Number: SAMPLE

Product Number: Z1551000

Manufacture Date: N/A

Expiration Date: N/A

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	7.12	7.09	7.06	7.04	7.02	7.00	6.99	6.98	6.98	6.97	6.97

Name	CAS#	Grade
Water	7732-18-5	ACS/ASTM/USP/EP
Sodium Phosphate Dibasic	7558-79-4	ACS
Potassium Dihydrogen Phosphate	7778-77-0	ACS
Preservative	Proprietary	
Yellow Dye	Proprietary	
Sodium Hydroxide	1310-73-2	Reagent

Test	Specification	Result
Appearance	Yellow liquid	Yellow liquid *Not a certified value.

Test	Certified Value	Uncertainty	NIST SRM#
pH at 25°C (Method: SQCP027, SQCP033)	6.990-7.010	0.02	186-I-g, 186-II-g, 191d

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)
R1551000-20F1	20 mL pouch	24 months

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

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Product Specification

Buffer, Reference Standard, pH 10.00 ± 0.01 at 25°C (Color Coded Blue)

Lot Number: SAMPLE

Product Number: Z1601000

Manufacture Date: N/A

Expiration Date: N/A

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	
Blue Dye	Proprietary	

Test	Specification	Result
Appearance	Blue liquid	Blue liquid *Not a certified value.

Test	Certified Value	Uncertainty	NIST SRM#
pH at 25°C (Method: SQCP027, SQCP033)	9.990-10.010	0.02	186-I-g, 186-II-g, 191d

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)
R1601000-20F1	20 mL pouch	18 months

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

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Product Specification

Rinse Solution, High Purity Water for Rinsing Electrodes and other Laboratory Instruments

Lot Number: SAMPLE**Product Number:** Z6648000**Manufacture Date:** N/A**Expiration Date:** N/A

This product is suitable for use in rinsing laboratory electrodes and other laboratory instrumentation. This product is nonsterile and is not tested for microbial count.

Name	CAS#	Grade
Water	7732-18-5	ACS/ASTM/USP/EP

Test	Specification	Result
Appearance	Colorless liquid	N/A

This water is specially purified by conventional water softening, prefiltration, activated carbon organic adsorption, reverse osmosis, mixed bed triple deionization, ultraviolet light irradiation, and 0.2 micron membrane filtration. Consult RICCA CHEMICAL COMPANY Technical Reference Document TRD02 (for lot numbers starting with 1) or TRD03 (for lot numbers starting with 2) for details of the water purification process.

Part Number	Size / Package Type	Shelf Life (Unopened Container)
R6648000-20F1	20 mL pouch	18 months

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

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