

P4764

Order ID:

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789

8900, Fax: 908 789 8922

#### **Prep Standard - Chemical Standard Summary**

Test :	pH,TSS
Prepbatch ID :	
Sequence ID/Qc Bate	ch ID: LB133337,LB133353,
Standard ID :	
Chemical ID :	
W3005,W3071,W307	72,W3093,W3094,W3107,



#### **CHEMICAL RECEIPT LOG BOOK**

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	AL13850-1 / Buffer Solution, PH2 (500ml)	4212E45	12/31/2024	01/31/2023 / lwona	01/31/2023 / Iwona	W3005
Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	AL14455-3 / buffer solution pH 7 yellow	4308H30	07/31/2025	01/02/2024 / JIGNESH	12/06/2023 / Iwona	W3071
Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	AL14940-1 / Buffer Solution, PH12 (500ml)	2310P21	04/30/2025	01/02/2024 / JIGNESH	12/07/2023 / Iwona	W3072
Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	566002 / BUFFER PH 7.00 GREEN 1PINT PK6	44001f99	12/31/2025	04/03/2024 / jignesh	04/02/2024 / jignesh	W3093
Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	1601-1 / PH 10.01 BUFFER,COLOR CD 475ML	4310g83	03/31/2025	04/03/2024 / jignesh	04/02/2024 / jignesh	W3094
				_		
Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #



## RICCA CHEMICAL COMPANY®

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1490 Lammers Pike Batesville, IN 47006 http://www.riccachemical.com

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# Certificate of Analysis

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

Lot Number: 4308H30

Product Number: 1551

Manufacture Date: AUG 09, 2023

Expiration Date: JUL 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  $\pm 0.01$  at 25 °C only. All other pH values at their corresponding temperatures are accurate to  $\pm 0.05$ .

5 10 15 20 25 35 40 45 Hq 7.12 7.09 7.06 7.04 7.027.00 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	coccottiti S. Tues and et e e e		
Sodium Hydroxide	1310-73-2	Reagent		

Test	Specification	Result	
Appearance	Yellow liquid	Passed	*Not a certified value
Test	Certified Value	Uncertainty	NIST SRM#
pH at 25°C (Method: SQCP027, SQCP033)	7.002	0.02	186-I-g, 186-II-g, 191d

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

pH measurements were performed in our Batesville, IN laboratory under ISO/IEC 17025 accreditation (ANAB Certificate L2387.02) 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)
1551-2.5	10 L Cubitainer®	24 months
1551-5	20 L Cubitainer®	24 months
Possesses de J. Character 1500	***************************************	24 months

Youl Drandon

Paul Brandon (08/09/2023)

**Production 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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Version: 1.3 Lot Number: 4308H30 Product Number: 1551 Page 2 of 2



RICCA CHEMICAL COMPANY®

W 3072

MC. (2/01/23)

Certificate of Analysis

1841 Broad Street Pocomoke City, MD 21851 http://www.riccachemical.com 1-888-GO-RICCA customerservice@riccachemical.com

Buffer, Reference Standard, pH  $12.00 \pm 0.01$  at 25°C

Lot Number: 2310P21

Product Number: 1615

Manufacture Date: OCT 24, 2023

Expiration Date: APR 2025

The certified value for this product is confirmed in independent testing by a second qualified chemist.

°C 15 35 40 12.35 12.17 11.99 11.78 Hg 11.62

Name	CAS#	Grade
Water	7732-18-5	ACS/ASTM/USP/EP
Potassium Chloride	7447-40-7	ACS
Sodium Hydroxide	1310-73-2	Reagent

Test	Specification	Result	
Appearance	Colorless liquid	Passed	*Not a certified value.
		· · · · · · · · · · · · · · · · · · ·	

Test	Certified Value	Uncertainty	NIST SRM#
pH at 25°C (Method: SQCP027, SQCP033)	12.005	0.02	186-I-g, 186-II-g, 191d

pH measurements were performed in our Pocomoke City, MD laboratory under ISO/IEC 17025 accreditation (ANAB Certificate L2387.01) 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		
1615-1	4 L natural poly	18 months		
1615-16	500 mL clear PET-G	18 months		
1615-32	1 L natural poly	18 months		
1615-5	20 L Cubitainer®	18 months		

Storen Travers.

Sharon Travers (10/24/2023)

**Operations Manager** 

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Version: 1.3 Lot Number: 2310P21 Product Number: 1615 Page 2 of 2



W 3005 Mec. 1/31/23

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## Certificate of Analysis

Buffer, Reference Standard, pH  $2.00 \pm 0.01$  at  $25^{\circ}$ C

Lot Number: 4212E45

Product Number: 1493

Manufacture Date: DEC 20, 2022

Expiration Date: DEC 2024

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 1.93 1.98 1.98 2.00 2.01 2.03 2.03 2.04 2.04

Name	CAS#	Grade
Water	7732-18-5	ACS/ASTM/USP/EP
Potassium Chloride	7447-40-7	ACS
Hydrochloric Acid	7647-01-0	ACS

Test	Specification	Result	
Appearance	Colorless liquid	Passed	*Not a certified value.
Test	A		

Test	Certified Value	Uncertainty	NIST SRM#
pH at 25°C (Method: SQCP027, SQCP033)	2.000	0.02	185i, 186-I-g, 186-II-g
**	***********************		1001' 100 T.S' 100-II-B

pH measurements were performed in our Batesville, IN laboratory under ISO/IEC 17025 accreditation (ANAB Certificate L2387.02) 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)
1493-1	4 L natural poly	24 months
1493-16	500 mL natural poly	24 months
1493-32	1 L natural poly	24 months
1493-5	20 L Cubitainer®	24 months

faul Drandon

Paul Brandon (12/20/2022)

**Production Manager** 

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#### This product was tested in an ISO 17025 Accredited Laboratory

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Version: 1.3 Lot Number: 4212E45 Product Number: 1493 Page 2 of 2



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Certificate of Analysis Onlong Concession Co

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

Lot Number: 4401F99

Product Number: 1551

Manufacture Date: JAN 08, 2024

Expiration Date: DEC 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  $\pm 0.01$  at 25 °C only. All other pH values at their corresponding temperatures are accurate to  $\pm 0.05$ .

5 10 15 20 25 30 35 40 45 50 pН 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	11.11.77	
Yellow Dye	Proprietary		
Sodium Hydroxide	1310-73-2		

Test	Specification	Result	
Appearance	Yellow liquid	Passed	*Not a certified value
Test	Certified Value	Uncertainty	NIST SRM#
pH at 25°C (Method: SQCP027, SQCP033)	7.004	0.02	186-I-g, 186-II-g, 191d

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

pH measurements were performed in our Batesville, IN laboratory under ISO/IEC 17025 accreditation (ANAB Certificate L2387.02) 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)
1551-1	4 L natural poly	24 months
1551-1CT	4 L Cubitainer®	24 months
1551-2.5	10 L Cubitainer®	24 months
1551-5	20 L Cubitainer®	24 months
		V /V   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.11   1.

faul Drandon

Paul Brandon (01/08/2024)

**Production Manager** 

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Version: 1.3 Lot Number: 4401F99 Product Number: 1551 Page 2 of 2



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Certificate of Analysis

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

Lot Number: 4310G83

Product Number: 1601

Manufacture Date: OCT 09, 2023

Expiration Date: MAR 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  $\pm 0.01$  at 25 °C only. All other pH values at their corresponding temperatures are accurate to  $\pm 0.05$ .

15 20 25 30

35 40 50 pН 10.31 10.23 10.17 10.11 10.05 10.00 9.959.91 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	110080110
Blue Dye	Proprietary	ne i i e e e e e e e e e e e e e e e e e

Test	Specification	Result	
Appearance	Blue liquid	Passed	*Not a certified value.
Test	Certified Value	Uncertainty	NIST SRM#
pH at 25°C (Method: SQCP027, SQCP033)	10.003	0.02	186-I-g, 186-II-g, 191d

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

pH measurements were performed in our Batesville, IN laboratory under ISO/IEC 17025 accreditation (ANAB Certificate L2387.02) 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)
1601-16	500 mL natural poly	18 months
1601-5	20 L Cubitainer®	18 months

Hand Brandon

Paul Brandon (10/09/2023)

**Production Manager** 

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#### This product was tested in an ISO 17025 Accredited Laboratory

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Version: 1.3 Lot Number: 4310G83 Product Number: 1601 Page 2 of 2



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#### Certificate of Analysis

Manufacture Date: MAR 09, 2024

Expiration Date: FEB 2026

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

Lot Number: 4403F90

Product Number: 1501

The certified value for this product is confirmed in independent testing by a second qualified chemist.

The NIST Traceable pH value is certified to  $\pm 0.01$  at 25 °C only. All other pH values at their corresponding temperatures are accurate to  $\pm 0.05$ .

10 15 20 25 30 35 45 50 4.00 4.00 pН 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/I	EP
Potassium Acid Phthalate	877-24-7	Buffer	
Preservative	Proprietary	Commercial	• •
Red Dye	Proprietary	Purified	
Test	Specification	Result	STATE OF STATE OF
Appearance	Red liquid	Passed	*Not a certified value
Test	Certified Value	Uncertainty	NIST SRM#
pH at 25°C (Method: SQCP027, SQCP033)	4.000	0.02	185i, 186-I-g, 186-II-g

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

pH measurements were performed in our Batesville, IN laboratory under ISO/IEC 17025 accreditation (ANAB Certificate L2387.02) 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)
1501-2.5	10 L Cubitainer®	24 months
1501-32	1 L natural poly	24 months
1501-5	20 L Cubitainer®	24 months

Hand Brandon

Paul Brandon (03/09/2024)

**Production Manager** 

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Version: 1.3 Lot Number: 4403F90 Product Number: 1501 Page 2 of 2