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Prep Standard - Chemical Standard Summary

Order ID :	Q1478
Test :	Corrosivity, Flash Point, Ignitability, Percent Solids, pH
Prepbatch ID :	
Sequence ID/Qc B	Batch ID: LB134873,LB134891,LB134900,LB134999,
Standard ID :	
Chemical ID :	093,W3094,W3107,W3159,W3161,
VV3071,VV3072,VV3	093, 003094, 003 107, 003 139, 003 101,



CHEMICAL RECEIPT LOG BOOK

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 #
PCI Scientific Supply, Inc.	AL14055-3 / PH 4 BUFFER SOLUTION	AL14055-3	02/27/2026	09/05/2024 / jignesh	05/13/2024 / jignesh	W3107
Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	TCX0014-500ML / p-xylene	BWDZJ	12/06/2029	02/14/2025 / rubina	12/06/2024 / Iwona	W3159



284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900, Fax : 908 789 8922

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)	2411E26	10/31/2026	12/09/2024 / Iwona	12/09/2024 / Iwona	W3161

RICCA CHEMICAL COMPANY®

W³07/ Mc 12/6/23 Certificate of Analysis 12

1490 Lammers Pike Batesville, IN 47006 http://www.riccachemical.com 1-888-GO-RICCA customerservice@riccachemical.com

Buffer, Reference Standard, pH 7.00 ± 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 ± 0.01 at 25 °C only. All other pH values at their corresponding temperatures are accurate to ± 0.05 .

°C pH	0 7.12	5 7.09	$\begin{array}{c} 10 \\ 7.06 \end{array}$	15 7.04	20 7.02	$\begin{array}{c} 25 \\ 7.00 \end{array}$	30 6.99	35 6.98	$\begin{array}{c} 40 \\ 6.98 \end{array}$	45 6.97	50 6.97	

Name	CAS#				
Water	7732-18-5	ACS/ASTM/USP/EP			
Sodium Phosphate Dibasic	7558-79-4	ACS			
Potassium Dihydrogen Phosphate	7778-77-0	ACS			
Preservative	Proprietary	AOD			
Yellow Dye	Proprietary				
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	Re	ference			
Commercial Buffer Solutions	AS	TM (D 1293 B)			
Buffer A		TM (D 5464)			
Buffer A		ГМ (D 5128)			

per industributions were periorined in our Batesvine, 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. 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		

Foul Brandon

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

RICCA CHEMICAL COMPANY[®] W^{3,072} M^c. (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 ± 0.01 at $25^{\circ}C$

Lot Number: 2310P21	Product Number: 1615	Manufacture Date: OCT 24, 2023
Lot Humper: 20101 21	110ddet 14dmber: 1015	Expiration Date: APR 2025

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

°C	15	20	25	30	35	40
pН	12.35	12.17	11.99	11.78	11.62	11.46

Name	CAS#	Grade	
Water	7732-18-5	ACS/ASTM/USP/EP	
Potassium Chloride	7447-40-7	ACS	6.00
Sodium Hydroxide	1310-73-2	Reagent	
Test	Specification	Result	
Appearance	Colorless liquid	Passed *Not a certified va	alue

Test	Certified Value	Uncertainty	NIST SRM#	
pH at 25°C (Method: SQCP027, SQCP033)		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 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 Containe		
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		

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Sharon Travers (10/24/2023) 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

RICCA CHEMICAL COMPANY[®] 3^{003} 0^{001} Certificate of Analysis 0^{010}

1490 Lammers Pike Batesville, IN 47006 http://www.riccachemical.com 1-888-GO-RICCA customerservice@riccachemical.com

Manufacture Date: JAN 08, 2024

Expiration Date: DEC 2025

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

Product Number: 1551

°C pH	0 7.12	5 7.09	10 7.06	15 7.04	20 7.02	25 7.00	30 6.99	35 6.98	40 6.98	45 6.97	50 6.97	
Name						CA	S#		1.15	Grade		
Water						77	32-18-5			ACS/AS	STM/USP/I	ξP
Sodiun	n Phosp	hate Di	basic			758	58-79-4	-		ACS		
Potass	ium Dił	nydrogen	n Phospi	hate		77	78-77-0			ACS		
Preserv	vative					Pro	prietar	У				
Yellow	Dye				•		prietar					
Sodium	n Hydro	xide					.0-73-2	· .				
Test						Specification Result						
Appear	ance				LEC.		Yell	ow liqui	d	Pas	ssed	*Not a certified value
<u>Fest</u>	Sec.				54-		Cert	ified Va	lue	Un	certainty	NIST SRM#
pH at 2	5°C (M	ethod: S	QCP02	7, SQCP	033)		7.004	4		0.0	2	186-I-g, 186-II-g, 191d
Specific	ation		1			Reference						
Comme	rcial Bu	ffer Sol	utions						ASTN	A (D 1293	B)	
Buffer A						ASTM (D 5464)						
Buffer A	1								ASTN	4 (D 5128		

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
Decommonded Steven 1500	2000 (F00) - 000T)	

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

Lot Number: 4401F99

Paul Drondon

Paul Brandon (01/08/2024) 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

RICCA CHEMICAL COMPANY°

1490 Lammers Pike Batesville, IN 47006 http://www.riccachemical.com 1-888-GO-RICCA customerservice@riccachemical.com

Certificate of Analysis

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

The cer	umber: tified valu	e for this	product is	confirme	d in inder	Number: 1601 pendent testing by a second qualified chemist. C only. All other pH values at their corresponding ter					facture Date: OCT 09, 2023 Expiration Date: MAR 2025
°C pH	0 10.31	5 10.23	10 10.17	15 10.11	20 10.05	25 10.00	30 9.95	35 9.91	40 9.87	50 9.81	res are accurate to ± 0.05 .
Name						CA	S#			Grade	
Water						773	32-18-5			ACS/ASTM/USP/	EP
Sodiur	n Carbo	nate				497	-19-8			ACS	T
Sodiur	n Bicarl	oonate								ACS	
Sodiur	n Hydro	xide 1310			0-73-2			Reagent			
Preser	Preservative			Proprietary				Intragent			
Blue D	ye						prietary	· ·			· · · ·
Test							Spec	ification		Result	
Appear	Appearance			Blue liquid				Passed	*Not a certified value.		
Test					1.1.1	120	Cert	ified Val	ue	Uncertainty	NIST SRM#
pH at 2	25°C (M	ethod: S	QCP02	7, SQCI	2 033)		10.00)3		0.02	186-I-g, 186-II-g, 191d
Specific	ation			1.2					Refe	rence	
Comme	rcial Bu	ffer Sol	utions							M (D 1293 B)	
Buffer (ASTM (D 5464)					
Buffer (7					ASTM (D 5128)					
comparis Standard a normal	ons. The u l Referenc distributi	incertaint e Materia on. Volum	y is calcul l, and the netric glas	lated from uncertain sware con	the unce ty of the provide	rtainty of measurem h Class A	the meas ent proce	d Reference urement v ss. The ur	ce Mater ariation certaint	fial as indicated above v from sample to sample, y is multiplied by k=2, o STM F 288 and NICE (cate L2387.02) and are certified ia an unbroken chain of the uncertainty in the NIST corresponding to 95% coverage in Circular 434; it is calibrated ses are calibrated regularly with

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.

I di ti tullibel	Size / Package Type	Shelf Life (Unopened Container)
1601-16	500 mL natural poly	18 months
1601-5	20 L Cubitainer®	18 months
Person and ad Steven 1500		

Foul Brandon 1

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Paul Brandon (10/09/2023) 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

RICCA CHEMICAL COMPANY

Certificate of Analysis

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

Product Number: 1501

Manufacture Date: MAR 09, 2024 Expiration Date: FEB 2026

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 .

							-			*	0 1	
°C	0	5	10	15	20	25	30	35	40	45	50	
$_{\rm pH}$	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/H	ΞP		
Potassium Acid Phthalate	877-24-7	Buffer			
Preservative	Proprietary	Commercial	••		
Red Dye	Proprietary	Purified			
Test	Specification	Result			
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	Re	ference			
Commercial Buffer Solutions	ASTM (D 1293 B)				
Buffer B	AS'	ГМ (D 5464)			

Buffer 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 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.

ASTM (D 5128)

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		

Foul Brandon

Paul Brandon (03/09/2024) 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



Certificate of Analysis

12/06/2024(JST)

TOKYO CHEMICAL INDUSTRY CO.,LTD. T-PLUS Nihonbashi-Kodemmacho

16-12 Nihonbashi-kodemmacho, Chuo-ku, Tokyo 103-0001, Japan

Chemical Name: p-Xylene						
Product Number: X0014 CAS RN: 106-42-3	Lot: BWDZJ					
Tests	Results	Specifications				
Appearance	Colorless clear liquid	Colorless to Almost colorless clear liquid				
Purity(GC)	99.7 %	min. 99.0 %				

TCI Lot numbers are 4-5 characters in length. Characters listed after the first 4-5 characters are control numbers for internal purpose only.

The contents of the specifications are subject to change without advance notice. The specification values displayed here are the most up to date values. There may be cases where the product labels display a different specification, however, the product quality still meets the latest specification.

Customer Service:

TCI AMERICA Tel: +1-800-423-8616 / +1-503-283-1681 Fax: +1-888-520-1075 / +1-503-283-1987 E-mail: Sales-US@TCIchemicals.com

Tahung nitich

Takuya Nishioka Quality Assurance Department Manager

RICCA CHEMICAL COMPANY[®] W3161 Rec. on 12/09/24 by IZ

Certificate of Analysis

Buffer, Reference Standard, pH 2.00 ± 0.01 at 25° C

Lot Number:	2411E26	\mathbf{Pr}
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oduct Number: 1493

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

Manufacture Date: NOV 11, 2024

Expiration Date: OCT 2026

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	Certified Value	Uncertainty	NIST SRM#
pH at 25°C (Method: SQCP027, SQCP033)	1.994	0.02	185i, 186-I-g, 186-II-g

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)
1493-1	4 L natural poly	24 months
1493-16	500 mL natural poly	24 months
1493-1CT	4 L Cubitainer®	24 months
1493-2.5	10 L Cubitainer®	24 months
1493-32	1 L natural poly	24 months
Recommended Storage: 15°C	- 30°C (59°F - 86°F)	

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Jose Pena (11/11/2024) Operations Manager

This product was tested in an ISO 17025 Accredited Laboratory