

#### Prep Standard - Chemical Standard Summary

Order ID:
Q1985

Test:
pH,TSS

Prepbatch ID:
Sequence ID/Qc Batch ID:
LB135711,LB135749,
Standard ID:

**Chemical ID :** 

W3071,W3072,W3093,W3161,W3178,W3191,



475ML

#### CHEMICAL RECEIPT LOG BOOK

| Supplier                       | ItemCode / ItemName                          | Lot #    | Expiration<br>Date | Date Opened /<br>Opened By           | Received Date /<br>Received By         | Chemtech<br>Lot # |
|--------------------------------|--|----------|--------------------|--------------------------------------|--|-------------------|
| PCI Scientific<br>Supply, Inc. | AL14455-3 / buffer solution<br>pH 7 yellow   | 4308H30  | 07/31/2025         | 01/02/2024 /<br>JIGNESH              | 12/06/2023 /<br>Iwona                  | W3071             |
| Supplier                       | ItemCode / ItemName                          | Lot #    | Expiration<br>Date | Date Opened /<br>Opened By           | Received Date /<br>Received By         | Chemtech<br>Lot # |
| PCI Scientific<br>Supply, Inc. | AL14940-1 / Buffer<br>Solution, PH12 (500ml) | 2310P21  | 04/30/2025         | 01/02/2024 /<br>JIGNESH              | 12/07/2023 /<br>Iwona                  | W3072             |
| Supplier                       | ItemCode / ItemName                          | Lot #    | Expiration<br>Date | Date Opened /<br>Opened By           | Received Date /<br>Received By         | Chemtech<br>Lot # |
| PCI Scientific<br>Supply, Inc. | 566002 / BUFFER PH<br>7.00 GREEN 1PINT PK6   | 44001f99 | 12/31/2025         | 04/03/2024 /<br>jignesh              | 04/02/2024 /<br>jignesh                | W3093             |
| Supplier                       | ItemCode / ItemName                          | Lot #    | Expiration<br>Date | Date Opened /<br>Opened By           | Received Date /<br>Received By         | Chemtech<br>Lot # |
| PCI Scientific<br>Supply, Inc. | AL13850-1 / Buffer<br>Solution, PH2 (500ml)  | 2411E26  | 10/31/2026         | 12/09/2024 /<br>Iwona                | 12/09/2024 /<br>Iwona                  | W3161             |
| Supplier                       | ItemCode / ItemName                          | Lot #    | Expiration         | Date Opened /                        | Received Date /                        | Chemtech          |
| PCI Scientific<br>Supply, Inc. | AL14055-3 / PH 4<br>BUFFER SOLUTION          | 2411A93  | Date<br>10/30/2026 | Opened By<br>04/01/2025 /<br>JIGNESH | Received By<br>01/27/2025 /<br>jignesh | Lot #<br>W3178    |
| Supplier                       | ItemCode / ItemName                          | Lot #    | Expiration<br>Date | Date Opened /<br>Opened By           | Received Date /<br>Received By         | Chemtech<br>Lot # |
| PCI Scientific<br>Supply, Inc. | 1601-1 / PH 10.01<br>BUFFER,COLOR CD         | 2410F80  | 03/31/2026         | 04/01/2025 /<br>JIGNESH              | 03/13/2025 /<br>jignesh                | W3191             |

# RICCA CHEMICAL COMPANY®

# W<sup>3</sup>07/ 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 $7.00 \pm 0.01$ 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  $\pm 0.05$ .

| °C<br>pH | 0<br>7.12 | 5<br>7.09 | $\begin{array}{c} 10 \\ 7.06 \end{array}$ | 15<br>7.04 | 20<br>7.02 | $\begin{array}{c} 25 \\ 7.00 \end{array}$ | 30<br>6.99 | 35<br>6.98 | $\begin{array}{c} 40 \\ 6.98 \end{array}$ | 45<br>6.97 | 50<br>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     | 1111 B. Luce    |                         |  |
| 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                       |  |  |

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

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<sup>®</sup> W<sup>3,072</sup> M<sup>c</sup>. (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 $25^{\circ}C$

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

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

| °C | 15    | 20    | <b>25</b> | 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 |

|                                       |                 | in the second se |                         |  |
|---------------------------------------|-----------------|--|-------------------------|--|
| 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                     |  |  |

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

nron Jrauers

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<sup>®</sup> $3^{003}$ $0^{001}$ 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<br>pH      | 0<br>7.12 | 5<br>7.09 | 10<br>7.06 | 15<br>7.04 | 20<br>7.02 | 25<br>7.00 | 30<br>6.99 | 35<br>6.98 | 40<br>6.98 | 45<br>6.97 | 50<br>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          |           |           |            |            |            | 1.1        | Spec       | ification  | 1          | Re         | sult       |                         |
| 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      |            |            |            | 0.0        | 2          | 186-I-g, 186-II-g, 191d |
| Specification |           |           |            |            | Reference  |            |            |            |            |            |            |                         |
| Comme         | rcial Bu  | ffer Sol  | utions     |            |            |            |            |            | ASTN       | A (D 1293  | B)         |                         |
| Buffer A      |           |           |            |            |            | ASTM (D 54 |            |            |            |            |            |                         |
| 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<sup>®</sup> W3161 Rec. on 12/09/24 by IZ

# **Certificate of Analysis**

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

| Lot Number: | 2411E26 | Pr |
|-------------|---------|----|
|-------------|---------|----|

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) |                     |                                 |  |  |  |  |

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

()

Jose Pena (11/11/2024) Operations Manager

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

# RICCA CHEMICAL COMPANY®

# **Certificate of Analysis**

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

 $\langle g \rangle$ 

231

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

(ed) Manufacture Date: NOV 04, 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 correspondence of the test of te

Lot Number: 2411A93

| 00 | 0    | F         | 10         |    |    | 0 01117.21 | n other p. | a seures s | it their co | rrespondi | ng tempera | tures are accurate to $\pm 0.05$ . |
|----|------|-----------|------------|----|----|------------|------------|------------|-------------|-----------|------------|------------------------------------|
| рH | 4.00 | о<br>4.00 | 10<br>4.00 | 15 | 20 | 25<br>4.00 | 30         | 35         | 40          | 45        | 50<br>4.06 |                                    |

Product Number: 1501

| Name  | CAS#   | Grade  |   |
|---|--|--|---|
| Water<br>Potassium Acid Phthalate<br>Preservative<br>Red Dye  | 7732-18-5<br>877-24-7<br>Proprietary<br>Proprietary  | ACS/ASTM/USP/<br>Buffer<br>Commercial<br>Purified  | EP  |
| Test  | Specification  | Result   |   |
| Appearance  | Red liquid   | Passed   | *Not a certified value  |
| Test  | Certified Value  | Uncertainty  | NIST SRM#   |
| pH at 25°C (Method: SQCP027, SQCP033)   | 4.008  | 0.02   | 185i, 186-I-g, 186-II-g   |
| Specification   | Ref  | erence   |   |
| Commercial Buffer Solutions<br>Buffer B<br>Buffer B<br>pH measurements were performed in our Pocomoke City, M<br>certified traceable to National Institute of Standards and T<br>chain of comparisons. The uncertainty is calculated from th<br>the NIST Standard Reference Material, and the uncertainty<br>95% coverage in a normal distribution. Volumetric glasswar<br>it is calibrated before first use and recalibrated regularly in<br>calibrated regularly with weights certified traceable to the N<br>pefore first use and recalibrated regularly with a thermomer<br>locuments that assure manufacture according to validated re | AST<br>AST<br>AST<br>ID laboratory under ISO/IEC 1702<br>echnology (NIST) Standard Refere<br>e uncertainty of the measurement<br>y of the measurement process. The<br>re complies with Class A tolerance<br>accordance with ASTM E 542 and | M (D 1293 B)<br>M (D 5464)<br>M (D 5128)<br>5 accreditation (ANAB Conce Material as indicated<br>variation from sample to<br>uncertainty is multiplied<br>requirements of ASTM E<br>NIST Procedure NBSIR | above via an unbroken<br>sample, the uncertainty in<br>by k=2, corresponding to<br>288 and NIST Circular 434;<br>74-461 Belance are |

|  | Size / Package Type   | Shelf Life (Il monored Que to )  |
|--|---|--|
| 1501-16<br>1501-2.5<br>1501-5<br>Recommended Storage: 15°C - 3 | 500 mL natural poly<br>10 L Cubitainer®<br>20 L Cubitainer® | Shelf Life (Unopened Container)<br>24 months<br>24 months<br>24 months |
| Storage, 10 C . 3  | U°C (59°F - 86°F)   |  |

CCA CHEMICAL COMPANY U3191

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

# Certificate of Analysis

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

Lot Number: 2410F80

1000

Product Number: 1601

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

Page 1 of 2

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 correspon

| °C         |       |       |       |       | 01 00 <u>20</u> | Сощу. Al | 1 other pl | 1 values a | t their con | respondi  | na tommomet                                  |
|------------|-------|-------|-------|-------|-----------------|----------|------------|------------|-------------|-----------|--|
| $\cup$     | 0     | 5     | 10    | 15    | 20              | 05       |            |            |             | a coponal | ng temperatures are accurate to $\pm 0.05$ . |
| $_{ m pH}$ | 10.31 | 10.23 | 10.17 | 10 11 | 10.05           | 25       | 30         | 35         | 40          | 50        |  |
|            |       |       |       | 10.11 | 10.00           | 10.00    | 9.95       | 9.91       | 9.87        | 9.81      |  |

| Name  | CAS#            | Grade  | The second s   |  |
|---|-----------------|--|--|--|
| Water   | 7732-18-5       |  |  |  |
| Sodium Carbonate                                      |                 | ACS/ASTM/USP/  | ΈP   |  |
| Sodium Bicarbonate                                    | 497-19-8        | ACS  |  |  |
| Sodium Hydroxide                                      | 144-55-8        | ACS  |  |  |
| Preservative  | 1310-73-2       | Reagent  |  |  |
| Blue Dye  | Proprietary     | anotegoint.  | and the second s |  |
|   | Proprietary     |  |  |  |
| Test  | (1 an           |  | Report Rando man   |  |
| Appearance  | Specification   | Result   |  |  |
| Fest  | Blue liquid     | Passed   | *Not a certified valu  |  |
| · · · · · · · · · · · · · · · · · · ·                 | Certified Value | Uncertainty  | NIST SRM#  |  |
| oH at 25°C (Method: SQCP027, SQCP033)                 | 10.009          | the second s |  |  |
| Specification   |                 | 0.02   | 186-I-g, 186-II-g, 191d  |  |
| Commercial Buffer Solutions                           | Refe            |  |  |  |
| Buffer C  | AST             |  |  |  |
| Buffer C  |                 | M (D 5464)   | × 80 T. 10 . 2010 T. 10 10   |  |
| pH measurements were performed in our Possenale. City |                 | M (D 5128)   |  |  |

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; calibrated before first use and recalibrated regularly in accordance with ASTM E 542 and NIST Procedure NBSIR 74-461. Balances are 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  | QL-167 'S AT                    |
|---------------------|--|---------------------------------|
| 1601-1              |  | Shelf Life (Unopened Container) |
|                     | EDO TOTAL PROVIDENCE AND | 18 months                       |
| 1601-1CT            | 500 mL natural poly<br>4 L Cubitainer®                       | 18 months                       |
| 1601-2.5<br>1601-32 |  | 18 months                       |
| 1001-32             |  |                                 |
| 1601-5              | + D natural poly   | 18 months                       |
| ersion: 1.3         |  | 10 11010.08                     |
|                     | Lot Name L. Lo La am   | umber: 1601                     |