

#### DATA REPORTING QUALIFIERS- INORGANIC

For reporting results, the following "Results Qualifiers" are used:

| J       | Indicates the reported value was obtained from a reading that was less than the Contract Required Detection Limit (CRDL), but greater than or equal to the Instrument Detection Limit (IDL).   |
|---------|--|
| U       | Indicates the analyte was analyzed for, but not detected.  |
| ND      | Indicates the analyte was analyzed for, but not detected   |
| E       | Indicates the reported value is estimated because of the presence of interference  |
| M       | Indicates Duplicate injection precision not met.   |
| N       | Indicates the spiked sample recovery is not within control limits.   |
| S       | Indicates the reported value was determined by the Method of Standard Addition (MSA).  |
| *       | Indicates that the duplicate analysis is not within control limits.  |
| +       | Indicates the correlation coefficient for the MSA is less than 0.995.  |
| D       | Indicates the reported value is from a secondary analysis with a dilution factor. The original analysis exceeded the calibration range.  |
| M<br>OR | Method qualifiers  "P" for ICP instrument  "PM" for ICP when Microwave Digestion is used  "CV" for Manual Cold Vapor AA  "AV" for automated Cold Vapor AA  "CA" for MIDI-Distillation Spectrophotometric  "AS" for Semi – Automated Spectrophotometric  "C" for Manual Spectrophotometric  "T" for Titrimetric  "NR" for analyte not required to be analyzed  Indicates the analyte's concentration exceeds the calibrated range of the instrument for that specific analysis. |
| Q       | Indicates the LCS did not meet the control limits requirements   |
| Н       | Sample Analysis Out Of Hold Time   |



#### LAB CHRONICLE

OrderID: Q2758

Client: Sciacca General Contractors, LLC

Contact: Rosanne Scirica

**OrderDate:** 8/1/2025 4:14:00 PM

Project: 92 Clifford Street, Newark Location: D21,VOA Ref. #2 Soil

| LabID    | ClientID | Matrix | Test             | Method          | Sample Date | Prep Date | Anal Date | Received |
|----------|----------|--------|------------------|-----------------|-------------|-----------|-----------|----------|
| Q2758-02 | WASTE    | SOIL   |                  |                 | 08/01/25    |           |           | 08/01/25 |
|          |          |        |                  |                 | 12:00       |           |           |          |
|          |          |        | Corrosivity      | 9045D           |             |           | 08/05/25  |          |
|          |          |        |                  |                 |             |           | 09:10     |          |
|          |          |        | Ignitability     | 1030            |             |           | 08/06/25  |          |
|          |          |        | 3,               |                 |             |           | 10:35     |          |
|          |          |        | Reactive Sulfide | 9034            |             | 08/05/25  | 08/05/25  |          |
|          |          |        | Reactive Sunide  | <del>3034</del> |             | 00/03/23  |           |          |
|          |          |        |                  |                 |             |           | 11:30     |          |
|          |          |        | Reactive Cyanide | 9012B           |             | 08/04/25  | 08/05/25  |          |
|          |          |        |                  |                 |             |           | 10:33     |          |



## SAMPLE DATA



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

Fax: 908 789 8922

#### **Report of Analysis**

Client: Sciacca General Contractors, LLC Date Collected: 08/01/25 12:00

Project: 92 Clifford Street, Newark Date Received: 08/01/25

Client Sample ID: WASTE SDG No.: Q2758
Lab Sample ID: Q2758-02 Matrix: SOIL

% Solid: 100

| Parameter        | Conc. | Qua. | DF | MDL    | LOQ / CRQL | Units | Prep Date      | Date Ana.      | Ana Met. |
|------------------|-------|------|----|--------|------------|-------|----------------|----------------|----------|
| Corrosivity      | 7.37  | Н    | 1  | 0      | 0          | pН    |                | 08/05/25 09:10 | 9045D    |
| Ignitability     | NO    |      | 1  | 0      | 0          | oC    |                | 08/06/25 10:35 | 1030     |
| Reactive Cyanide | 0.010 | J    | 1  | 0.0083 | 0.050      | mg/Kg | 08/04/25 15:15 | 08/05/25 10:33 | 9012B    |
| Reactive Sulfide | 3.17  | J    | 1  | 0.20   | 10.0       | mg/Kg | 08/05/25 08:45 | 08/05/25 11:30 | 9034     |

Comments: pH result reported at temperature 20.4 °C

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

D = Dilution

Q = indicates LCS control criteria did not meet requirements

H = Sample Analysis Out Of Hold Time

J = Estimated Value

B = Analyte Found in Associated Method Blank

\* = indicates the duplicate analysis is not within control limits.

E = Indicates the reported value is estimated because of the presence of interference.

OR = Over Range

N =Spiked sample recovery not within control limits



## QC RESULT SUMMARY



 ${\tt 284~Sheffield~Street,~Mountainside,~New~Jersey~07092,~Phone:908~789~8900,}\\$ 

Fax: 908 789 8922

#### **Initial and Continuing Calibration Verification**

Client: Sciacca General Contractors, LLC SDG No.: Q2758

Project: 92 Clifford Street, Newark RunNo.: LB136700

| Analyte                   |      | Units | Result | True Value | %<br>Recovery | Acceptance Window (%R) | Analysis<br>Date |
|---------------------------|------|-------|--------|------------|---------------|------------------------|------------------|
| Sample ID:<br>Corrosivity | ICV  | рН    | 6.99   | 7          | 100           | 90-110                 | 08/05/2025       |
| Sample ID:<br>Corrosivity | CCV1 | рН    | 2.01   | 2.00       | 101           | 90-110                 | 08/05/2025       |
| Sample ID:<br>Corrosivity | CCV2 | рН    | 12.02  | 12.00      | 100           | 90-110                 | 08/05/2025       |



**Initial and Continuing Calibration Verification** 

Client: Sciacca General Contractors, LLC SDG No.: Q2758

Project: 92 Clifford Street, Newark RunNo.: LB136704

| Analyte                |                 | Units | Result | True Value | %<br>Recovery | Acceptance<br>Window (%R) | Analysis<br>Date |
|------------------------|-----------------|-------|--------|------------|---------------|---------------------------|------------------|
| Sample ID:<br>Reactive | ICV1<br>Cyanide | mg/L  | 0.094  | 0.099      | 95            | 85-115                    | 08/05/2025       |
| Sample ID:<br>Reactive | CCV1<br>Cyanide | mg/L  | 0.25   | 0.25       | 100           | 90-110                    | 08/05/2025       |
| Sample ID:<br>Reactive | CCV2<br>Cyanide | mg/L  | 0.25   | 0.25       | 100           | 90-110                    | 08/05/2025       |
| Sample ID:<br>Reactive | CCV3<br>Cyanide | mg/L  | 0.25   | 0.25       | 100           | 90-110                    | 08/05/2025       |





**Initial and Continuing Calibration Verification** 

Client: Sciacca General Contractors, LLC SDG No.: Q2758

**Project:** 92 Clifford Street, Newark RunNo.: LB136704



 $284 \; Sheffield \; Street, \; Mountainside, \; New \; Jersey \; 07092, \; Phone \; : \; 908 \; 789 \; 8900, \\$ 

Fax: 908 789 8922

#### **Initial and Continuing Calibration Blank Summary**

Client: Sciacca General Contractors, LLC SDG No.: Q2758

Project: 92 Clifford Street, Newark RunNo.: LB136704

| Analyte                |                 | Units | Result   | Acceptance<br>Limits | Conc<br>Qual | MDL     | RDL   | Analysis<br>Date |
|------------------------|-----------------|-------|----------|----------------------|--------------|---------|-------|------------------|
| Sample ID:             | ICB1<br>Cyanide | mg/L  | 0.001    | 0.0025               | J            | 0.00096 | 0.005 | 08/05/2025       |
| Sample ID:<br>Reactive | CCB1<br>Cyanide | mg/L  | < 0.0025 | 0.0025               | U            | 0.00096 | 0.005 | 08/05/2025       |
| Sample ID:<br>Reactive | CCB2<br>Cyanide | mg/L  | 0.0012   | 0.0025               | J            | 0.00096 | 0.005 | 08/05/2025       |
| Sample ID:<br>Reactive | CCB3<br>Cyanide | mg/L  | 0.00096  | 0.0025               | J            | 0.00096 | 0.005 | 08/05/2025       |



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

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#### **Initial and Continuing Calibration Blank Summary**

Client: Sciacca General Contractors, LLC SDG No.: Q2758

**Project:** 92 Clifford Street, Newark RunNo.: LB136704





#### **Preparation Blank Summary**

**Client:** Sciacca General Contractors, LLC **SDG No.:** Q2758

92 Clifford Street, Newark **Project:** 

| Analyte                             | Units         | Result   | Acceptance<br>Limits | Conc<br>Qual | MDL    | RDL  | Analysis<br>Date |
|-------------------------------------|---------------|----------|----------------------|--------------|--------|------|------------------|
| Sample ID: PB16917 Reactive Cyanide | 13BL<br>mg/Kg | 0.0089   | 0.0250               | J            | 0.0084 | 0.05 | 08/05/2025       |
| Sample ID: PB16912 Reactive Sulfide | 27BL<br>mg/Kg | < 5.0000 | 5.0000               | U            | 0.201  | 10   | 08/05/2025       |



 ${\tt 284~Sheffield~Street,~Mountainside,~New~Jersey~07092,~Phone:908~789~8900,}\\$ 

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#### **Duplicate Sample Summary**

Client: Sciacca General Contractors, LLC SDG No.: Q2758

**Project:** 92 Clifford Street, Newark Sample ID: Q2758-02

Client ID: WASTEDUP Percent Solids for Spike Sample: 100

| Analyte      | Units | Acceptance<br>Limit | Sample<br>Result | Conc.<br>Qualifier | Duplicate<br>Result | Conc.<br>Qualifier | Dilution<br>Factor | RPD/<br>AD | Qual | Analysis<br>Date |
|--------------|-------|---------------------|------------------|--------------------|---------------------|--------------------|--------------------|------------|------|------------------|
| Ignitability | оC    | +/-20               | NO               |                    | NO                  |                    | 1                  | 0          |      | 08/06/2025       |



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Fax: 908 789 8922

#### **Duplicate Sample Summary**

Client: Sciacca General Contractors, LLC SDG No.: Q2758

**Project:** 92 Clifford Street, Newark Sample ID: Q2763-04

Client ID: TP-2DUP Percent Solids for Spike Sample: 100

| Analyte          | Units | Acceptance<br>Limit | Sample<br>Result | Conc.<br>Qualifier | Duplicate<br>Result | Conc.<br>Qualifier | Dilution<br>Factor | RPD/<br>AD | Qual | Analysis<br>Date |
|------------------|-------|---------------------|------------------|--------------------|---------------------|--------------------|--------------------|------------|------|------------------|
| Corrosivity      | pН    | +/-20               | 8.50             |                    | 8.52                |                    | 1                  | 0.24       |      | 08/05/2025       |
| Reactive Cyanide | mg/Kg | +/-20               | 0.010            | J                  | 0.011               | J                  | 1                  | 10         |      | 08/05/2025       |
| Reactive Sulfide | mg/Kg | +/-20               | 1.60             | J                  | 1.60                | J                  | 1                  | 0          |      | 08/05/2025       |



### RAW DATA



#### Analytical Summary Report

Analysis Method: 9045D Analyst By : jignesh

Parameter: Corrosivity Supervisor Review By : Iwona

Run Number: LB136700 Slope: 98.3

| Calibration Standards           | Chemtech Log# |
|---------------------------------|---------------|
| PH 4 BUFFER SOLUTION            | W3178         |
| BUFFER PH 7.00 GREEN 1PINT PK6  | W3093         |
| PH 10.01 BUFFER, COLOR CD 475ML | W3191         |
| buffer solution pH 7 yellow     | W3217         |
| Buffer Solution, PH2 (500ml)    | W3161         |
| pH 12.00 Buffer                 | W3200         |

True Value of ICV = 7.00 Control Limits[+/- 0.1].

True Value of CCV1 = 2.00 Control Limits[+/- 0.05].

True Value of CCV2 = 12.00 Control Limits[+/- 0.05].

| Seq | LabID       | DF | Matrix | Weight<br>(gm) | Volume (ml) | Temperature (°C) | Result<br>(pH) | Anal Date  | Anal Time |
|-----|-------------|----|--------|----------------|-------------|------------------|----------------|------------|-----------|
| 1   | CAL1        | 1  | Water  | NA             | NA          | 20.2             | 4.02           | 08/05/2025 | 08:45     |
| 2   | CAL2        | 1  | Water  | NA             | NA          | 20.2             | 7.00           | 08/05/2025 | 08:46     |
| 3   | CAL3        | 1  | Water  | NA             | NA          | 20.3             | 10.02          | 08/05/2025 | 08:47     |
| 4   | ICV         | 1  | Water  | NA             | NA          | 20.3             | 6.99           | 08/05/2025 | 08:50     |
| 5   | CCV1        | 1  | Water  | NA             | NA          | 20.2             | 2.01           | 08/05/2025 | 08:52     |
| 6   | Q2758-02    | 1  | Solid  | 20.02          | 20          | 20.4             | 7.37           | 08/05/2025 | 09:10     |
| 7   | Q2759-02    | 1  | Solid  | 20.03          | 20          | 20.6             | 6.90           | 08/05/2025 | 09:20     |
| 8   | Q2763-04    | 1  | Solid  | 20.04          | 20          | 22.7             | 8.50           | 08/05/2025 | 09:30     |
| 9   | Q2763-04DUP | 1  | Solid  | 20.05          | 20          | 22.9             | 8.52           | 08/05/2025 | 09:34     |
| 10  | CCV2        | 1  | Water  | NA             | NA          | 20.3             | 12.02          | 08/05/2025 | 09:35     |

201961 GM

Date: 08-05-2025 08:26:02 Collect Date Method 08/04/2025 9045D 08/01/2025 9045D Raw Sample Storage Location **D21** D31 PSEG03 Customer SCIA01 Department: Wet-Chemistry WORKLIST(Hardcopy Internal Chain) Cool 4 deg C Cool 4 deg C Preservative WorkList ID: 191106 Corrosivity Corrosivity Test Matrix Solid Solid **Customer Sample** SOLID-DRUMS corrsovity q2763 WASTE WorkList Name: Q2759-02 Q2758-02 Sample

08/04/2025 9045D

023

PSEG03

Cool 4 deg C

Corrosivity

Solid

**TP-2** 

Q2763-04

Date/Time 08 (05) 1.5

Raw Sample Received by:

Reviewed By:Iwona On:8/5/2025 11:40:30 AM Inst Id :WC PH METER-1

R3 ( FX4-

1240

Raw Sample Relinquished by:

Page 1 of 1

Raw Sample Relinquished by: スコーレビストー(しん)

Raw Sample Received by:

Date/Time 02/05/15 08:35

Reviewed By:Iwona On:8/5/2025 1:46:54

Test results

Aquakem 7.2AQ1

Page: 1

Test results

Alliance Technical Group 284 Sheffield Street, Mountainside, NJ 07092

Reviewed by :  $\underline{RM}$  Instrument ID : Konelab

8/5/2025 10:53

Test: Total CN

| Sample Id  | Result   | Dil. 1 +   | Response  | Errors |
|--|--|--|---|--------|
| ICV1 ICB1 CCV1 CCB1 PB169113BL Q2752-03 Q2753-02 Q2754-01 Q2758-02 Q2759-02 Q2763-04 Q2763-04DUP PB169112BL Q2751-01 CCV2 CCB2 Q2751-01DUP Q2754-02 Q2759-04 CCV3 CCB3 | 94.446<br>1.036<br>246.493<br>0.929<br>0.894<br>0.777<br>1.060<br>0.960<br>1.049<br>0.972<br>1.041<br>1.117<br>0.484<br>1.267<br>246.619<br>1.193<br>1.255<br>0.960<br>0.903<br>250.493<br>0.958 | 0.0<br>0.0<br>0.0<br>0.0<br>0.0<br>0.0<br>0.0<br>0.0 | 0.078<br>0.001<br>0.204<br>0.001<br>0.001<br>0.001<br>0.001<br>0.001<br>0.001<br>0.001<br>0.001<br>0.001<br>0.001<br>0.001<br>0.001<br>0.001<br>0.001<br>0.001<br>0.001<br>0.001<br>0.001 |        |
|  |  |  |   |        |

Ν 21 Mean 40.710 SD 89.0114 CV% 218.65

Aquakem v. 7.2AQ1

Results from time period:

Tue Aug 05 10:26:18 2025

Tue Aug 05 10:47:14 2025

| Sample Id   | Sa | m/Ctr/c/ Test short r Test t | ype Result Result | unit Result date and time Stat |
|-------------|----|------------------------------|-------------------|--------------------------------|
| 0.0PPBCN    | Α  | Total CN P                   | 0.832 μg/l        | 8/5/2025 8:41:28               |
| 5.0PPBCN    | Α  | Total CN P                   | 5.6741 μg/l       | 8/5/2025 8:41:29               |
| 10PPBCN     | Α  | Total CN P                   | 10.8499 µg/l      | 8/5/2025 8:41:30               |
| 50PPBCN     | Α  | Total CN P                   | 48.8713 μg/l      | 8/5/2025 8:41:31               |
| 100PPBCN    | Α  | Total CN P                   | 97.2898 µg/l      | 8/5/2025 8:41:32               |
| 250PPBCN    | Α  | Total CN P                   | 251.7035 μg/l     | 8/5/2025 8:41:33               |
| 500PPBCN    | Α  | Total CN P                   | 499.7794 μg/l     | 8/5/2025 8:41:34               |
| ICV1        | S  | Total CN P                   | 94.4464 µg/l      | 8/5/2025 10:26:19              |
| ICB1        | S  | Total CN P                   | 1.0356 µg/l       | 8/5/2025 10:26:22              |
| CCV1        | S  | Total CN P                   | 246.4932 µg/l     | 8/5/2025 10:26:24              |
| CCB1        | S  | Total CN P                   | 0.9286 μg/l       | 8/5/2025 10:26:27              |
| PB169113BL  | S  | Total CN P                   | 0.8944 μg/l       | 8/5/2025 10:26:28              |
| Q2752-03    | S  | Total CN P                   | 0.7771 μg/l       | 8/5/2025 10:33:52              |
| Q2753-02    | S  | Total CN P                   | 1.0603 µg/l       | 8/5/2025 10:33:53              |
| Q2754-01    | S  | Total CN P                   | 0.9604 μg/l       | 8/5/2025 10:33:54              |
| Q2758-02    | S  | Total CN P                   | 1.0495 µg/l       | 8/5/2025 10:33:55              |
| Q2759-02    | S  | Total CN P                   | 0.9719 μg/l       | 8/5/2025 10:33:56              |
| Q2763-04    | S  | Total CN P                   | 1.0415 µg/l       | 8/5/2025 10:33:58              |
| Q2763-04DUP | S  | Total CN P                   | 1.1173 µg/l       | 8/5/2025 10:34:00              |
| PB169112BL  | S  | Total CN P                   | 0.4838 μg/l       | 8/5/2025 10:41:25              |
| Q2751-01    | S  | Total CN P                   | 1.2673 μg/l       | 8/5/2025 10:41:26              |
| CCV2        | S  | Total CN P                   | 246.6187 µg/l     | 8/5/2025 10:41:29              |
| CCB2        | S  | Total CN P                   | 1.1926 µg/l       | 8/5/2025 10:41:32              |
| Q2751-01DUP | S  | Total CN P                   | 1.2546 µg/l       | 8/5/2025 10:41:34              |
| Q2754-02    | S  | Total CN P                   | 0.9599 μg/l       | 8/5/2025 10:41:35              |
| Q2759-04    | S  | Total CN P                   | 0.9029 µg/l       | 8/5/2025 10:47:08              |
| CCV3        | S  | Total CN P                   | 250.4932 μg/l     | 8/5/2025 10:47:12              |
| CCB3        | S  | Total CN P                   | 0.9581 μg/l       | 8/5/2025 10:47:14              |
|             |    |                              |                   |                                |

Calibration results

Aquakem 7.2AQ1

Page:

Alliance Technical Group 284 Sheffield Street, Mountainside, NJ 07092

Reviewed by : RM Instrument ID : Konelab

8/5/2025 8:42

Test Total CN

Accepted

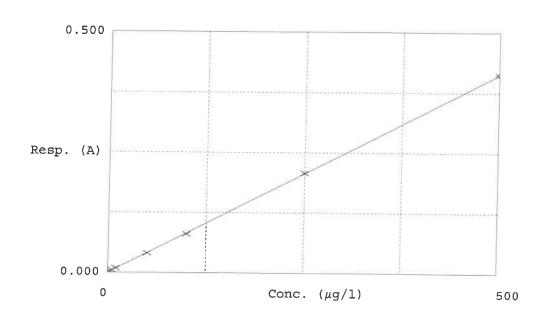
8/5/2025 8:42

Factor Bias

1212

Coeff. of det. 0.999935

Errors



|                                 | Calibrator   | Response  | Calc. con.  | Conc.  | Errors                             |
|---------------------------------|--|---|---|--|------------------------------------|
| 1<br>2<br>3<br>4<br>5<br>6<br>7 | 0.0PPBCN<br>5.0PPBCN<br>10PPBCN<br>50PPBCN<br>100PPBCN<br>250PPBCN<br>500PPBCN | 0.001<br>0.005<br>0.009<br>0.040<br>0.080<br>0.208<br>0.413 | 0.8320<br>5.6741<br>10.8499<br>48.8713<br>97.2898<br>251.7035<br>499.7794 | 0.0000<br>5.0000<br>10.0000<br>50.0000<br>100.0000<br>250.0000 | 13.5<br>8.5<br>-2.3<br>-2.7<br>0.7 |

#### Analytical Summary Report

CHEMITECH

Analysis Method: 9034

Parameter: Reactive Sulfide

Run Number: LB136706

ANALYST: rubina

SUPERVISOR REVIEW BY: Iwona

Constant: 16000

\_\_\_\_

Normality1: 0.025

Normality2: 0.025

| Reagent/Standard                   | Lot/Log # |
|------------------------------------|-----------|
| SODIUM THIOSULFATE, 0.025N, 4LITRE | W3105     |
| IODINE SOLUTION .025N 1L           | W3213     |
| Starch Solution, 4L                | W3149     |

| Seq | Lab ID      | True<br>Value<br>(mg/l) | DF | Initial<br>Weight<br>(g) | Final<br>Volume<br>(ml) | T1<br>(ml) | T2<br>Initial | T2<br>Final | T2 Diff. (ml) | T1 - T2<br>Diff (mL) | Value<br>Corrected<br>With Blank | Result<br>(ppm) | Anal<br>Date | Anal<br>Time |
|-----|-------------|-------------------------|----|--------------------------|-------------------------|------------|---------------|-------------|---------------|----------------------|----------------------------------|-----------------|--------------|--------------|
| 1   | PB169127BL  |                         | 1  | 5.00                     | 50                      | 2.00       | 0.00          | 1.92        | 1.92          | 0.08                 | 0.00                             | 0.00            | 08/05/2025   | 11:20        |
| 2   | Q2752-03    |                         | 1  | 5.02                     | 50                      | 2.00       | 0.00          | 1.88        | 1.88          | 0.12                 | 0.04                             | 3.19            | 08/05/2025   | 11:23        |
| 3   | Q2753-02    |                         | 1  | 5.04                     | 50                      | 2.00       | 0.00          | 1.90        | 1.90          | 0.10                 | 0.02                             | 1.59            | 08/05/2025   | 11:26        |
| 4   | Q2754-01    |                         | 1  | 5.01                     | 50                      | 2.00       | 0.00          | 1.86        | 1.86          | 0.14                 | 0.06                             | 4.79            | 08/05/2025   | 11:28        |
| 5   | Q2758-02    |                         | 1  | 5.04                     | 50                      | 2.00       | 0.00          | 1.88        | 1.88          | 0.12                 | 0.04                             | 3.17            | 08/05/2025   | 11:30        |
| 6   | Q2759-02    |                         | 1  | 5.07                     | 50                      | 2.00       | 0.00          | 1.86        | 1.86          | 0.14                 | 0.06                             | 4.73            | 08/05/2025   | 11:33        |
| 7   | Q2763-04    |                         | 1  | 5.01                     | 50                      | 2.00       | 0.00          | 1.90        | 1.90          | 0.10                 | 0.02                             | 1.60            | 08/05/2025   | 11:36        |
| 8   | Q2763-04DUP |                         | 1  | 5.01                     | 50                      | 2.00       | 0.00          | 1.90        | 1.90          | 0.10                 | 0.02                             | 1.60            | 08/05/2025   | 11:39        |

T1 = Titrant1

T2 = Titrant2

T2 Diff = T2 Final - T2 Initial

Value Corrected With Blank = ((T1 - T2 Diff) - Blank Correction(BL))

Result = ((T1 \* Normality1) - ((T1 - Value Corrected With Blank) \* Normality2)) \* Constant / Initial Volume



#### Analytical Summary Report

Analysis Method: 1030 Reviewed By: Eman

Parameter: Ignitability Supervisor Review By: Iwona

Run Number: LB136722

| Seq | LabID       | ClientID    | DF | matrix | Result<br>Status | Burning<br>Rate | Anal Date  | Anal Time |
|-----|-------------|-------------|----|--------|------------------|-----------------|------------|-----------|
| 1   | Q2758-02    | WASTE       | 1  | Solid  | NO               | 0.00            | 08/06/2025 | 10:35     |
| 2   | Q2758-02DUP | WASTEDUP    | 1  | Solid  | NO               | 0.00            | 08/06/2025 | 10:42     |
| 3   | Q2759-01    | SOLID-DRUMS | 1  | Solid  | NO               | 0.00            | 08/06/2025 | 10:49     |
| 4   | Q2759-02    | SOLID-DRUMS | 1  | Solid  | NO               | 0.00            | 08/06/2025 | 10:57     |
| 5   | Q2763-01    | TP-2        | 1  | Solid  | NO               | 0.00            | 08/06/2025 | 11:05     |
| 6   | Q2763-04    | TP-2        | 1  | Solid  | NO               | 0.00            | 08/06/2025 | 11:12     |
| 7   | Q2773-01    | COMP-1      | 1  | Solid  | NO               | 0.00            | 08/06/2025 | 11:20     |
| 8   | Q2773-02    | COMP-2      | 1  | Solid  | NO               | 0.00            | 08/06/2025 | 11:27     |
| 9   | Q2773-03    | COMP-3      | 1  | Solid  | NO               | 0.00            | 08/06/2025 | 11:35     |
| 10  | Q2775-01    | 60273       | 1  | Solid  | NO               | 0.00            | 08/06/2025 | 11:42     |
| 11  | Q2780-01    | TP-3        | 1  | Solid  | NO               | 0.00            | 08/06/2025 | 11:50     |
| 12  | Q2780-04    | TP-3        | 1  | Solid  | NO               | 0.00            | 08/06/2025 | 11:57     |
| 13  | Q2780-05    | TP-1        | 1  | Solid  | NO               | 0.00            | 08/06/2025 | 12:05     |
| 14  | Q2780-08    | TP-1        | 1  | Solid  | NO               | 0.00            | 08/06/2025 | 12:12     |

Burning Rate = Length(mm)

Total Time(sec)

# 16136722

# WORKLIST(Hardcopy Internal Chain)

IGN-080625

WorkList Name:

| WorkList Name: | IGN-080625      | WorkList ID : | 0: 191128  | Department:  | Wet-Chemistry | C                   | Date . 08-06-20"    | 08-06-2025-08-34-30 |
|----------------|-----------------|---------------|--|--------------|---------------|---------------------|---------------------|---------------------|
| Sample         |                 |               |  |              |               | Raw Sample          | _                   | 20.00.24.39         |
|                | Customer Sample | Matrix        | Test   | Preservative | Customer      | Storage<br>Location | Collect Date Method | Method              |
| Q2758-02       | WASTE           |               |  |              |               |                     |                     |                     |
|                | 1.00            | DIIOS         | Ignitability   | Cool 4 deg C | SCIA01        | D21                 | 08/01/2025          | 1030                |
| Q2759-01       | SOLID-DRUMS     | Solid         | Ignitability   | Cool 4 dea C | PSEC.03       | D24                 |                     |                     |
| Q2759-02       | SOLID-DRUMS     | Solid         | lanitability   |              |               |                     | 08/04/2025          | 1030                |
| 70 00200       |                 | 5             | 191111 and 19111 a | C001 4 deg C | PSEG03        | D31                 | 08/04/2025          | 1030                |
| QZ/63-01       | TP-2            | Solid         | Ignitability   | Cool 4 deg C | PSEG03        | 023                 | 1000140100          | 000                 |
| Q2763-04       | ТР-2            | Solid         | lanitability   | C 20 1 1000  |               | 043                 | 06/04/2025          | 1030                |
| O2773 04       | 7 4700          |               |  | o nen + non  | PSEG03        | 023                 | 08/04/2025          | 1030                |
| 10-51 175      | COMP-1          | Solid         | Ignitability   | Cool 4 deg C | PSEG03        | D31                 | 3000/30/30          | 000                 |
| Q2773-02       | COMP-2          | Solid         | Ignitability   | Cool 4 dea C | 8001100       |                     | 02/02/20/00         | 1030                |
| Q2773-03       | COMP-3          | Filoo         | 12-14-15-114   |              | TOEGUS        | D31                 | 08/05/2025          | 1030                |
| 1000           |                 | Dilloc        | Ignitability   | Cool 4 deg C | PSEG03        | D31                 | 08/05/2025          | 1030                |
| QZ/75-01       | 60273           | Solid         | Ignitability   | Cool 4 deg C | PSEG03        | D34                 | 10000110100         |                     |
| Q2780-01       | TP-3            | Solid         | Ignitability   | Cool 4 dea C | Decon         |                     | CZ0Z/C0/00          | 1030                |
| Q2780-04       | TP-3            | 1 2 0         |  |              | 205057        | D31                 | 08/05/2025          | 1030                |
|                |                 | Solid         | Ignitability   | Cool 4 deg C | PSEG03        | D31                 | 08/05/2025 1030     | 1030                |
| Q2780-05       | TP-1            | Solid         | Ignitability   | Cool 4 dea C | PSEGOS        | 100                 |                     | 000                 |
| Q2780-08       | TP-1            | rilov.        | 111111111111111111111111111111111111111  |              |               | 3                   | 08/05/2025          | 1030                |
|                |                 |               | Ignitability   | Cool 4 deg C | PSEG03        | D31                 | 08/05/2025          | 1030                |
|                |                 |               |  |              |               |                     |                     |                     |

08/06/25 Raw Sample Received by: Date/Time

Raw Sample Relinquished by:

Page 1 of 1

Date/Time 08/06 25

Raw Sample Relinquished by: Raw Sample Received by:



#### **Water Reactive Cyanide Preparation Sheet**



SOP ID:

M9012B-Total, Amenable and Reactive Cyanide-21

SDG No:

N/A

Start Digest Date: 08/04/2025

Time: 15:15

Temp: N/A

Matrix:

WATER

**End Digest Date:** 08/04/2025

Time: 16:45

Temp: N/A

Pippete ID :

N/A

N/A

Balance ID: N/A

Hood ID:

HOOD#1

Digestion tube ID: M5595

**Block Thermometer ID:** N/A

RM

Block ID: Weigh By: MC-1,MC-2

Filter paper ID: N/A pH Meter ID: N/A

Prep Technician Signature:

Supervisor Signature:

| Standared Name | MLS USED | STD REF. # FROM LOG |  |
|----------------|----------|---------------------|--|
| PBW            | 50.0ML   | W3112               |  |
| N/A            | N/A      | N/A                 |  |

| Chemical Used | ML/SAMPLE USED | Lot Number |
|---------------|----------------|------------|
| 0.25N NaOH    | 50.0ML         | WP113836   |
| N/A           | N/A            | N/A        |

| LAB SAMPLE ID | CLIENT SAMPLE ID | Comment |
|---------------|------------------|---------|
|               |                  |         |

#### **Extraction Conformance/Non-Conformance Comments:**

N/A

| Date / Time    | Prepped Sample Relinquished By/Location | Received By/Location |
|----------------|---|----------------------|
| 104/2025 15.25 | RH cwes                                 | RH wil               |
|                | Preparation Group                       | Analysis Group       |





| Lab<br>Sample ID | Client<br>Sample ID | Initial Vol<br>(ml) | Final Vol<br>(ml) | рH  | Sulfide | Oxidizing | Nitrate/<br>Nitrite | Comment | Prep<br>Pos |
|------------------|---------------------|---------------------|-------------------|-----|---------|-----------|---------------------|---------|-------------|
| PB169112BL       | PBW112              | 50                  | 50                | N/A | N/A     | N/A       | N/A                 | N/A     | N/A         |
| Q2751-01DUP      | ROLL-OFF-LIQUIDDUP  | 50                  | 50                | N/A | N/A     | N/A       | N/A                 | N/A     | N/A         |
| Q2751-01         | ROLL-OFF-LIQUID     | 50                  | 50                | N/A | N/A     | N/A       | N/A                 | N/A     | N/A         |
| Q2754-02         | OILY-WATER          | 50                  | 50                | N/A | N/A     | N/A       | N/A                 | N/A     | N/A         |
| Q2759-04         | LIQUID-DRUMS        | 50                  | 50                | N/A | N/A     | N/A       | N/A                 | N/A     | N/A         |



PB169113



| SOP ID:      | M9012B-Total, Ame | nable and Reactive Cyanide | e-21               |                            |                       |
|--------------|-------------------|----------------------------|--------------------|----------------------------|-----------------------|
| SDG No:      | N/A               |                            | Start Digest Date: | 08/04/2025 <b>Time</b> : 1 | 5:15 <b>Temp:</b> N/A |
| Matrix :     | SOIL              |                            | End Digest Date:   | 08/04/2025 <b>Time</b> : 1 |                       |
| Pippete ID : | N/A               |                            |                    |                            |                       |
| Balance ID : | WC SC-7           |                            |                    |                            |                       |
| Hood ID:     | HOOD#1            | Digestion tube ID :        | M5595              | Block Thermometer 1        | D: N/A                |
| Block ID :   | MC-1,MC-2         | Filter paper ID :          | N/A                | Prep Technician Signatu    | re: PH                |
| Weigh By :   | RM                | pH Meter ID :              | N/A                | Supervisor Signatur        | 1)                    |

| Standared Name | MLS USED | STD REF. # FROM LOG |   |
|----------------|----------|---------------------|---|
| PBS003         | 50.0ML   | W3112               |   |
| N/A            | N/A      | N/A                 |   |
| N/A            | N/A      | N/A                 |   |
| N/A            | N/A      | N/A                 | _ |
| N/A            | N/A      | N/A                 |   |

| Chemical Used | ML/SAMPLE USED | Lot Number |
|---------------|----------------|------------|
| 0.25N NaOH    | 50.0ML         | WP113836   |
| N/A           | N/A            | N/A        |

| LAB SAMPLE ID | CLIENT SAMPLE ID | Comment |  |  |
|---------------|------------------|---------|--|--|
|               |                  |         |  |  |

#### **Extraction Conformance/Non-Conformance Comments:**

**Preparation Group** 

N/A

| Date / Time |       | Prepped Sample Relinquished By/Location | Received By/Location |  |  |
|-------------|-------|---|----------------------|--|--|
| 28/04/2025  | 15.00 | RM (W)                                  | DIS 1vs              |  |  |

**Analysis Group** 



#### **Soil/Sludge Reactive Cyanide Preparation Sheet**

PB169113

| Lab<br>Sample ID | Client<br>Sample ID | Initial<br>Weight<br>(g) | Final Vol<br>(ml) | рH  | Sulfide | Oxidizing | Nitrate/<br>Nitrite | Comment | Prep<br>Pos |
|------------------|---------------------|--------------------------|-------------------|-----|---------|-----------|---------------------|---------|-------------|
| PB169113BL       | PBS113              | 5.00                     | 50                | N/A | N/A     | N/A       | N/A                 | N/A     | N/A         |
| Q2752-03         | PIPE-LINE-LIQUIDS   | 5.08                     | 50                | N/A | N/A     | N/A       | N/A                 | N/A     | N/A         |
| Q2753-02         | 289                 | 5.02                     | 50                | N/A | N/A     | N/A       | N/A                 | N/A     | N/A         |
| Q2754-01         | OILY-RAGS           | 5.07                     | 50                | N/A | N/A     | N/A       | N/A                 | N/A     | N/A         |
| Q2758-02         | WASTE               | 5.03                     | 50                | N/A | N/A     | N/A       | N/A                 | N/A     | N/A         |
| Q2759-02         | SOLID-DRUMS         | 5.04                     | 50                | N/A | N/A     | N/A       | N/A                 | N/A     | N/A         |
| Q2763-04         | TP-2                | 5.05                     | 50                | N/A | N/A     | N/A       | N/A                 | N/A     | N/A         |
| Q2763-04DUP      | TP-2DUP             | 5.05                     | 50                | N/A | N/A     | N/A       | N/A                 | N/A     | N/A         |



#### Soil/Sludge Reactive Sulfide Preparation Sheet

PB169127

SOP ID:

M9030B-Sulfide-13

SDG No:

N/A

Start Digest Date: 08/05/2025

Time: 08:45

Temp: N/A

Matrix:

SOIL

**End Digest Date:** 08/05/2025

Time: 10:15

Temp: N/A

Pippete ID: WC

Balance ID: **Hood ID:** 

WC SC-7

HOOD#1

RM

Digestion tube ID: M5595

**Block Thermometer ID:** N/A

Supervisor Signature:

Block ID: Weigh By: MC-1,MC-2

Filter paper ID: N/A pH Meter ID: N/A

**Prep Technician Signature:** 

| Standared Name | MLS USED | STD REF. # FROM LOG |  |
|----------------|----------|---------------------|--|
| PBS003         | 50.0ML   | W3112               |  |
| N/A            | N/A      | N/A                 |  |

| Chemical Used     | ML/SAMPLE USED | Lot Number |  |
|-------------------|----------------|------------|--|
| 0.5M ZINC ACETATE | 5.0ML          | WP113086   |  |
| FORMALDEHYDE      | 2.0ML          | W3220      |  |
| N/A               | N/A            | N/A        |  |
| V/A               | N/A            | N/A        |  |
| N/A               | N/A            | N/A        |  |
| N/A               | N/A            | N/A        |  |

**Extraction Conformance/Non-Conformance Comments:** 

N/A

08/05/2025

Date / Time Prepped Sample Relinquished By/Location Received By/Location **Preparation Group Analysis Group** 



| Lab<br>Sample ID | Client<br>Sample ID | Initial<br>Weight<br>(g) | Final Vol<br>(ml) | рН  | Sulfide | Oxidizing | Nitrate/<br>Nitrite | Comment | Prep<br>Pos |
|------------------|---------------------|--------------------------|-------------------|-----|---------|-----------|---------------------|---------|-------------|
| PB169127BL       | PBS127              | 5.00                     | 50                | N/A | N/A     | N/A       | N/A                 | N/A     | N/A         |
| Q2752-03         | PIPE-LINE-LIQUIDS   | 5.02                     | 50                | N/A | N/A     | N/A       | N/A                 | N/A     | N/A         |
| Q2753-02         | 289                 | 5.04                     | 50                | N/A | N/A     | N/A       | N/A                 | N/A     | N/A         |
| Q2754-01         | OILY-RAGS           | 5.01                     | 50                | N/A | N/A     | N/A       | N/A                 | N/A     | N/A         |
| Q2758-02         | WASTE               | 5.04                     | 50                | N/A | N/A     | N/A       | N/A                 | N/A     | N/A         |
| Q2759-02         | SOLID-DRUMS         | 5.07                     | 50                | N/A | N/A     | N/A       | N/A                 | N/A     | N/A         |
| Q2763-04         | TP-2                | 5.01                     | 50                | N/A | N/A     | N/A       | N/A                 | N/A     | N/A         |
| 2763-04DUP       | TP-2DUP             | 5.01                     | 50                | N/A | N/A     | N/A       | N/A                 | N/A     | N/A         |



Instrument ID: WC PH METER-1

| Review By     | jignesh |                                     | Review On    | 8/5/2025 8:54:30 AM  |  |  |
|---------------|---------|-------------------------------------|--------------|----------------------|--|--|
| Supervise By  | Iwona   |                                     | Supervise On | 8/5/2025 11:40:30 AM |  |  |
| SubDirectory  | LB′     | 136700                              | Test         | Corrosivity          |  |  |
| STD. NAME     |         | STD REF.#                           |              |                      |  |  |
| ICAL Standard |         | N/A                                 |              |                      |  |  |
| ICV Standard  |         | N/A                                 |              |                      |  |  |
| CCV Standard  |         | N/A                                 |              |                      |  |  |
| ICSA Standard |         | N/A                                 |              |                      |  |  |
| CRI Standard  |         | N/A                                 |              |                      |  |  |
| LCS Standard  |         | N/A                                 |              |                      |  |  |
| Chk Standard  |         | W3178,W3093,W3191,W3217,W3161,W3200 |              |                      |  |  |

| Sr# | SampleId    | ClientID    | QcType | Date           | Comment | Operator | Status |
|-----|-------------|-------------|--------|----------------|---------|----------|--------|
| 1   | CAL1        | CAL1        | CAL    | 08/05/25 08:45 |         | Jignesh  | ок     |
| 2   | CAL2        | CAL2        | CAL    | 08/05/25 08:46 |         | Jignesh  | ок     |
| 3   | CAL3        | CAL3        | CAL    | 08/05/25 08:47 |         | Jignesh  | ок     |
| 4   | ICV         | ICV         | ICV    | 08/05/25 08:50 |         | Jignesh  | ОК     |
| 5   | CCV1        | CCV1        | CCV    | 08/05/25 08:52 |         | Jignesh  | ок     |
| 6   | Q2758-02    | WASTE       | SAM    | 08/05/25 09:10 |         | Jignesh  | ок     |
| 7   | Q2759-02    | SOLID-DRUMS | SAM    | 08/05/25 09:20 |         | Jignesh  | ок     |
| 8   | Q2763-04    | TP-2        | SAM    | 08/05/25 09:30 |         | Jignesh  | ок     |
| 9   | Q2763-04DUP | TP-2DUP     | DUP    | 08/05/25 09:34 |         | Jignesh  | ок     |
| 10  | CCV2        | CCV2        | CCV    | 08/05/25 09:35 |         | Jignesh  | ОК     |



**Instrument ID:** 

#### /AAD / 1 ID // 1 D/AADA

**KONELAB** 

| Daily Analysis Runlog For | Sequence/QCBatch ID # LB136704 |
|---------------------------|--------------------------------|
|---------------------------|--------------------------------|

| Review By     | rub   | rubina Review On |              | 8/5/2025 1:26:56 PM |  |
|---------------|---|------------------|--------------|---------------------|--|
| Supervise By  | lwc   | ona              | Supervise On | 8/5/2025 1:46:54 PM |  |
| SubDirectory  | LB  | 136704           | Test         | Reactive Cyanide    |  |
| STD. NAME     |   | STD REF.#        |              |                     |  |
| ICAL Standard | d WP114165,WP114166,WP114168,WP114169,WP114170,WP114171 |                  |              |                     |  |
| ICV Standard  |   | WP114172         |              |                     |  |
| CCV Standard  |   | WP114166         |              |                     |  |
| ICSA Standard |   | N/A              |              |                     |  |
| CRI Standard  |   | N/A              |              |                     |  |
| LCS Standard  |   | N/A              |              |                     |  |
| Chk Standard  | WP112643,WP112900,WP114173                              |                  |              |                     |  |

| Sr# | Sampleld   | ClientID          | QcType | Date           | Comment | Operator | Status |
|-----|------------|-------------------|--------|----------------|---------|----------|--------|
| 1   | 0.0PPBCN   | 0.0PPBCN          | CAL1   | 08/05/25 08:41 |         | rubina   | ОК     |
| 2   | 5.0PPBCN   | 5.0PPBCN          | CAL2   | 08/05/25 08:41 |         | rubina   | ОК     |
| 3   | 10PPBCN    | 10PPBCN           | CAL3   | 08/05/25 08:41 |         | rubina   | ОК     |
| 4   | 50PPBCN    | 50PPBCN           | CAL4   | 08/05/25 08:41 |         | rubina   | ОК     |
| 5   | 100PPBCN   | 100PPBCN          | CAL5   | 08/05/25 08:41 |         | rubina   | ОК     |
| 6   | 250PPBCN   | 250PPBCN          | CAL6   | 08/05/25 08:41 |         | rubina   | ОК     |
| 7   | 500PPBCN   | 500PPBCN          | CAL7   | 08/05/25 08:41 |         | rubina   | ОК     |
| 8   | ICV1       | ICV1              | ICV    | 08/05/25 10:26 |         | rubina   | ОК     |
| 9   | ICB1       | ICB1              | ICB    | 08/05/25 10:26 |         | rubina   | ОК     |
| 10  | CCV1       | CCV1              | CCV    | 08/05/25 10:26 |         | rubina   | ОК     |
| 11  | CCB1       | CCB1              | ССВ    | 08/05/25 10:26 |         | rubina   | ОК     |
| 12  | PB169113BL | PB169113BL        | МВ     | 08/05/25 10:26 |         | rubina   | ОК     |
| 13  | Q2752-03   | PIPE-LINE-LIQUIDS | SAM    | 08/05/25 10:33 |         | rubina   | ОК     |
| 14  | Q2753-02   | 289               | SAM    | 08/05/25 10:33 |         | rubina   | ОК     |
| 15  | Q2754-01   | OILY-RAGS         | SAM    | 08/05/25 10:33 |         | rubina   | ок     |
| 16  | Q2758-02   | WASTE             | SAM    | 08/05/25 10:33 |         | rubina   | ок     |
| 17  | Q2759-02   | SOLID-DRUMS       | SAM    | 08/05/25 10:33 |         | rubina   | ОК     |
| 18  | Q2763-04   | TP-2              | SAM    | 08/05/25 10:33 |         | rubina   | ОК     |
|     |            |                   |        |                |         |          |        |



**Instrument ID:** KONELAB

| Review By rubina                        |                       | Review On          | 8/5/2025 1:26:56 PM           |                  |
|---|-----------------------|--------------------|-------------------------------|------------------|
| Supervise By Iwona                      |                       | Supervise On       | 8/5/2025 1:46:54 PM           |                  |
| SubDirectory                            | SubDirectory LB136704 |                    | Test                          | Reactive Cyanide |
| STD. NAME STD REF.#                     |                       |                    |                               |                  |
| ICAL Standard                           |                       | WP114165,WP114166, | WP114167,WP114168,WP114169,WP | 114170,WP114171  |
| ICV Standard                            |                       | WP114172           |                               |                  |
| CCV Standard                            |                       | WP114166           |                               |                  |
| ICSA Standard                           |                       | N/A                |                               |                  |
| CRI Standard                            |                       | N/A                |                               |                  |
| LCS Standard N/A                        |                       |                    |                               |                  |
| Chk Standard WP112643,WP112900,WP114173 |                       |                    | WP114173                      |                  |
|   |                       | 1                  |                               |                  |

| 19 | Q2763-04DUP | TP-2DUP           | DUP | 08/05/25 10:34 | rubina     | OK |
|----|-------------|-------------------|-----|----------------|------------|----|
| 20 | PB169112BL  | PB169112BL        | МВ  | 08/05/25 10:41 | rubina     | ок |
| 21 | Q2751-01    | ROLL-OFF-LIQUID   | SAM | 08/05/25 10:41 | rubina     | ок |
| 22 | CCV2        | CCV2              | CCV | 08/05/25 10:41 | rubina     | ок |
| 23 | CCB2        | CCB2              | ССВ | 08/05/25 10:41 | rubina     | ок |
| 24 | Q2751-01DUP | ROLL-OFF-LIQUIDDL | DUP | 08/05/25 10:41 | rubina     | ок |
| 25 | Q2754-02    | OILY-WATER        | SAM | 08/05/25 10:41 | rubina     | ок |
| 26 | Q2759-04    | LIQUID-DRUMS      | SAM | 08/05/25 10:47 | <br>rubina | ок |
| 27 | CCV3        | CCV3              | CCV | 08/05/25 10:47 | rubina     | ок |
| 28 | ССВ3        | ССВ3              | ССВ | 08/05/25 10:47 | rubina     | OK |



**Instrument ID:** TITRAMETRIC

| Review By rubina               |     | Review On    | 8/5/2025 11:58:19 AM |                  |
|--------------------------------|-----|--------------|----------------------|------------------|
| Supervise By Iwona             |     | Supervise On | 8/5/2025 11:58:22 AM |                  |
| SubDirectory                   | LB1 | 136706       | Test                 | Reactive Sulfide |
| STD. NAME STD REF.#            |     | STD REF.#    |                      |                  |
| ICAL Standard                  |     | N/A          |                      |                  |
| ICV Standard                   |     | N/A          |                      |                  |
| CCV Standard                   |     | N/A          |                      |                  |
| ICSA Standard                  |     | N/A          |                      |                  |
| CRI Standard                   |     | N/A          |                      |                  |
| LCS Standard N/A               |     |              |                      |                  |
| Chk Standard W3105,W3213,W3149 |     |              |                      |                  |

| Sr# | SampleId    | ClientID          | QcType | Date           | Comment | Operator | Status |
|-----|-------------|-------------------|--------|----------------|---------|----------|--------|
| 1   | PB169127BL  | PB169127BL        | МВ     | 08/05/25 11:20 |         | rubina   | ок     |
| 2   | Q2752-03    | PIPE-LINE-LIQUIDS | SAM    | 08/05/25 11:23 |         | rubina   | ок     |
| 3   | Q2753-02    | 289               | SAM    | 08/05/25 11:26 |         | rubina   | ОК     |
| 4   | Q2754-01    | OILY-RAGS         | SAM    | 08/05/25 11:28 |         | rubina   | ОК     |
| 5   | Q2758-02    | WASTE             | SAM    | 08/05/25 11:30 |         | rubina   | ок     |
| 6   | Q2759-02    | SOLID-DRUMS       | SAM    | 08/05/25 11:33 |         | rubina   | ОК     |
| 7   | Q2763-04    | TP-2              | SAM    | 08/05/25 11:36 |         | rubina   | ОК     |
| 8   | Q2763-04DUP | TP-2DUP           | DUP    | 08/05/25 11:39 |         | rubina   | ок     |



**Instrument ID:** FLAME

| Review By Eman   |                     | Review On | 8/6/2025 12:59:52 PM |                     |
|------------------|---------------------|-----------|----------------------|---------------------|
| Supervise By     | Supervise By Iwona  |           | Supervise On         | 8/6/2025 1:08:11 PM |
| SubDirectory     | LB                  | 136722    | Test                 | Ignitability        |
| STD. NAME        | STD. NAME STD REF.# |           |                      |                     |
| ICAL Standard    |                     | N/A       |                      |                     |
| ICV Standard     |                     | N/A       |                      |                     |
| CCV Standard     |                     | N/A       |                      |                     |
| ICSA Standard    |                     | N/A       |                      |                     |
| CRI Standard     |                     | N/A       |                      |                     |
| LCS Standard N/A |                     |           |                      |                     |
| Chk Standard N/A |                     |           |                      |                     |

| Sr# | Sampleld    | ClientID    | QcType | Date           | Comment | Operator | Status |
|-----|-------------|-------------|--------|----------------|---------|----------|--------|
| 1   | Q2758-02    | WASTE       | SAM    | 08/06/25 10:35 |         | Eman     | ОК     |
| 2   | Q2758-02DUP | WASTEDUP    | DUP    | 08/06/25 10:42 |         | Eman     | ОК     |
| 3   | Q2759-01    | SOLID-DRUMS | SAM    | 08/06/25 10:49 |         | Eman     | ОК     |
| 4   | Q2759-02    | SOLID-DRUMS | SAM    | 08/06/25 10:57 |         | Eman     | ОК     |
| 5   | Q2763-01    | TP-2        | SAM    | 08/06/25 11:05 |         | Eman     | ОК     |
| 6   | Q2763-04    | TP-2        | SAM    | 08/06/25 11:12 |         | Eman     | ок     |
| 7   | Q2773-01    | COMP-1      | SAM    | 08/06/25 11:20 |         | Eman     | ок     |
| 8   | Q2773-02    | COMP-2      | SAM    | 08/06/25 11:27 |         | Eman     | ОК     |
| 9   | Q2773-03    | COMP-3      | SAM    | 08/06/25 11:35 |         | Eman     | ок     |
| 10  | Q2775-01    | 60273       | SAM    | 08/06/25 11:42 |         | Eman     | ОК     |
| 11  | Q2780-01    | TP-3        | SAM    | 08/06/25 11:50 |         | Eman     | ОК     |
| 12  | Q2780-04    | TP-3        | SAM    | 08/06/25 11:57 |         | Eman     | ок     |
| 13  | Q2780-05    | TP-1        | SAM    | 08/06/25 12:05 |         | Eman     | ок     |
| 14  | Q2780-08    | TP-1        | SAM    | 08/06/25 12:12 |         | Eman     | ок     |



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

8900, Fax: 908 789 8922

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

| Order ID | : | Q2758 |
|----------|---|-------|
|----------|---|-------|

Test: Corrosivity, Ignitability, Percent Solids, Reactive Cyanide, Reactive Sulfide

**Prepbatch ID:** PB169113,PB169127,

**Sequence ID/Qc Batch ID:** LB136700,LB136704,LB136706,LB136722,

| Sta |    | ١. |    | $\overline{}$ |   |
|-----|----|----|----|---------------|---|
| SIA | mo | ы  | ГΟ | u             | - |

WP112643,WP112900,WP113086,WP113836,WP113838,WP114164,WP114165,WP114166,WP114167,WP114168,WP114169,WP114170,WP114171,WP114172,WP114173,

#### Chemical ID:

M6151,W2668,W2926,W3019,W3093,W3105,W3112,W3113,W3139,W3149,W3161,W3178,W3191,W3200,W3203,W3213,W3214,W3217,W3220,W3224,



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#### Wet Chemistry STANDARD PREPARATION LOG

| Recipe<br>ID | <u>NAME</u> | NO.      | Prep Date  | Expiration<br>Date | Prepared<br>By | <u>ScaleID</u> | <u>PipetteID</u> | Supervised By Iwona Zarych |
|--------------|-------------|----------|------------|--------------------|----------------|----------------|------------------|----------------------------|
| 539          | CN BUFFER   | WP112643 | 04/09/2025 | 10/09/2025         | Niha Farheen   | WETCHEM_S      | None             | -                          |
|              |             |          |            |                    | Shaik          | CALE_5 (WC     |                  | 04/09/2025                 |
| EDOM         | 50-5)       |          |            |                    |                |                |                  |                            |

| FROM     | 138.00000gram of W2668    | + 862.00000ml of W3112     | = Final Quantity: 1000.000 mi |
|----------|---------------------------|----------------------------|-------------------------------|
| I IXOIVI | 100.0000g/a/ii/ 0/ 1/2000 | . 002.000001111 01 1101112 | r mar quartity. 1000.000 m    |

| Recipe    |                          |            |            | Expiration  | Prepared      |                |                  | Supervised By |
|-----------|--------------------------|------------|------------|-------------|---------------|----------------|------------------|---------------|
| <u>ID</u> | NAME                     | <u>NO.</u> | Prep Date  | <u>Date</u> | <u>By</u>     | <u>ScaleID</u> | <u>PipetteID</u> | Iwona Zarych  |
| 607       | PYRIDINE-BARBITURIC ACID | WP112900   | 05/01/2025 | 08/18/2025  | Rubina Mughal | WETCHEM_S      | Glass            | ·             |
|           |                          |            |            |             |               | CALE_8 (WC     | Pipette-A        | 05/01/2025    |

FROM 145.00000ml of W3112 + 15.00000gram of W3203 + 15.00000ml of M6151 + 75.00000ml of W3019 = Final Quantity: 250.000 ml



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#### Wet Chemistry STANDARD PREPARATION LOG

| Recipe<br>ID | <u>NAME</u>       | <u>NO.</u> | Prep Date  | Expiration<br>Date | Prepared<br>By | <u>ScaleID</u> | <u>PipetteID</u> | Supervised By Iwona Zarych |
|--------------|-------------------|------------|------------|--------------------|----------------|----------------|------------------|----------------------------|
| 160          | 0.5M ZINC ACETATE | WP113086   | 05/15/2025 | 08/18/2025         | Rubina Mughal  | _              |                  |                            |
|              |                   |            |            |                    |                | CALE_8 (WC     |                  | 05/15/2025                 |
| SC-7)        |                   |            |            |                    |                |                |                  |                            |

| <u>FROM</u> | 0.88900L of W3112 + 1.00000ml of M6 | 151 + 110.00000gram of W2926 | = Final Quantity: 1000.000 ml |
|-------------|-------------------------------------|------------------------------|-------------------------------|
|             |                                     |                              |                               |

| Recipe<br>ID | NAME_                                      | NO.      | Prep Date  | Expiration<br>Date | Prepared<br>By | <u>ScaleID</u>          | <u>PipetteID</u> | Supervised By Iwona Zarych |
|--------------|--|----------|------------|--------------------|----------------|-------------------------|------------------|----------------------------|
| 11           | Sodium hydroxide absorbing solution 0.25 N | WP113836 | 07/08/2025 | 12/31/2025         | Rubina Mughal  | WETCHEM_S<br>CALE 8 (WC | None             | 07/00/0005                 |
|              | Solution 0.25 N                            |          |            |                    |                | SC-7)                   |                  | 07/08/2025                 |

**FROM** 21.00000L of W3112 + 210.00000gram of W3113 = Final Quantity: 21.000 L



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### Wet Chemistry STANDARD PREPARATION LOG

| Recipe<br>ID | NAME   | NO.             | Prep Date  | Expiration<br>Date | Prepared<br>By | <u>ScaleID</u> | <u>PipetteID</u>      | Supervised By Iwona Zarych |  |  |
|--------------|--|-----------------|------------|--------------------|----------------|----------------|-----------------------|----------------------------|--|--|
| 3371         | Cyanide LCS Spike Solution,<br>5PPM  | <u>WP113838</u> | 07/08/2025 | 12/24/2025         | Rubina Mughal  | None           | WETCHEM_F<br>IPETTE_3 | ,                          |  |  |
| FROM         | FROM 1.00000ml of W3224 + 199.00000ml of WP113836 = Final Quantity: 200.000 ml |                 |            |                    |                |                |                       |                            |  |  |

| -ROM | 1.00000ml of W3224 + | 199.00000ml of WP113836 | = Final Quantity: 200.000 mi |
|------|----------------------|-------------------------|------------------------------|
|      |                      |                         |                              |

| Recipe<br>ID | NAME                                      | <u>NO.</u>      | Prep Date  | Expiration<br>Date | Prepared<br>By | <u>ScaleID</u> | <u>PipettelD</u>              | Supervised By Iwona Zarych |
|--------------|---|-----------------|------------|--------------------|----------------|----------------|-------------------------------|----------------------------|
| 3456         | Cyanide Intermediate Working<br>Std, 5PPM | <u>WP114164</u> | 08/05/2025 | 08/06/2025         | Rubina Mughal  | None           | WETCHEM_F<br>IPETTE_3<br>(WC) | ,                          |

0.25000ml of W3214 + 49.75000ml of WP113836 = Final Quantity: 50.000 ml **FROM** 



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### Wet Chemistry STANDARD PREPARATION LOG

| Recipe<br>ID | <u>NAME</u>                      | NO.             | Prep Date    | Expiration<br>Date | Prepared<br>By | <u>ScaleID</u> | <u>PipettelD</u>      | Supervised By Iwona Zarych |
|--------------|----------------------------------|-----------------|--------------|--------------------|----------------|----------------|-----------------------|----------------------------|
| 4            | Calibation standard 500 ppb      | <u>WP114165</u> | 08/05/2025   | 08/06/2025         | Rubina Mughal  | None           | WETCHEM_P<br>IPETTE_3 | 08/06/2025                 |
| EDOM         | 45 00000ml of WP113836 ± 5 00000 | ml of WD11      | 1164 - Final | Ouantity: 50 00    |                |                | (WC)                  |                            |

| Recipe<br>ID | NAME.                               | NO.             | Prep Date  | Expiration<br>Date | Prepared<br>By | <u>ScaleID</u> | <u>PipetteID</u>              | Supervised By Iwona Zarych |
|--------------|-------------------------------------|-----------------|------------|--------------------|----------------|----------------|-------------------------------|----------------------------|
| 3761         | Calibration-CCV CN Standard 250 ppb | <u>WP114166</u> | 08/05/2025 | 08/06/2025         | Rubina Mughal  | None           | WETCHEM_F<br>IPETTE_3<br>(WC) | 08/06/2025                 |

**FROM** 2.50000ml of WP114164 + 47.50000ml of WP113836 = Final Quantity: 50.000 ml



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### Wet Chemistry STANDARD PREPARATION LOG

| Recipe<br>ID | NAME   | <u>NO.</u>      | Prep Date  | Expiration<br>Date | Prepared<br>By | <u>ScaleID</u> | <u>PipettelD</u>      | Supervised By Iwona Zarych |  |
|--------------|--|-----------------|------------|--------------------|----------------|----------------|-----------------------|----------------------------|--|
| 6            | Calibration Standard 100 ppb   | <u>WP114167</u> | 08/05/2025 | 08/06/2025         | Rubina Mughal  | None           | WETCHEM_F<br>IPETTE_3 | ,                          |  |
| FROM         | M 1.00000ml of WP114164 + 49.00000ml of WP113836 = Final Quantity: 50.000 ml |                 |            |                    |                |                |                       |                            |  |

| Recipe<br>ID | <u>NAME</u>                 | <u>NO.</u>      | Prep Date  | Expiration<br>Date | Prepared<br>By | <u>ScaleID</u> | <u>PipetteID</u>      | Supervised By Iwona Zarych |
|--------------|-----------------------------|-----------------|------------|--------------------|----------------|----------------|-----------------------|----------------------------|
| 7            | Calibration Standard 50 ppb | <u>WP114168</u> | 08/05/2025 | 08/06/2025         | Rubina Mughal  | None           | WETCHEM_P<br>IPETTE_3 | 08/06/2025                 |

**FROM** 0.50000ml of WP114164 + 49.50000ml of WP113836 = Final Quantity: 50.000 ml



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### Wet Chemistry STANDARD PREPARATION LOG

| Recipe    |                             |          |            | Expiration  | <u>Prepared</u> |                |                       | Supervised By |  |  |
|-----------|-----------------------------|----------|------------|-------------|-----------------|----------------|-----------------------|---------------|--|--|
| <u>ID</u> | NAME                        | NO.      | Prep Date  | <u>Date</u> | By              | <u>ScaleID</u> | <u>PipetteID</u>      | Iwona Zarych  |  |  |
| 8         | Calibration Standard 10 ppb | WP114169 | 08/05/2025 | 08/06/2025  | Rubina Mughal   | None           | WETCHEM_F<br>IPETTE 3 |               |  |  |
|           |                             |          |            |             |                 |                |                       | 08/06/2025    |  |  |
| FROM      | (VVC)                       |          |            |             |                 |                |                       |               |  |  |

| Recipe    |                            |            |            | Expiration  | Prepared      |                |                  | Supervised By |
|-----------|----------------------------|------------|------------|-------------|---------------|----------------|------------------|---------------|
| <u>ID</u> | <u>NAME</u>                | <u>NO.</u> | Prep Date  | <u>Date</u> | <u>By</u>     | <u>ScaleID</u> | <u>PipetteID</u> | Iwona Zarych  |
| 9         | Calibration Standard 5 ppb | WP114170   | 08/05/2025 | 08/06/2025  | Rubina Mughal | None           | WETCHEM_F        |               |
|           |                            |            |            |             |               |                | IPETTE_3         | 08/06/2025    |

**FROM** 0.50000ml of WP114165 + 49.50000ml of WP113836 = Final Quantity: 50.000 ml



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### Wet Chemistry STANDARD PREPARATION LOG

| Recipe<br>ID | NAME  | NO.      | Prep Date  |            | Prepared<br>By | <u>ScaleID</u> | PipettelD | Supervised By Iwona Zarych |  |  |  |
|--------------|---|----------|------------|------------|----------------|----------------|-----------|----------------------------|--|--|--|
| 167          | 0 ppb CN calibration std                            | WP114171 | 08/05/2025 | 08/06/2025 | Rubina Mughal  | None           | None      |                            |  |  |  |
|              |   |          |            |            |                |                |           | 08/06/2025                 |  |  |  |
| FDOM         | FD 00000ml of W/D412926 - Final Quantity: F0 000 ml |          |            |            |                |                |           |                            |  |  |  |

| <u>FROM</u> | 50.00000ml of WP113836 | = Final Quantity: 50.000 in | nı |
|-------------|------------------------|-----------------------------|----|
|-------------|------------------------|-----------------------------|----|

| Recipe    |                      |            |            | Expiration  | <u>Prepared</u> |                |                  | Supervised By |
|-----------|----------------------|------------|------------|-------------|-----------------|----------------|------------------|---------------|
| <u>ID</u> | NAME.                | <u>NO.</u> | Prep Date  | <u>Date</u> | <u>By</u>       | <u>ScaleID</u> | <u>PipetteID</u> | lwona Zarych  |
| 2168      | RCN ICV STD, 100 PPB | WP114172   | 08/05/2025 | 08/06/2025  | Rubina Mughal   | None           | WETCHEM_F        | ,             |
|           |                      |            |            |             |                 |                | IPETTE_3         | 08/06/2025    |

**FROM** 1.00000ml of WP113838 + 49.00000ml of WP113836 = Final Quantity: 50.000 ml





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### Wet Chemistry STANDARD PREPARATION LOG

| Recipe<br>ID<br>1582 | NAME Chloramine T solution, 0.014M | <u>NO.</u><br>WP114173 | Prep Date<br>08/05/2025 |                  | <u>Prepared</u><br><u>By</u><br>Rubina Mughal | ScaleID WETCHEM_S CALE_5 (WC | PipetteID  Glass Pipette-A | Supervised By Iwona Zarych 08/06/2025 |
|----------------------|------------------------------------|------------------------|-------------------------|------------------|---|------------------------------|----------------------------|---------------------------------------|
| FROM                 | 0.08000gram of W3139 + 20.00000n   | I<br>nl of W3112       | = Final Quan            | ntity: 20.000 ml |   | SC-5)                        |                            | 30/00/2023                            |



| Supplier                       | ItemCode / ItemName   | Lot #      | Expiration<br>Date | Date Opened /<br>Opened By | Received Date /<br>Received By | Chemtech<br>Lot # |
|--------------------------------|---|------------|--------------------|----------------------------|--------------------------------|-------------------|
| Seidler Chemical               | BA-9530-33 / Hydrochloric<br>Acid, Instra-Analyzed<br>(cs/6x2.5L)   | 22G2862015 | 08/17/2025         | 02/18/2025 /<br>Sagar      | 01/15/2025 /<br>Sagar          | M6151             |
| 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. | J3818-5 / SODIUM<br>PHOSPHATE,<br>MONOBAS/HYD, CRYS,<br>ACS, 2.5 KG | 0000225799 | 12/03/2025         | 04/05/2021 /<br>Alexander  | 02/10/2020 /<br>apatel         | W2668             |
| 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. | J4296-1 / ZINC<br>ACETATE,DIHYD,CRYS,AC<br>S,500G                   | 383058     | 07/05/2027         | 07/05/2022 /<br>ketankumar | 07/05/2022 /<br>ketankumar     | W2926             |
| Supplier                       | ItemCode / ItemName   | Lot #      | Expiration<br>Date | Date Opened /<br>Opened By | Received Date /<br>Received By | Chemtech<br>Lot # |
| SIGMA ALDRICH                  | 270970-1L / Pyridine 1L   | SHBQ2113   | 04/03/2028         | 04/03/2023 /<br>lwona      | 04/03/2023 /<br>lwona          | W3019             |
| 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. | AL69870-8 / SODIUM<br>THIOSULFATE,0.025N,4LIT<br>RE                 | 4403S13    | 09/30/2025         | 04/22/2024 /<br>Iwona      | 04/22/2024 /<br>Iwona          | W3105             |



| Supplier                       | ItemCode / ItemName                           | Lot #               | Expiration<br>Date | Date Opened /<br>Opened By | Received Date /<br>Received By | Chemtech<br>Lot # |
|--------------------------------|---|---------------------|--------------------|----------------------------|--------------------------------|-------------------|
| Seidler Chemical               | DIW / DI Water                                | Daily Lab-Certified | 07/03/2029         | 07/03/2024 /<br>Iwona      | 07/03/2024 /<br>Iwona          | W3112             |
| 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. | PC19510-7 / Sodium<br>Hydroxide Pellets 12 Kg | 23B1556310          | 12/31/2025         | 07/08/2024 /<br>Iwona      | 07/08/2024 /<br>Iwona          | W3113             |
| 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. | JTE494-6 /<br>CHLORAMINE-T BAKER<br>250GM     | 10239484            | 09/09/2029         | 09/09/2024 /<br>Iwona      | 09/09/2024 /<br>Iwona          | W3139             |
| 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. | AL70850-8 / Starch<br>Solution, 4L            | 4408P62             | 08/31/2026         | 10/16/2024 /<br>Iwona      | 10/16/2024 /<br>Iwona          | W3149             |
| Supplier                       | ItemCode / ItemName                           | Lot #               | Expiration<br>Date | Date Opened /<br>Opened By | Received Date /                | Chemtech<br>Lot # |
| PCI Scientific<br>Supply, Inc. | AL13850-1 / Buffer<br>Solution, PH2 (500ml)   | 2411E26             | 10/31/2026         | 12/09/2024 /<br>lwona      | 12/09/2024 /<br>Iwona          | W3161             |
| Supplier                       | ItemCode / ItemName                           | Lot #               | Expiration<br>Date | Date Opened /<br>Opened By | Received Date /                | Chemtech<br>Lot # |
| PCI Scientific Supply, Inc.    | AL14055-3 / PH 4<br>BUFFER SOLUTION           | 2411A93             | 10/30/2026         | 04/01/2025 /<br>JIGNESH    | 01/27/2025 /<br>jignesh        | 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<br>475ML | 2410F80    | 03/31/2026         | 04/01/2025 /<br>JIGNESH    | 03/13/2025 /<br>jignesh        | W3191             |
| Supplier                       | ItemCode / ItemName                           | Lot #      | Expiration<br>Date | Date Opened /<br>Opened By | Received Date /<br>Received By | Chemtech<br>Lot # |
| RICCA<br>CHEMICAL<br>COMPANY   | 1615-16 / pH 12.00 Buffer                     | 2504F20    | 09/30/2026         | 04/11/2025 /<br>Iwona      | 04/11/2025 /<br>Iwona          | W3200             |
| 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. | EM-BX0035-3 / Barbituric<br>Acid, 100 gms     | WXBF3271V  | 05/16/2029         | 04/21/2025 /<br>lwona      | 04/21/2025 /<br>Iwona          | W3203             |
| Supplier                       | ItemCode / ItemName                           | Lot #      | Expiration<br>Date | Date Opened /<br>Opened By | Received Date /                | Chemtech<br>Lot # |
| PCI Scientific<br>Supply, Inc. | AL35830-4 / IODINE<br>SOLUTION .025N 1L       | MK25A21527 | 01/20/2029         | 05/21/2025 /<br>lwona      | 05/21/2025 /<br>Iwona          | W3213             |
| 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. | RC2543-4 / CYANIDE<br>STD 1000PPM 4OZ         | 1505H73    | 11/30/2025         | 05/21/2025 /<br>Iwona      | 05/21/2025 /<br>Iwona          | W3214             |
| Cumpliar                       | ItemCode / ItemName                           | Lot #      | Expiration<br>Date | Date Opened /<br>Opened By | Received Date /<br>Received By | Chemtech<br>Lot # |
| Supplier                       |   |            |                    | •                          | •                              |                   |



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| 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. | EMD-FX0410-5 /<br>FORMALDEHYDE<br>SOLUTION 450ML | MKCW7614 | 12/31/2026         | 06/26/2025 /<br>Iwona      | 06/26/2025 /<br>Iwona          | W3220             |

| 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. | LC135457 / Cyanide<br>Standard, 1000 PPM,<br>Second Source | 45060288 | 12/24/2025         | 07/07/2025 /<br>Iwona      | 07/07/2025 /<br>Iwona          | W3224             |

# W3019 lec 4/3/23

3050 Spruce Street, Saint Louis, MO 63103, USA

Website: www.sigmaaldrich.com Email USA: techserv@sial.com Outside USA: eurtechserv@sial.com

Product Name:

# **Certificate of Analysis**

Pyridine - anhydrous, 99.8%

**Product Number:** 

270970

**Batch Number:** 

SHBQ2113

Brand:

SIAL

CAS Number:

110-86-1

MDL Number:

MFCD00011732

Formula:

C5H5N

Formula Weight:

79.10 g/mol

Quality Release Date:

15 DEC 2022

| L |   |
|---|---|
|   | N |

| Test                    | Specification         | Result     |
|-------------------------|-----------------------|------------|
| Appearance (Color)      | Colorless             | Colorless  |
| Appearance (Form)       | Liquid                | Liquid     |
| Infrared Spectrum       | Conforms to Structure | Conforms   |
| Purity (GC)             | > 99.75 %             | 99.99 %    |
| Water (by Karl Fischer) | _<br>< 0.003 %        | 0.002 %    |
| Residue on Evaporation  | _<br>< 0.0005 %       | < 0.0001 % |

Larry Coers, Director Quality Control

Sheboygan Falls, WI US

Sigma-Aldrich warrants, that at the time of the quality release or subsequent retest date this product conformed to the information contained in this publication. The current Specification sheet may be available at Sigma-Aldrich.com. For further inquiries, please contact Technical Service. Purchaser must determine the suitability of the product for its particular use. See reverse side of invoice or packing slip for additional terms and conditions of sale.



Hydrochloric Acid, 36.5-38.0% BAKER INSTRA-ANALYZED® Reagent For Trace Metal Analysis





M6151

R-> 1/15/25

Material No.: 9530-33

Batch No.: 22G2862015 Manufactured Date: 2022-06-15

Retest Date: 2027-06-14

Revision No.: 0

# Certificate of Analysis

| Test                                      | Specification         | Result      |
|---|-----------------------|-------------|
| ACS - Assay (as HCI) (by acid-base titrn) | 36.5 - 38.0 %         |             |
| ACS - Color (APHA)                        | 50.5 - 36.0 %<br>≤ 10 | 37.9 %      |
| ACS - Residue after Ignition              | ≤ 3 ppm               | 5           |
| ACS - Specific Gravity at 60°/60°F        |                       | < 1 ppm     |
| ACS – Bromide (Br)                        | 1.185 - 1.192         | 1.191       |
| ACS - Extractable Organic Substances      | ≤ 0.005 %             | < 0.005 %   |
| ACS - Free Chlorine (as Cl2)              | ≤ 5 ppm               | < 1 ppm     |
| Phosphate (PO <sub>4</sub> )              | ≤ 0.5 ppm             | < 0.5 ppm   |
| Sulfate (SO <sub>4</sub> )                | ≤ 0.05 ppm            | < 0.03 ppm  |
| Sulfite (SO₃)                             | ≤ 0.5 ppm             | < 0.3 ppm   |
| Ammonium (NH <sub>4</sub> )               | ≤ 0.8 ppm             | 0.3 ppm     |
| Trace Impurities - Arsenic (As)           | ≤ 3 ppm               | < 1 ppm     |
| Trace Impurities - Aluminum (AI)          | ≤ 0.010 ppm           | < 0.003 ppm |
| Arsenic and Antimony (as As)              | ≤ 10.0 ppb            | 1.3 ppb     |
| Trace Impurities - Barium (Ba)            | ≤ 5.0 ppb             | < 3.0 ppb   |
| Trace Impurities - Beryllium (Be)         | ≤ 1.0 ppb             | 0.2 ppb     |
| Trace Impurities - Bismuth (Bi)           | ≤ 1.0 ppb             | < 0.2 ppb   |
| Trace Impurities – Boron (B)              | ≤ 10.0 ppb            | < 1.0 ppb   |
| Trace Impurities - Cadmium (Cd)           | ≤ 20.0 ppb            | < 5.0 ppb   |
| Trace Impurities - Calcium (Ca)           | ≤ 1.0 ppb             | < 0.3 ppb   |
|   | ≤ 50.0 ppb            | 163.0 ppb   |
| Trace Impurities - Chromium (Cr)          | ≤ 1.0 ppb             | 0.7 ppb     |
| Trace Impurities - Cobalt (Co)            | ≤ 1.0 ppb             | < 0.3 ppb   |
| Trace Impurities - Copper (Cu)            | ≤ 1.0 ppb             | < 0.1 ppb   |
| Trace Impurities – Gallium (Ga)           | ≤ 1.0 ppb             | < 0.2 ppb   |
| Frace Impurities – Germanium (Ge)         | ≤ 3.0 ppb             | < 2.0 ppb   |
| Frace Impurities – Gold (Au)              | ≤ 4.0 ppb             | 0.6 ppb     |
| Heavy Metals (as Pb)                      | ≤ 100 ppb             | < 50 ppb    |
| Frace Impurities – Iron (Fe)              | ≤ 15 ppb              | 6 ppb       |

>>> Continued on page 2 >>>

Hydrochloric Acid, 36.5-38.0% BAKER INSTRA-ANALYZED® Reagent For Trace Metal Analysis





Material No.: 9530-33 Batch No.: 22G2862015

| Test   | Specification | Result     |
|--|---------------|------------|
| Trace Impurities – Lead (Pb)                           | ≤ 1.0 ppb     | < 0.5 ppb  |
| Trace Impurities - Lithium (Li)                        | ≤ 1.0 ppb     | < 0.2 ppb  |
| Trace Impurities – Magnesium (Mg)                      | ≤ 10.0 ppb    | 2.9 ppb    |
| Trace Impurities - Manganese (Mn)                      | ≤ 1.0 ppb     | < 0.4 ppb  |
| Trace Impurities – Mercury (Hg)                        | ≤ 0.5 ppb     | 0.1 ppb    |
| Trace Impurities – Molybdenum (Mo)                     | ≤ 10.0 ppb    | < 3.0 ppb  |
| Trace Impurities - Nickel (Ni)                         | ≤ 4.0 ppb     | < 0.3 ppb  |
| Trace Impurities - Niobium (Nb)                        | ≤ 1.0 ppb     | 0.8 ppb    |
| Trace Impurities - Potassium (K)                       | ≤ 9.0 ppb     | < 2.0 ppb  |
| Trace Impurities - Selenium (Se), For Information Only |               | < 1.0 ppb  |
| Trace Impurities - Silicon (Si)                        | ≤ 100.0 ppb   | < 10.0 ppb |
| Trace Impurities - Silver (Ag)                         | ≤ 1.0 ppb     | 0.5 ppb    |
| Trace Impurities – Sodium (Na)                         | ≤ 100.0 ppb   | 2.3 ppb    |
| Trace Impurities – Strontium (Sr)                      | ≤ 1.0 ppb     | < 0.2 ppb  |
| Trace Impurities – Tantalum (Ta)                       | ≤ 1.0 ppb     | 1.6 ppb    |
| Trace Impurities – Thallium (TI)                       | ≤ 5.0 ppb     | < 2.0 ppb  |
| Trace Impurities – Tin (Sn)                            | ≤ 5.0 ppb     | 4.0 ppb    |
| Trace Impurities – Titanium (Ti)                       | ≤ 1.0 ppb     | 1.5 ppb    |
| Trace Impurities – Vanadium (V)                        | ≤ 1.0 ppb     | < 0.2 ppb  |
| Trace Impurities – Zinc (Zn)                           | ≤ 5.0 ppb     | 0.8 ppb    |
| Frace Impurities – Zirconium (Zr)                      | ≤ 1.0 ppb     | 0.3 ppb    |

Hydrochloric Acid, 36.5-38.0% BAKER INSTRA-ANALYZED® Reagent For Trace Metal Analysis





Material No.: 9530-33 Batch No.: 22G2862015

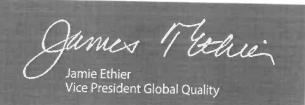
Test

Specification

Result

For Laboratory, Research, or Manufacturing Use Product Information (not specifications): Appearance (clear, fuming liquid) Meets ACS Specifications Storage Condition: Store below 25 °C.

Country of Origin: USA Packaging Site: Phillipsburg Mfg Ctr & DC



Sodium Phosphate, Monobasic, Monohydrate, Crystal BAKER ANALYZED® A.C.S. Reagent **C**Vavantor™ J.T.Baker

(sodium dihydrogen phosphate, monohydrate)

Material No.: 3818-05 Batch No.: 0000225799

Manufactured Date: 2018/12/05 Retest Date: 2025/12/03

Revision No: 1

# Certificate of Analysis

Meets ACS Reagent Chemical Requirements,

| Test                             | Specification  | Result  |
|----------------------------------|----------------|---------|
| Assay (NaH2PO4 · H2O)            | 98.0 - 102.0 % | 99.5    |
| pH of 5% Solution at 25°C        | 4.1 - 4.5      | 4.3     |
| Insoluble Matter                 | <= 0.01 %      | < 0.01  |
| Chloride (CI)                    | <= 5 ppm       | < 5     |
| ACS - Sulfate (SO <sub>4</sub> ) | <= 0.003 %     | < 0.003 |
| Calcium (Ca)                     | <= 0.005 %     | < 0.005 |
| Potassium (K)                    | <= 0.01 %      | < 0.01  |
| Heavy Metals (as Pb)             | <= 0.001 %     | < 0.001 |
| Trace Impurities – Iron (Fe)     | <= 0.001 %     | < 0.001 |

For Laboratory, Research or Manufacturing Use Meets Reagent Specifications for testing USP/NF monographs

Country of Origin: IN

Packaging Site: Paris Mfg Ctr & DC



3050 Spruce Street, Saint Louis, MO 63103, USA

Website: www.sigmaaldrich.com

Email USA:

techserv@sial.com

Outside USA: eurtechserv@sial.com 0 2926 0 715/22 peleired 0 715/22

Product Name:

Certificate of Analysis

Zinc acetate dihydrate - ACS reagent, ≥98%

**Product Number:** 

383058

Batch Number:

MKCQ9159

Brand:

SIGALD

CAS Number:

MDL Number:

5970-45-6

MFCD00066961

Formula:

C4H6O4Zn · 2H2O

Formula Weight:

219.51 g/mol

Quality Release Date:

06 JAN 2022

H<sub>3</sub>C O Zn<sup>2</sup>· 2H<sub>2</sub>O

| Test                   | Specification                 | Result             |
|------------------------|-------------------------------|--------------------|
| Appearance (Color)     | White                         | White              |
| Appearance (Form)      | Powder or Crystal or Chunk(s) | Powder             |
| Infrared Spectrum      | Conforms to Structure         | Conforms           |
| Insoluble Matter       | < 0.005 %                     | 0.003 %            |
| Calcium (Ca)           | < 0.005 %                     | 0.003 %            |
| Chloride (CI)          | < 5 ppm                       | < 5 ppm            |
| Iron (Fe)              | < 5 ppm                       | < 5 ppm            |
| Potassium (K)          | < 0.01 %                      | 0.00 %             |
| Magnesium (Mg)         | < 0.005 %                     | 0.003 %            |
| Sodium (Na)            | < 0.05 %                      | 0.03 %             |
| Lead (Pb)              | < 0.002 %                     | < 0.001 %          |
| рН                     | 6.0 - 7.0                     | 6.1                |
| Sulfate (SO4)          | < 0.005 %                     | < 0.005 %          |
| Complexometric EDTA    | 98.0 - 101.0 %                | 100.3 %            |
| Meets ACS Requirements | Meets Requirements            | Meets Requirements |

Larry Coers, Director Quality Control Milwaukee, WI US

Sigma-Aldrich warrants, that at the time of the quality release or subsequent retest date this product conformed to the information contained in this publication. The current Specification sheet may be available at Sigma-Aldrich.com. For further inquiries, please contact Technical Service. Purchaser must determine the suitability of the product for its particular use. See reverse side of invoice or packing slip for additional terms and conditions of sale.



# RICCA CHEMICAL COMPANY

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customerservice@riccachemical.com

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 | II II Ta' .     |  |
| 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)                           |

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

faul Drandon

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

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

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# Certificate of Analysis

Sodium Thiosulfate, 0.0250 Normal (N/40)

Lot Number: 4403S13 Product Number: 7900

Manufacture Date: MAR 29, 2024

Expiration Date: SEP 2025

This product is specially formulated to increase its stability. A preservative is added to prevent bacterial contamination. However, all Sodium Thiosulfate solutions are subject to slow chemical deterioration and should be restandardized periodically.

| Name                            | CAS#        | Grade           |
|---------------------------------|-------------|-----------------|
| Water                           | 7732-18-5   | ACS/ASTM/USP/EP |
| Sodium Thiosulfate Pentahydrate | 10102-17-7  | ACS             |
| Organic Preservative            | Proprietary |                 |
| Sodium Carbonate                | 497-19-8    | ACS             |

| Test                                | Specification   | Result            | NIST SRM# |
|-------------------------------------|---|-------------------|-----------|
| Appearance                          | Colorless liquid  | Passed            |           |
| Assay (vs. Potassium Iodate/Starch) | $0.02499 \text{-} 0.02501 \text{ N} \text{ at } 20^{\circ}\text{C}$ | 0.02501 N at 20°C | 136       |

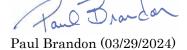
| Specification                                  | Reference           |
|--|---------------------|
| Standard Sodium Thiosulfate Solution, 0.0250 N | APHA (4500-S2- F)   |
| Standard Sodium Thiosulfate Titrant            | APHA (4500-O D)     |
| Standard Sodium Thiosulfate Titrant            | APHA (4500-O E)     |
| Standard Sodium Thiosulfate Titrant            | APHA (4500-O F)     |
| Standard Sodium Thiosulfate Titrant, 0.025 N   | APHA (4500-Cl B)    |
| Standard Sodium Thiosulfate Titrant            | APHA (4500-O C)     |
| Standard Sodium Thiosulfate Titrant, 0.025 M   | APHA (5530 C)       |
| Standard Sodium Thiosulfate Solution (0.025 N) | EPA (SW-846) (9031) |
| Standard Sodium Thiosulfate solution (0.025 N) | EPA (SW-846) (9034) |

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) |
|-------------|---------------------|---------------------------------|
| 7900-1      | 4 L natural poly    | 18 months                       |
| 7900-16     | 500 mL natural poly | 18 months                       |
| 7900-1CT    | 4 L Cubitainer®     | 18 months                       |
| 7900-32     | 1 L natural poly    | 18 months                       |

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

Version: 1.3 Lot Number: 4403S13 Product Number: 7900 Page 1 of 2



Production Manager

This document is designed to comply with ISO Guide 31 "Reference Materials  $^{\rm --}$  Contents of Certificates and Labels."

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Version: 1.3 Lot Number: 4403S13 Product Number: 7900 Page 2 of 2



# Certificate of Analysis

12/14/2022

12/31/2025

# **Sodium Hydroxide (Pellets)**

Material: 0583

Grade: ACS GRADE Batch Number: 23B1556310

Chemical Formula: NaOH
Molecular Weight: 40

CAS #: 1310-73-2

Appearance: Storage: Room Temperature

Pellets

| TEST               | SPECIFICATION | ANALYSIS | DISPOSITION |
|--------------------|---------------|----------|-------------|
| Calcium            | <= 0.005 %    | <0.005 % | PASS        |
| Chloride           | <= 0.005 %    | 0.002 %  | PASS        |
| Heavy Metals       | <= 0.002 %    | <0.002 % | PASS        |
| Iron               | <= 0.001 %    | <0.001 % | PASS        |
| Magnesium          | <= 0.002 %    | <0.002 % | PASS        |
| Mercury            | <= 0.1 ppm    | <0.1 ppm | PASS        |
| Nickel             | <= 0.001 %    | <0.001 % | PASS        |
| Nitrogen Compounds | <= 0.001 %    | <0.001 % | PASS        |
| Phosphate          | <= 0.001 %    | <0.001 % | PASS        |
| Potassium          | <= 0.02 %     | <0.02 %  | PASS        |
| Purity             | >= 97.0 %     | 99.2 %   | PASS        |
| Sodium Carbonate   | <= 1.0 %      | 0.5 %    | PASS        |
| Sulfate            | <= 0.003 %    | <0.003 % | PASS        |

Manufacture Date:

**Expiration Date:** 

Internal ID #: 710

#### Signature Additional Information

We certify that this batch conforms to the specifications listed.

This document has been electronically produced and is valid without a signature.

Leona Edwardson, Quality Control Sr. Manager - Solon VWR Chemicals, LLC.

28600 Fountain Parkway, Solon OH 44139 USA

Analysis may have been rounded to significant digits in specification limits.

Product meets analytical specifications of the grades listed.



# Certificate of Analysis

12/14/2022

12/31/2025

Room Temperature

Manufacture Date:

**Expiration Date:** 

Storage:

# **Sodium Hydroxide (Pellets)**

Material: 0583

Grade: ACS GRADE Batch Number: 23B1556310

Chemical Formula: NaOH Molecular Weight: 40

CAS #: 1310-73-2

Appearance:

**Pellets** 

Spec Set: 0583ACS

Internal ID #: 710

Signature Additional Information

We certify that this batch conforms to the specifications listed.

This document has been electronically produced and is valid without a signature.

Leona Edwardson, Quality Control Sr. Manager - Solon VWR Chemicals, LLC. 28600 Fountain Parkway, Solon OH 44139 USA Analysis may have been rounded to significant digits in specification limits.

Product meets analytical specifications of the grades listed.



# Certificate of Analysis

#### W3139 Received on 9/9/24 by IZ

Product No.: A12044

Product: Chloramine-T trihydrate, 98%

Lot No.: 10239484

Appearance: White powder Melting Point: 166°C(dec)
Assay (Iodometric titration): 100.5% Identification (FTIR): Conforms

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Products are processed under ISO 9001:2015 quality management systems and samples are tested for conformance to the noted specifications. Certain data may have been supplied by third parties. We disclaim the implied warranties of merchantability and fitness for a particular purpose, and the accuracy of third party data or information associated with the product. Products are for research and development use only. Products are not for direct administration to humans or animals. It is the responsibility of the final formulator or end user to determine suitability, and to qualify and/or validate each product for its intended use.

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# Certificate of Analysis

Starch Indicator, 0.5% (w/v), Mercury Free, for Iodometric Titrations

Lot Number: 4408P62 Product Number: 8000 Manufacture Date: AUG 28, 2024

Expiration Date: AUG 2026

This product is Mercury-free.

| Name            | CAS#      | Grade           |  |
|-----------------|-----------|-----------------|--|
| Water           | 7732-18-5 | ACS/ASTM/USP/EP |  |
| Starch, soluble | 9005-84-9 | ACS             |  |
| Salicylic Acid  | 69-72-7   | ACS             |  |

| Test                | Specification                    | Result |
|---------------------|----------------------------------|--------|
| Appearance          | White translucent liquid         | Passed |
| Suitability for Use | Colorless (Iodine absent) - Blue | Passed |
|                     | (Iodine present)                 |        |

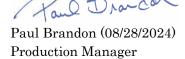
| Specification             | Reference           |
|---------------------------|---------------------|
| Starch Solution           | APHA (4500-S2- F)   |
| Starch Indicator Solution | APHA (4500-Cl B)    |
| Starch Indicator          | APHA (4500-SO32- B) |
| Starch indicator solution | APHA (2350 B)       |
| Starch indicator solution | APHA (2350 E)       |
| Starch Solution           | APHA (510 B)        |
| Starch Solution           | APHA (5530 C)       |
| Starch Indicator          | APHA (4500-C1 C)    |
| Starch Indicator          | EPA (345.1)         |

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) |
|-------------|---------------------|---------------------------------|
| 8000-1      | 4 L natural poly    | 24 months                       |
| 8000-16     | 500 mL natural poly | 24 months                       |
| 8000-32     | 1 L natural poly    | 24 months                       |

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

Version: 1.3 Lot Number: 4408P62 Product Number: 8000 Page 1 of 2



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Version: 1.3 Lot Number: 4408P62 Product Number: 8000 Page 2 of 2

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# Certificate of Analysis

Buffer, Reference Standard, pH  $2.00 \pm 0.01$  at 25°C

Lot Number: 2411E26 Product Number: 1493

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.

25 30 35 40 45 50 1.93 1.98 1.98 2.00 2.01 2.03 2.03 2.04 2.04 pН

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

|                                       | *                |             |                         |
|---------------------------------------|------------------|-------------|-------------------------|
| 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 |

Specification

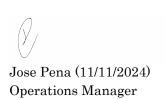
Result

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)

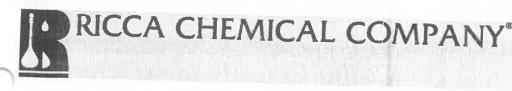
Version: 1.3 Lot Number: 2411E26 Product Number: 1493 Page 1 of 2



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

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Version: 1.3 Lot Number: 2411E26 Product Number: 1493 Page 2 of 2



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customerservice@riccachemical.com

# Certificate of Analysis

93178

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

Lot Number: 2411A93

Product Number: 1501

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  $\pm 0.01$  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 45 pH 50 4.00 4.00 4.00 4.00 4.004.00 4.01 4.024.03 4.04 4.06

| Name                                  | CAS#            | Grade                | A DESCRIPTION OF THE PERSON  |
|---------------------------------------|-----------------|----------------------|--|
| Water                                 | 7732-18-5       | ACS/ASTM/USP/        | EP   |
| Potassium Acid Phthalate              | 877-24-7        | Buffer               |  |
| Preservative Red Dye                  | Proprietary     | Commercial           |  |
| Red Dye                               | Proprietary     | Purified             | THE STATE OF THE S |
| Test                                  | Specification   | Result               |  |
| Appearance                            | Red liquid      | Passed               | *Not a partiful 1  |
| l'est                                 | Certified Value |                      | *Not a certified val   |
| pH at 25°C (Method: SQCP027, SQCP033) | 4.008           | Uncertainty          | NIST SRM#  |
| Specification                         | 4.008           | 0.02                 | 185i, 186-I-g, 186-II-g  |
| Specification                         | Day             | THE PARTY ASSESSMENT |  |

| Specification            |                               |
|--------------------------|-------------------------------|
| Commonaid D. CC. G. L.   | Reference                     |
| Ruffer R                 | ASTM (D 1293 B) ASTM (D 5464) |
| Buffer B                 | ASTM (D 5464) ASTM (D 5128)   |
| DH measurements were and | ASTM (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 | CO. Yew to day                  |
|---------------------------|---------------------|---------------------------------|
| 1501-16                   |                     | Shelf Life (Unopened Container) |
| 1501-2.5                  | 500 mL natural poly | 24 months                       |
| 1501-5                    | 10 L Cubitainer®    | 24 months                       |
| Recommended Storage: 15°C | 20 L Cubitainer®    | 24 months                       |



# RICCA CHEMICAL COMPANY 33191

1841 Broad Street Pocomoke City, MD 21851 http://www.riccachemical.com

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Certificate of Analysis

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

Lot Number: 2410F80

Product Number: 1601

Manufacture Date: OCT 09, 2024

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

20 25 30 pН 35 10.31 10.23 40 50 10.1710.11 10.05 10.00 9.95 9.91 9.87 9.81

| Name              | CAS#        |  |                       |
|-------------------|-------------|--|-----------------------|
| Water             |             | Grade  |                       |
| Sodium Carbonate  | 7732-18-5   | ACS/ASTM/USP/EP                                      |                       |
| Sodium Ricarhamat | 497-19-8    | ACS  |                       |
| Sodium Hydroxide  | 144-55-8    | ACS  |                       |
| Preservative      | 1310-73-2   | Reagent  |                       |
| Blue Dyo          | Proprietary |  |                       |
| Cest              | Proprietary | 11-12-2 11 AT 1-11-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1 | Service and a service |
| Γest              |             |  | El Mariano de         |

| Appearance   | Specification   | Result      |                         |
|--|-----------------|-------------|-------------------------|
| Test   | Blue liquid     | Passed      | *Not a certified value  |
|  | Certified Value | Uncertainty |                         |
| pH at 25°C (Method: SQCP027, SQCP033)  Specification | 10.009          | 0.00        | 186-I-g, 186-II-g, 191d |

| Specification  | 0.02            | 186-I-g, 186-II-g, 191d                |
|--|-----------------|--|
| Commoraial P. Co. C. J.  | Reference       |  |
| Buffer C   | ASTM (D 1293 B) |  |
| Buffer C   | ASTM (D 54CA)   | 0 × 20 1 0 30 010 1000                 |
| pH measurements were performed in our Pocomoke City, MD laboratory up  |                 |  |
| cortified the delivery was common and the cortified the co | adou ICO TEO    | ************************************** |

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

| Part Number         |                                      | and production and testing                |
|---------------------|--------------------------------------|---|
| 1601-1              | Size / Package Type                  | Shelf Life (Time Lo                       |
| 1601-16             | 4 L natural poly 500 mL natural poly | Shelf Life (Unopened Container) 18 months |
| 1601-16<br>1601-1CT | 500 mL natural poly 4 L Cubitainer®  | 18 months                                 |
| 2.0                 | 4 L Cubitainer® 10 L Cubitainer®     | 18 months                                 |
|                     | 1 L natural poly                     | 18 months                                 |
|                     | 1 L natural poly<br>20 L Cubitainer® | 18 months                                 |
| ersion: 1.3         | Lot Number: 2410F80                  | 18 months                                 |

Lot Number: 2410F80

Product Number: 1601

Page 1 of 2

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# Certificate of Analysis

Buffer, Reference Standard, pH 12.00 ± 0.01 at 25°C

Lot Number: 2504F20 Product Number: 1615

Manufacture Date: APR 08, 2025

Expiration Date: SEP 2026

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

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

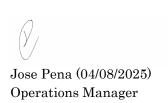
| Test                                  | Specification    | nesuit      |                         |
|---------------------------------------|------------------|-------------|-------------------------|
| Appearance                            | Colorless liquid | Passed      | *Not a certified value. |
| Test                                  | Certified Value  | Uncertainty | NIST SRM#               |
| pH at 25°C (Method: SQCP027, SQCP033) |                  |             | -                       |

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                       |
| 1615-5      | 20 L Cubitainer®    | 18 months                       |

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

Version: 1.3 Lot Number: 2504F20 Product Number: 1615 Page 1 of 2



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

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Version: 1.3 Lot Number: 2504F20 Product Number: 1615 Page 2 of 2



3050 Spruce Street, Saint Louis, MO 63103, USA

Website: www.sigmaaldrich.com
Email USA: techserv@sial.com
Outside USA: eurtechserv@sial.com

# Certificate of Analysis

Barbituric acid - ReagentPlus®, 99%

Product Name:

Product Number: 185698
Batch Number: WXBF3271V

Brand: SIAL
CAS Number: 67-52-7
Formula: C4H4N2O3
Formula Weight: 128,09 g/mol
Quality Release Date: 16 MAY 2024

|   |     | LΗ   |
|---|-----|------|
| 0 | `N^ | >>`0 |
|   | Ĥ   |      |

| Test                       | Specification         | Result   |  |
|----------------------------|-----------------------|----------|--|
| Appearance (Colour)        | White to Off-White    | White    |  |
| Appearance (Form)          | Pow der               | Pow der  |  |
| Infrared spectrum          | Conforms to Structure | Conforms |  |
| Purity (Titration by NaOH) | 98.5 - 101.5 %        | 100.4 %  |  |
| GC (area %)                | > 98 %                | 100 %    |  |
| VPCT                       | _                     |          |  |

S. 455

Kang Chen Quality Manager Wuxi , China CN

Sigma-Aldrich warrants, that at the time of the quality release or subsequent retest date this product conformed to the information contained in this publication. The current Specification sheet may be available at Sigma-Aldrich.com. For further inquiries, please contact Technical Service. Purchaser must determine the suitability of the product for its particular use. See reverse side of invoice or packing slip for additional terms and conditions of sale.

Version Number: 1 Page 1 of 1



# W3213 Deceived on 5/21/25 6y 12 Certificate of Analysis

W

Material

Material Description

Lot

Expires end of

Molecular mass

**Last Quality Control** 

Date of manufacture

Made in

Manufacturer Source Batch

BDHVBDH7206-1

**IODINE SOLUTION 0.025N** 

25A2461008

2029-Jan-20

0

2025-Jan-24

2025-Jan-21

United States

MK25A21527

Additional infomation

| Characteristics                 | Specifications   | Measured values |
|---------------------------------|--|-----------------|
| Prepared to formulation and St. | The second secon | Measured values |
| Prepared to formulation on file | Confirmed  | Confirmed       |
| Appearance                      | Passes Test  | Passes Test     |
| Normality, N                    |  | 1 43563 1636    |
| Normancy, IV                    | 0.0200 - 0.0300  | 0.0268          |

#### Signature

We certify that this batch conforms to the specifications listed above.

This document has been produced electronically and is valid without a signature.

Michelle Bales - Sr. Manager Quality Assurance Avantor Performance Materials, LLC

For Professional use in Laboratory or Manufacturing. Not for use as an Active Pharmaceutical Ingredient or Food or Animal Feed. Suitability and intended use of the product remains the responsibility of the user

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# Certificate of Analysis

Cyanide Standard, 1000 ppm CN

Lot Number: 1505H73 Product Number: 2543

Manufacture Date: MAY 08, 2025

Expiration Date: NOV 2025

This standard is prepared using accurate volumetric techniques from material that has been assayed against Silver Nitrate solution certified traceable to NIST Standard Reference Material 999. The certified value reported is the prepared value based upon the method of preparation of the material. The uncertainty in the prepared value is the combined uncertainty based on the stability of the assayed Potassium Cyanide, and the uncertainty in the mass and volume measurements.

Use 0.16% (w/v) (0.04 N) Sodium Hydroxide or 0.225% (w/v) (0.04 N) Potassium Hydroxide to make dilutions of this standard. Restandardize weekly if extreme accuracy is required.

| Name              | CAS#      | Grade              |
|-------------------|-----------|--------------------|
| Water             | 7732-18-5 | ACS/ASTM/USP/EP    |
| Potassium Cyanide | 151-50-8  | ACS                |
| Sodium Hydroxide  | 1310-73-2 | Reagent (from ACS) |

| Test         | Specification    | Result   |
|--------------|------------------|----------|
| Appearance   | Colorless liquid | Passed   |
| Cyanide (CN) | 995-1005 ppm     | 1000 ppm |

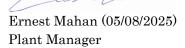
| Specification                                       | Reference              |
|---|------------------------|
| Stock Standard Cyanide Solution                     | APHA (4500-CN- F)      |
| Stock Cyanide Solution                              | APHA (4500-CN- E)      |
| Stock Cyanide Solution                              | APHA (4500-CN- K)      |
| Stock Cyanide Solution                              | APHA (4500-CN- H)      |
| Cyanide Reference Solution (1000 mg/L)              | EPA (SW-846) (7.3.3.2) |
| Cyanide Calibration Stock Solution (1,000 mg/L CN-) | EPA (SW-846) (9213)    |
| Stock Cyanide Solution                              | EPA (335.3)            |
| Stock Cyanide Solution                              | EPA (335.2)            |
| Cyanide Solution Stock                              | ASTM (D 4282)          |
| Simple Cyanide Solution, Stock (1.0 g/L CN)         | ASTM (D 4374)          |

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) |
|-------------|---------------------|---------------------------------|
| 2543-16     | 500 mL amber poly   | 6 months                        |
| 2543-32     | 1 L amber poly      | 6 months                        |
| 2543-4      | 120 mL amber poly   | 6 months                        |

Recommended Storage: 2°C - 8°C (36°F - 46°F)

Version: 1.3 Lot Number: 1505H73 Product Number: 2543 Page 1 of 2



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Version: 1.3 Lot Number: 1505H73 Product Number: 2543 Page 2 of 2

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# Certificate of Analysis

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

Lot Number: 2504D34 Product Number: 1551

Manufacture Date: APR 03, 2025

Expiration Date: MAR 2027

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.

15 20 30 35 45 50 рH 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 (from ACS) |

|   | Test       | Specification   | Result      |                         |
|---|------------|-----------------|-------------|-------------------------|
| • | Appearance | Yellow liquid   | Passed      | *Not a certified value. |
|   | Test       | Certified Value | Uncertainty | NIST SRM#               |
|   |            |                 |             |                         |

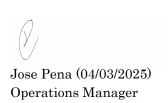
| Specification               | Reference       |
|-----------------------------|-----------------|
| Commercial Buffer Solutions | ASTM (D 1293 B) |
| Buffer A                    | ASTM (D 5464)   |
| Buffer A                    | ASTM (D 5128)   |

pH measurements were performed in our 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) |
|-------------|---------------------|---------------------------------|
| 1551-2.5    | 10 L Cubitainer®    | 24 months                       |
| 1551-20     | 20 x 20 mL pack     | 24 months                       |
| 1551-32     | 1 L natural poly    | 24 months                       |
| 1551-5      | 20 L Cubitainer®    | 24 months                       |

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

Version: 1.3 Lot Number: 2504D34 Product Number: 1551 Page 1 of 2



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

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Version: 1.3 Lot Number: 2504D34 Product Number: 1551 Page 2 of 2

3050 Spruce Street, Saint Louis, MO 63103, USA

Website: www.sigmaaldrich.com
Email USA: techserv@sial.com
Outside USA: eurtechserv@sial.com

# **Certificate of Analysis**

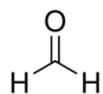
Formaldehyde solution - ACS reagent, 37 wt. % in H2O, contains 10-15% Methanol as stabilizer (to prevent

polymerization)

Product Name:

Product Number: 252549
Batch Number: MKCW7614
Brand: SIAL

MDL Number: MFCD00003274
Quality Release Date: 05 DEC 2024
Recommended Retest Date: DEC 2026



| Test                                | Specification             | Result     |
|-------------------------------------|---------------------------|------------|
| Appearance (Color)                  | Colorless                 | Colorless  |
| Appearance (Form)                   | Liquid                    | Liquid     |
| Infrared Spectrum                   | Conforms to Structure     | Conforms   |
| Titration by H2SO4                  | 36.5 - 38.0 %             | 36.6 %     |
| Residue on ignition (Ash)           | ≤ 0.005 %                 | 0.004 %    |
| Color Test                          | < 10 APHA                 | 5 APHA     |
| Chloride (CI)                       | ≤ 5 ppm                   | < 5 ppm    |
| Iron (Fe)                           | ≤ 5 ppm                   | < 1 ppm    |
| Heavy Metals                        | ≤ 5 ppm                   | 2 ppm      |
| by ICP-OES                          |                           |            |
| Sulfate (SO4)                       | < = 0.002%                | < = 0.002% |
| Titratable Acid (meq/g)             | ≤ 0.006                   | < 0.006    |
| Note                                | Confirmed                 | Conforms   |
| Stabilized with 10% to 15% Methanol |                           |            |
| Meets ACS Requirements              | Current ACS Specification | Conforms   |
| Recommended Retest Period           |                           |            |
| 2 Years                             |                           |            |

Larry Coers, Director Quality Control Milwaukee, WI US

Sigma-Aldrich warrants, that at the time of the quality release or subsequent retest date this product conformed to the information contained in this publication. The current Specification sheet may be available at Sigma-Aldrich.com. For further inquiries, please contact Technical Service. Purchaser must determine the suitability of the product for its particular use. See reverse side of invoice or packing slip for additional terms and conditions of sale.

Version Number: 2 Page 1 of 1



Jackson's Pointe Commerce Park- Building 1000 1010 Jackson's Pointe Court, Zelienople, PA 16063

### **Certificate of Analysis**

#### Cyanide Standard 1000 ppm (1ml = 1mg CN)

Product Code: LC13545 Manufacture Date: June 25, 2025

Lot Number: 45060288 Expiration Date: December 24, 2025

| Test                  | Specification      | Result         |  |
|-----------------------|--------------------|----------------|--|
| Appearance (clarity)  | clear solution     | clear solution |  |
| Appearance (color)    | colorless          | colorless      |  |
| Concentration (CN)    | 0.990 - 1.010mg/mL | 1.000mg/mL     |  |
| Concentration (CN)    | 990 - 1,010ppm     | 1,000ppm       |  |
| Traceable to NIST SRM | Report             | 999b           |  |

Intended Use - Product is intended for use in manufacturing procedures and laboratory procedures and protocols.

**Storage Information** - Unless noted on the product label, store the product under normal lab conditions in its tightly closed, original container. Do not pipet directly from the container or return unused portions to the container.

**Instructions for Handling and Use -** Please refer to the associated product label and Safety Data Sheet (SDS) for information regarding safety and handling of this product.

**Preparation -** All products are manufactured and tested according to established, documented procedures and methodology. Production documentation records manufacturing data, raw material traceability and testing history on a per lot basis. Balances, thermometers, and glassware are calibrated before first use and on a regular schedule with references traceable to NIST

\*The suffix of the product code may differ from what is on your product label. The suffix will designate the size and be associated with a numeric digit(s). Visit LabChem.com for more information\*

| Suffix | 1          | 2         | 3/35/36/36S                           | 4/4C | 5   | 6   | 7     | 8   | 9    | 20      | 44   | 200  | 246    | 486    |
|--------|------------|-----------|---------------------------------------|------|-----|-----|-------|-----|------|---------|------|------|--------|--------|
| Size   | 500mL or g | 1L or 1kg | 2.5L/2.5L Coated/6x2.5L/6x2.5L Coated | 4L   | 20L | 10L | 125mL | 25g | 100g | 20x20mL | 4x4L | 200L | 24x6mL | 48x6mL |





#### PERCENT SOLID

Supervisor: Iwona
Analyst: jignesh

**Date:** 8/5/2025

OVENTEMP IN Celsius(°C): 107

Time IN: 17:10

**In Date:** 08/04/2025

Weight Check 1.0g: 1.00 Weight Check 10g: 10.00

OvenID: M OVEN#1

OVENTEMP OUT Celsius (°C): 104

Time OUT: 08:14

Out Date: 08/05/2025

Weight Check 1.0g: 1.00 Weight Check 10g: 10.00

BalanceID: M SC-4

Thermometer ID: % SOLID-OVEN

qc:LB136687

| Lab ID   | Client SampleID   | Dish<br># | Dish<br>Wt(g)<br>(A) | Sample<br>Wt(g) | Dish +<br>Sample<br>Wt(g)(B) | Dish+Dry<br>Sample<br>Wt(g)(C) | %<br>Solid | Comments   |  |  |  |
|----------|-------------------|-----------|----------------------|-----------------|------------------------------|--------------------------------|------------|------------|--|--|--|
| Q2752-03 | PIPE-LINE-LIQUIDS | 1         | 1.00                 | 1.00            | 2.00                         | 2.00                           | 100.0      | oil sample |  |  |  |
| Q2757-01 | WASTE             | 2         | 1.14                 | 9.99            | 11.13                        | 9.28                           | 81.5       |            |  |  |  |
| Q2757-02 | VOC               | 3         | 1.13                 | 10.85           | 11.98                        | 9.96                           | 81.4       |            |  |  |  |
| Q2757-03 | 1                 | 4         | 1.19                 | 10.50           | 11.69                        | 9.83                           | 82.3       |            |  |  |  |
| Q2757-04 | 2                 | 5         | 1.18                 | 10.81           | 11.99                        | 10.1                           | 82.5       |            |  |  |  |
| Q2757-05 | 3                 | 6         | 1.18                 | 10.81           | 11.99                        | 9.98                           | 81.4       |            |  |  |  |
| Q2757-06 | 4                 | 7         | 1.13                 | 10.59           | 11.72                        | 9.66                           | 80.5       |            |  |  |  |
| Q2757-07 | 5                 | 8         | 1.13                 | 10.86           | 11.99                        | 9.95                           | 81.2       |            |  |  |  |
| Q2758-01 | WASTE             | 9         | 1.12                 | 10.57           | 11.69                        | 10.94                          | 92.9       |            |  |  |  |
| Q2759-01 | SOLID-DRUMS       | 10        | 1.15                 | 10.84           | 11.99                        | 5.75                           | 42.4       |            |  |  |  |
| Q2760-01 | NB-07-08042025    | 11        | 1.13                 | 10.76           | 11.89                        | 11.36                          | 95.1       |            |  |  |  |
| Q2760-02 | NB-07-08042025-E2 | 12        | 1.13                 | 10.37           | 11.5                         | 10.44                          | 89.8       |            |  |  |  |
| Q2763-01 | TP-2              | 13        | 1.16                 | 10.02           | 11.18                        | 9.36                           | 81.8       |            |  |  |  |
| Q2763-02 | TP-2 EPH          | 14        | 1.18                 | 10.12           | 11.3                         | 9.75                           | 84.7       |            |  |  |  |
| Q2763-03 | TP-2 VOC          | 15        | 1.18                 | 10.48           | 11.66                        | 9.45                           | 78.9       |            |  |  |  |

WorkList Name:

Sample

Q2752-03

Q2757-02 Q2757-03

Q2757-01

Q2757-05

Q2757-06

Q2757-07 Q2758-01

Q2757-04

Chemtech -SO Chemtech -SO 08/01/2025 Chemtech -SQ Chemtech -SO Chemtech -SO 08/01/2025 Chemtech -SO Chemtech -SO 08/01/2025 Chemtech -SO 08/01/2025 Chemtech -SO 08/04/2025 Chemtech -SO Date: 08-04-2025 07:38:11 Collect Date Method 08/01/2025 08/01/2025 08/01/2025 08/01/2025 08/01/2025 A 136687 Storage Location **D21 D31 D31 D31 D31 D31 D31 D21 D31** Customer PSEG03 PSEG03 SCIA01 SCIA01 SCIA01 SCIA01 SCIA01 SCIA01 SCIA01 SCIA01 Department: Wet-Chemistry WORKLIST(Hardcopy Internal Chain) Cool 4 deg C Preservative Percent Solids WorkList ID: 191066 Test Matrix Solid PIPE-LINE-LIQUIDS Customer Sample SOLID-DRUMS %1-080425 WASTE WASTE VOC

08/04/2025 Chemtech -SO 08/04/2025 Chemtech -SO 08/04/2025 Chemtech -SO 08/04/2025 Chemtech -SO 08/04/2025 Chemtech -SO

**D21** 

PSEG05

Cool 4 deg C

Percent Solids

Solid Solid Solid Solid Solid

NB-07-08042025-E2

TP-2

Q2763-01

Q2763-02

TP-2 VOC TP-2 EPH

Q2763-03

NB-07-08042025

Q2760-01 Q2760-02

Q2759-01

Percent Solids Percent Solids Percent Solids Percent Solids

Cool 4 deg C Cool 4 deg C Cool 4 deg C Cool 4 deg C

**D21** 

PSEG05 PSEG03 023

PSEG03 PSEG03 Date/Time (1804)15 Raw Sample Received by:

Raw Sample Relinquished by:

R3 C CZAL- Lado 14.20

Date/Time 08/04/13 151,10

Raw Sample Received by: 40 ( 100)

Raw Sample Relinquished by:



# SHIPPING DOCUMENTS

| WHITE CH                                   | BELINDUISHED BY  | RELINDUISHED BY DATE/TIME |           | DATE/TIMES  | SAMPLE CUSTODY              | 10.   | 9.   | 8 | 7. | 6. 4       | 5.  | 4. 2 | ω        | 2. VOC | 1. WASTE |                   | CHEMTECH PI    | TO BE APPROVED BY CHEMTECH STANDARD HARDCOPY TURNAROUND TIME IS 10 BUSINESS DAYS | EDD:                            | FAX (RUSH) | DATA TURNAROUND INFORMATION | PHONE: FAX:      | ATTENTION: | OITY: STATE:   | ADDRESS.   | Report to be sent to: | CLIENT INFORMATION  | CHAIN OF CUSTODY RECORD   |           |  |
|--|--|---------------------------|-----------|---|-----------------------------|-------|------|---|----|------------|-----|------|----------|--------|----------|-------------------|----------------|--|---------------------------------|------------|-----------------------------|------------------|------------|----------------|------------|-----------------------|---------------------|---|-----------|--|
| WHITE - CHEMIECH COPY FOR RETURN TO CLIENT | INE//S GRECEWED FOR LAB BY   | 1 2. 2.                   | サイトを      | IMESS RECOMPTION 15:3                               | JST BE DOCUMENTED BELC      | 1 /0. | MARK |   |    |            | 800 |      |          |        |          |                   | PROJECT SAMPLE | IME IS 10 BUSINESS DAYS G EDD FORMAT   | DAYS* CI Level 2 (Results + QC) | 10         |                             |                  |            | E: ZIP: F-MAII | PROJECT #: |                       |                     |   |           |  |
| VELLOW - CHEMTECH COPY                     | Page of CHEMTER  |                           | Comments: | 15 3 7 Conditions of battles or collers at receipt: | EACH TIME SAMPLES CHANGE P  |       | (P)  |   |    | The little |     | 7    | 100      |        |          | GRA DATE TIME     | AMPI<br>AMPI   | D Other  | 00                              | 0          | INFORMATION                 | DATA DELIVERARIE | EAY.       |                | LOCATION:  |                       | PROJECT INFORMATION | 284 Sheffield Street, Mountainside, NJ 07092<br>(908) 789-8900 Fax (908) 789-8922<br>www.chemtech.net |           |  |
| PINK - SAMPLER COPY                        | CHENTE CH Hand Dalwered CHENTECH: CH |                           |           | COMPLIANT D HON COMPLIANT D COOLER TEMP             | ROSSESSION INCLUDING COURIE |       |      |   | 8  |            |     | ×    | <b>3</b> | ×      | X        | 1 2 3 4 5 6 7 8 9 |                | 1 2 3 4 5 6 7 8 9  | 16                              |            |                             | ANALYSIS         | A CAN      | J. J. J.       | ESS:       | BILL TO:              | BILLING INFORMATION | Chemtech Project Number COC Number  | 2 Ciftons |  |
| ı  | Shipment Complete  |                           |           | 10 3 :Q'C   | R DELIVERY                  |       |      |   |    |            |     |      |          |        | 1        | C-H2SO4 F-OTHER   | A-HCI D-NaCH   | COMMENTS   |                                 |            |                             |                  |            | STATE: ZIP:    |            | PO#                   | MATION              | Jeway)  | WZ758     |  |



#### Laboratory Certification

| Certified By         | License No.      |
|----------------------|------------------|
| CAS EPA CLP Contract | 68HERH20D0011    |
| Connecticut          | PH-0830          |
| DOD ELAP (ANAB)      | L2219            |
| Maine                | 2024021          |
| Maryland             | 296              |
| New Hampshire        | 255424 Rev 1     |
| New Jersey           | 20012            |
| New York             | 11376            |
| Pennsylvania         | 68-00548         |
| Soil Permit          | 525-24-234-08441 |
| Texas                | T104704488       |

QA Control Code: A2070148



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

Fax: 908 789 8922

#### LOGIN REPORT/SAMPLE TRANSFER

Order ID: Q2758

SCIA01

Order Date: 8/1/2025 4:14:00 PM

Project Mgr:

Client Name: Sciacca General Contractors

Project Name: 89 E. Centre St, Nutley

Report Type: Results Only

Client Contact: Rosanne Scirica

Receive DateTime: 8/1/2025 12:00:00 AM

**EDD Type:** EXCEL NJCLEANUP

Invoice Name: Sciacca General Contractors

Purchase Order:

TIME

Hard Copy Date:

Invoice Contact: Rosanne Scirica

Date Signoff:

**CLIENT ID** 

MATRIX SAMPLE

**SAMPLE** TEST **TEST GROUP** 

**METHOD** 

FAX DATE

DUE **DATES** 

Q2758-01

LAB ID

WASTE

Solid 08/01/2025 00:00

DATE

VOC-TCLVOA-10

8260D

10 Bus. Days

Relinguished By:

Date / Time:

0140 NHO

Storage Area: VOA Refridgerator Room

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