

DATA PACKAGE GENERAL CHEMISTRY

PROJECT NAME : AE1-CTY 3.2.Z-PR-DOCK-DES-ODC - 60693795-1719206

AECOM

605 3rd Avenue

29th Floor

New York, NY - 10158

Phone No: 212-973-2900

ORDER ID : Q3434

ATTENTION : Rob Forstner



Laboratory Certification ID # 20012



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Cover Page

Order ID : Q3434

Project ID : AE1-CTY 3.2.Z-PR-DOCK-Des-ODC - 60693795-1719206

Client : AECOM

Lab Sample Number

Q3434-01
Q3434-02
Q3434-03

Client Sample Number

PR132-WC1-20251022
PR132-WC2-20251022
TB

I certify that the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the laboratory manager or his designee, as verified by the following signature.

Signature :

APPROVED

By Nimisha Pandya, QA/QC Supervisor at 10:01 am, Nov 05, 2025

Date: 11/3/2025

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012



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

CASE NARRATIVE

AECOM

Project Name: AE1-CTY 3.2.Z-PR-DOCK-Des-ODC - 60693795-1719206

Project # N/A

Order ID # Q3434

Test Name: Corrosivity,Flash Point,Ignitability,pH,Reactive Cyanide,Reactive Sulfide,TPH

A. Number of Samples and Date of Receipt:

1 Solid sample was received on 10/22/2025.

1 Water sample was received on 10/22/2025.

B. Parameters:

According to the Chain of Custody document, the following analyses were requested: Corrosivity,Flash Point,Ignitability,pH,Reactive Cyanide,Reactive Sulfide,TPH. This data package contains results for Corrosivity,Flash Point,Ignitability,pH,Reactive Cyanide,Reactive Sulfide,TPH.

C. Analytical Techniques:

The analysis of Flash Point was based on method 1010B, The analysis of Ignitability was based on method 1030, The analysis of TPH was based on method 1664A, The analysis of Reactive Cyanide was based on method 9012B, The analysis of Reactive Sulfide was based on method 9034, The analysis of pH was based on method 9040C, The analysis of Corrosivity was based on method 9045D.

D. QA/ QC Samples:

The Holding Times were met for all samples except for PR132-WC1-20251022 of Corrosivity and for PR132-WC2-20251022 of pH as samples were receive out of holding time.

The Blank Spike met requirements for all compounds.

The Duplicate analysis met criteria for all compounds.

The Blank analysis did not indicate the presence of lab contamination.

The Calibration met the requirements.

E. Additional Comments:

As per method 1664A, MS/MSD is required to be performed with the sample analysis. However, Lab did not receive sufficient volume to perform the MS/MSD therefore MS/MSD were not performed for this project.



I certify that the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. The laboratory manager or his designee, as verified by the following signature has authorized release of the data contained in this hard copy data package.

APPROVED

By Nimisha Pandya, QA/QC Supervisor at 10:02 am, Nov 05, 2025

Signature_____

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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	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
OR	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
H	Sample Analysis Out Of Hold Time

GENERAL CHEMISTRY CONFORMANCE/NON-CONFORMANCE SUMMARY

ORDER ID: Q3434

MATRIX: Soil/Water

METHOD: 1010B,1030,1664A,9012B,9034,9040C,9045D,

	NA	NO	YES
1. Blank Contamination - If yes, list compounds and concentrations in each blank:		✓	
2. Matrix Spike Duplicate Recoveries Met Criteria			✓
If not met, list those compounds and their recoveries which fall outside the acceptable range.			
The Blank Spike met requirements for all compounds.			
3. Sample Duplicate Analysis Met QC Criteria			✓
If not met, list those compounds and their recoveries which fall outside the acceptable range.			
4. Digestion Holding Time Met		✓	
If not met, list number of days exceeded for each sample:			
The Holding Times were met for all samples except for PR132-WC1-20251022 of Corrosivity and for PR132-WC2-20251022 of pH as samples were receive out of holding time.			

ADDITIONAL COMMENTS:

As per method 1664A, MS/MSD is required to be performed with the sample analysis. However, Lab did not receive sufficient volume to perform the MS/MSD therefore MS/MSD were not performed for this project.

APPROVED

By Nimisha Pandya, QA/QC Supervisor at 10:02 am, Nov 05, 2025

QA REVIEW

Date

APPENDIX A

QA REVIEW GENERAL DOCUMENTATION

Project #: Q3434

Completed

For thorough review, the report must have the following:

GENERAL:

Are all original paperwork present (chain of custody, record of communication,airbill, sample management lab chronicle, login page)

✓

Check chain-of-custody for proper relinquish/return of samples

✓

Is the chain of custody signed and complete

✓

Check internal chain-of-custody for proper relinquish/return of samples /sample extracts

✓

Collect information for each project id from server. Were all requirements followed

✓

COVER PAGE:

Do numbers of samples correspond to the number of samples in the Chain of Custody on login page

✓

Do lab numbers and client Ids on cover page agree with the Chain of Custody

✓

CHAIN OF CUSTODY:

Do requested analyses on Chain of Custody agree with form I results

✓

Do requested analyses on Chain of Custody agree with the log-in page

✓

Were the correct method log-in for analysis according to the Analytical Request and Chain of Custody

✓

Were the samples received within hold time

✓

Were any problems found with the samples at arrival recorded in the Sample Management Laboratory Chronicle

✓

ANALYTICAL:

Was method requirement followed?

✓

Was client requirement followed?

✓

Does the case narrative summarize all QC failure?

✓

All runlogs and manual integration are reviewed for requirements

✓

All manual calculations and /or hand notations verified

✓

QA Review Signature: SOHIL JODHANI

Date: 11/03/2025

LAB CHRONICLE

OrderID:	Q3434	OrderDate:	10/22/2025 1:40:00 PM
Client:	AECOM	Project:	AE1-CTY 3.2.Z-PR-DOCK-Des-ODC - 60693795-1719206
Contact:	Rob Forstner	Location:	D41,VOA Ref. #2 Soil,VOA Ref. #3 Water

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q3434-01	PR132-WC1-2025102 2	SOIL			10/22/25 10:18			10/22/25
			Corrosivity	9045D			10/22/25 15:44	
			Ignitability	1030			10/24/25 09:50	
			Reactive Cyanide	9012B		10/24/25	10/24/25 14:37	
			Reactive Sulfide	9034		10/24/25	10/24/25 13:33	
Q3434-02	PR132-WC2-2025102 2	Water			10/22/25 10:30			10/22/25
			Flash Point	1010B			10/23/25 09:30	
			pH	9040C			10/23/25 08:50	
			Reactive Cyanide	9012B		10/24/25	10/24/25 14:37	
			Reactive Sulfide	9034		10/24/25	10/24/25 13:23	
			TPH	1664A			10/27/25 10:30	



SAMPLE DATA

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Report of Analysis

Client: AECOM
Project: AE1-CTY 3.2.Z-PR-DOCK-Des-ODC - 60693795-1719206
Client Sample ID: PR132-WC1-20251022
Lab Sample ID: Q3434-01

Date Collected: 10/22/25 10:18
Date Received: 10/22/25
SDG No.: Q3434
Matrix: SOIL
% Solid: 57.9

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Corrosivity	8.62	H	1	0	0	pH		10/22/25 15:44	9045D
Ignitability	NO		1	0	0	oC		10/24/25 09:50	1030
Reactive Cyanide	0.049	U	1	0.0083	0.049	mg/Kg	10/24/25 12:15	10/24/25 14:37	9012B
Reactive Sulfide	3.17	J	1	0.20	10.0	mg/Kg	10/24/25 11:15	10/24/25 13:33	9034

Comments: pH result reported at temperature 20.1 °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

Report of Analysis

Client: AECOM
Project: AE1-CTY 3.2.Z-PR-DOCK-Des-ODC - 60693795-1719206
Client Sample ID: PR132-WC2-20251022
Lab Sample ID: Q3434-02

Date Collected: 10/22/25 10:30
Date Received: 10/22/25
SDG No.: Q3434
Matrix: Water
% Solid: 0

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Flash Point	>212		1	0	0	o F		10/23/25 09:30	1010B
pH	7.77	H	1	0	0	pH		10/23/25 08:50	9040C
Reactive Cyanide	0.0050	U	1	0.00096	0.0050	mg/L	10/24/25 12:15	10/24/25 14:37	9012B
Reactive Sulfide	1.00	U	1	0.43	1.00	mg/L	10/24/25 11:15	10/24/25 13:23	9034
TPH	3.40	J	1	0.29	5.00	mg/L		10/27/25 10:30	1664A

Comments: Other method reference for flash point : Pensky-Martens Closed Cup Flash Point ASTM D 93 - IP 34, pH result reported at temperature

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

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Initial and Continuing Calibration Verification

Client: AECOM

SDG No.: Q3434

Project: AE1-CTY 3.2.Z-PR-DOCK-Des-ODC - 60693795-1719206

RunNo.: LB137618

Analyte		Units	Result	True Value	% Recovery	Acceptance Window (%R)	Analysis Date
Sample ID:	ICV						
Corrosivity		pH	7.00	7	100	90-110	10/22/2025
Sample ID:	CCV1						
Corrosivity		pH	2.01	2.00	101	90-110	10/22/2025
Sample ID:	CCV2						
Corrosivity		pH	12.02	12.00	100	90-110	10/22/2025

Initial and Continuing Calibration Verification

Client: AECOM

SDG No.: Q3434

Project: AE1-CTY 3.2.Z-PR-DOCK-Des-ODC - 60693795-1719206

RunNo.: LB137621

Analyte	Units	Result	True Value	% Recovery	Acceptance Window (%R)	Analysis Date
Sample ID: ICV pH	pH	7.00	7	100	90-110	10/23/2025
Sample ID: CCV1 pH	pH	2.01	2.00	101	90-110	10/23/2025
Sample ID: CCV2 pH	pH	12.02	12.00	100	90-110	10/23/2025

Initial and Continuing Calibration Verification

Client: AECOM

SDG No.: Q3434

Project: AE1-CTY 3.2.Z-PR-DOCK-Des-ODC - 60693795-1719206

RunNo.: LB137627

Analyte	Units	Result	True Value	% Recovery	Acceptance Window (%R)	Analysis Date
Sample ID: ICV						
Flash Point	o F	82.7	81	102	78-84	10/23/2025

Initial and Continuing Calibration Verification

Client: AECOM

SDG No.: Q3434

Project: AE1-CTY 3.2.Z-PR-DOCK-Des-ODC - 60693795-1719206

RunNo.: LB137639

Analyte	Units	Result	True Value	% Recovery	Acceptance Window (%R)	Analysis Date
Sample ID: ICV1 Reactive Cyanide	mg/L	0.096	0.099	97	85-115	10/24/2025
Sample ID: CCV1 Reactive Cyanide	mg/L	0.24	0.25	96	90-110	10/24/2025
Sample ID: CCV2 Reactive Cyanide	mg/L	0.24	0.25	96	90-110	10/24/2025
Sample ID: CCV3 Reactive Cyanide	mg/L	0.25	0.25	100	90-110	10/24/2025

Initial and Continuing Calibration Blank Summary

Client: AECOM

SDG No.: Q3434

Project: AE1-CTY 3.2.Z-PR-DOCK-Des-ODC - 60693795-1719206

RunNo.: LB137639

Analyte	Units	Result	Acceptance Limits	Conc Qual	MDL	RDL	Analysis Date
Sample ID: ICB1 Reactive Cyanide	mg/L	< 0.0025	0.0025	U	0.00096	0.005	10/24/2025
Sample ID: CCB1 Reactive Cyanide	mg/L	0.0017	0.0025	J	0.00096	0.005	10/24/2025
Sample ID: CCB2 Reactive Cyanide	mg/L	< 0.0025	0.0025	U	0.00096	0.005	10/24/2025
Sample ID: CCB3 Reactive Cyanide	mg/L	< 0.0025	0.0025	U	0.00096	0.005	10/24/2025

Preparation Blank Summary

Client: AECOM

SDG No.: Q3434

Project: AE1-CTY 3.2.Z-PR-DOCK-Des-ODC - 60693795-1719206

Analyte	Units	Result	Acceptance Limits	Conc Qual	MDL	RDL	Analysis Date
Sample ID: LB137651BL TPH	mg/L	< 2.5000	2.5000	U	0.29	5.0	10/27/2025
Sample ID: PB170241BL Reactive Cyanide	mg/Kg	< 0.0250	0.0250	U	0.0084	0.05	10/24/2025
Sample ID: PB170244BL Reactive Sulfide	mg/Kg	< 5.0000	5.0000	U	0.201	10	10/24/2025
Sample ID: PB170245BL Reactive Sulfide	mg/L	< 0.5000	0.5000	U	0.43	1	10/24/2025
Sample ID: PB170248BL Reactive Cyanide	mg/L	0.0014	0.0025	J	0.00096	0.005	10/24/2025

Duplicate Sample Summary

Client:	AECOM	SDG No.:	Q3434
Project:	AE1-CTY 3.2.Z-PR-DOCK-Des-ODC - 60693795-1719206	Sample ID:	LB137651BS
Client ID:	LB137651BSD	Percent Solids for Spike Sample:	0

Analyte	Units	Acceptance Limit	Sample Result	Conc. Qualifier	Duplicate Result	Conc. Qualifier	Dilution Factor	RPD/AD	Qual	Analysis Date
TPH	mg/L	+/-18	16.7		17.0		1	1.78		10/27/2025

Duplicate Sample Summary

Client:	AECOM	SDG No.:	Q3434
Project:	AE1-CTY 3.2.Z-PR-DOCK-Des-ODC - 60693795-1719206	Sample ID:	Q3427-01
Client ID:	TP-8DUP	Percent Solids for Spike Sample:	90.3

Analyte	Units	Acceptance Limit	Sample Result	Conc. Qualifier	Duplicate Result	Conc. Qualifier	Dilution Factor	RPD/AD	Qual	Analysis Date
Ignitability	oC	+/-20	NO		NO		1	0		10/24/2025

Duplicate Sample Summary

Client: AECOM	SDG No.: Q3434
Project: AE1-CTY 3.2.Z-PR-DOCK-Des-ODC - 60693795-1719206	Sample ID: Q3427-04
Client ID: TP-8DUP	Percent Solids for Spike Sample: 100

Analyte	Units	Acceptance Limit	Sample Result	Conc. Qualifier	Duplicate Result	Conc. Qualifier	Dilution Factor	RPD/AD	Qual	Analysis Date
Corrosivity	pH	+/-20	6.20		6.22		1	0.32		10/22/2025
Reactive Cyanide	mg/Kg	+/-20	0.0083	U	0.0083	U	1	0		10/24/2025

Duplicate Sample Summary

Client:	AECOM	SDG No.:	Q3434
Project:	AE1-CTY 3.2.Z-PR-DOCK-Des-ODC - 60693795-1719206	Sample ID:	Q3434-01
Client ID:	PR132-WC1-20251022DUP	Percent Solids for Spike Sample:	57.9

Analyte	Units	Acceptance Limit	Sample Result	Conc. Qualifier	Duplicate Result	Conc. Qualifier	Dilution Factor	RPD/AD	Qual	Analysis Date
Reactive Sulfide	mg/Kg	+/-20	3.17	J	3.17	J	1	0		10/24/2025

Duplicate Sample Summary

Client: AECOM	SDG No.: Q3434
Project: AE1-CTY 3.2.Z-PR-DOCK-Des-ODC - 60693795-1719206	Sample ID: Q3434-02
Client ID: PR132-WC2-20251022DUP	Percent Solids for Spike Sample: 0

Analyte	Units	Acceptance Limit	Sample Result	Conc. Qualifier	Duplicate Result	Conc. Qualifier	Dilution Factor	RPD/AD	Qual	Analysis Date
pH	pH	+/-20	7.77		7.79		1	0.26		10/23/2025
Flash Point	o F	+/-2	>212.0		>212.0		1	0		10/23/2025
Reactive Cyanide	mg/L	+/-20	0.00096	U	0.00096	U	1	0		10/24/2025
Reactive Sulfide	mg/L	+/-20	0.43	U	0.43	U	1	0		10/24/2025

Laboratory Control Sample Summary

Client:	AECOM	SDG No.:	Q3434
Project:	AE1-CTY 3.2.Z-PR-DOCK-Des-ODC - 60693795-1719206	Run No.:	LB137651

Analyte	Units	True Value	Result	Conc. Qualifier	% Recovery	Dilution Factor	Acceptance Limit %R	Analysis Date
Sample ID	LB137651BS							
TPH	mg/L	20.0	16.7		84	1	78-114	10/27/2025

Laboratory Control Sample Summary

Client:	AECOM	SDG No.:	Q3434
Project:	AE1-CTY 3.2.Z-PR-DOCK-Des-ODC - 60693795-1719206	Run No.:	LB137651

Analyte	Units	True Value	Result	Conc. Qualifier	% Recovery	Dilution Factor	Acceptance Limit %R	Analysis Date
Sample ID	LB137651BSD							
TPH	mg/L	20.0	17.0		85	1	78-114	10/27/2025



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Analytical Summary Report

Analysis Method: 9045D

Analyst By : jignesh

Parameter: Corrosivity

Supervisor Review By : Iwona

Run Number: LB137618

Slope : 98.6

BalanceID: WC SC-7

pH Meter ID : WC PH METER-1

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 (gm)	Volume (ml)	Temperature (°C)	Result (pH)	Anal Date	Anal Time
1	CAL1	1	Water	NA	NA	20.2	4.01	10/22/2025	15:10
2	CAL2	1	Water	NA	NA	20.2	7.01	10/22/2025	15:11
3	CAL3	1	Water	NA	NA	20.3	10.02	10/22/2025	15:15
4	ICV	1	Water	NA	NA	20.1	7.00	10/22/2025	15:20
5	CCV1	1	Water	NA	NA	20.2	2.01	10/22/2025	15:22
6	Q3427-04	1	Solid	20.02	20	20.8	6.20	10/22/2025	15:35
7	Q3427-04DUP	1	Solid	20.03	20	20.9	6.22	10/22/2025	15:37
8	Q3434-01	1	Solid	20.02	20	20.1	8.62	10/22/2025	15:44
9	CCV2	1	Water	NA	NA	20.2	12.02	10/22/2025	15:45

WORKLIST(Hardcopy Internal Chain)

9/13/25 17:18

WorkList Name : corrosivity q3427 WorkList ID : 192613 Department : Wet-Chemistry Date : 10-22-2025 12:38:42

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q3427-04	TP-8	Solid	Corrosivity	Cool 4 deg C	PSEG03	D41	10/21/2025	9045D
Q3434-01	PR132-WC1-20251022	Solid	Corrosivity	Cool 4 deg C	AECO02	D41	10/22/2025	9045D

Date/Time 10/22/25 15:00

Raw Sample Received by: SPC1

Raw Sample Relinquished by: SPC1

Date/Time 10/22/25 17:40

Raw Sample Received by: SPC1

Raw Sample Relinquished by: SPC1

Analytical Summary Report

Analysis Method: 9040C
Parameter: pH
Run Number: LB137621

Analyst By : jignesh
Supervisor Review By : Iwona
Slope : 98.4
pH Meter ID : WC PH METER-1

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 (gm)	Volume (ml)	Temperature (°C)	Result (pH)	Anal Date	Anal Time
1	CAL1	1	Water	NA	NA	20.2	4.02	10/23/2025	08:35
2	CAL2	1	Water	NA	NA	20.2	7.01	10/23/2025	08:36
3	CAL3	1	Water	NA	NA	20.2	10.02	10/23/2025	08:37
4	ICV	1	Water	NA	NA	20.3	7.00	10/23/2025	08:39
5	CCV1	1	Water	NA	NA	20.3	2.01	10/23/2025	08:40
6	Q3434-02	1	Water	NA	NA	20.7	7.77	10/23/2025	08:50
7	Q3434-02DUP	1	Water	NA	NA	20.3	7.79	10/23/2025	08:52
8	CCV2	1	Water	NA	NA	20.3	12.02	10/23/2025	08:55

WORKLIST(Hardcopy Internal Chain)

VB 137621

WorkList Name : PH W Q3434 WorkList ID : 192628 Department : Wet-Chemistry Date : 10-23-2025 08:18:10

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q3434-02	D PR132-WC2-20251022	Water	pH	Cool 4 deg C	AECO02	D41	10/22/2025	9040C

Date/Time 10/23/25 08:25
Raw Sample Received by: [Signature]
Raw Sample Relinquished by: [Signature]

Date/Time 10/23/25 13:00
Raw Sample Received by: [Signature]
Raw Sample Relinquished by: [Signature]

Analytical Summary Report

Analysis Method: 1010B
Parameter: Flash Point
Run Number: LB137627
Thermometer ID: Flash Point

Reviewed By: rubina
Supervisor Review By: Iwona
Ambient Barometric Pressure (mmHg): 755.00
Barometric Scale ID: 0511064

Reagent/Standard	Lot/Log #
p-xylene (ICV)	W3242

Seq	LabID	True Value °F	DL	Initial Sample °C	Celsius °C	Result °F	Final Result °F	Anal Date	Anal Time
1	ICV	81	1	9	28.00	82.4	82.7	10/23/2025	09:00
2	Q3434-02		1	13	100.00	>212.0	>212.0	10/23/2025	09:30
3	Q3434-02DUP		1	13	100.00	>212.0	>212.0	10/23/2025	10:35

Result = (Celsius * 1.8) + 32

Final Result = Result + (760 - Ambient Barometric Pressure) * 0.06

WORKLIST(Hardcopy Internal Chain)

WorkList Name : fp-10-23.

WorkList ID : 192645

Department : Wet-Chemistry

Date : 10-23-2025 08:15:27

LB137627

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q3434-02	PR132-WC2-20251022	Water	Flash Point	Cool 4 deg C	AECO02	D41	10/22/2025	1010B

Date/Time 10/23/2025 08:35
Raw Sample Received by: RM CWS
Raw Sample Relinquished by: RM CWS

Date/Time 10/23/2025 11:15
Raw Sample Received by: RM CWS
Raw Sample Relinquished by: RM CWS

Lb137639

Reviewed By: Iwona
On: 10/27/2025
11:49:31 AM
Inst Id: Konelab 20
LB: LB137639

Test results

Aquakem 7.2AQ1

Page: 1

Alliance Technical Group
284 Sheffield Street, Mountainside, NJ 07092

Reviewed by : RM

Instrument ID : Konelab

10/24/2025 14:53

Test: Total CN

Sample Id	Result	Dil. 1 +	Response	Errors
ICV1	95.875	0.0	0.083	
ICB1	0.929	0.0	0.001	
CCV1	242.157	0.0	0.210	
CCB1	1.670	0.0	0.002	
PB170248BL	1.425	0.0	0.001	
Q3434-02	0.658	0.0	0.001	
Q3434-02DUP	0.632	0.0	0.001	
PB170241BL	0.691	0.0	0.001	
Q3427-04	0.741	0.0	0.001	
Q3427-04DUP	0.819	0.0	0.001	
Q3434-01	0.798	0.0	0.001	
Q3439-04	0.829	0.0	0.001	
Q3439-08	0.692	0.0	0.001	
Q3440-04	0.661	0.0	0.001	
CCV2	244.758	0.0	0.212	
CCB2	0.932	0.0	0.001	
Q3449-06	0.817	0.0	0.001	
Q3451-04	0.711	0.0	0.001	
Q3451-08	0.548	0.0	0.001	
Q3452-04	0.614	0.0	0.001	
CCV3	245.709	0.0	0.213	
CCB3	0.812	0.0	0.001	

N 22
Mean 38.340
SD 86.1300
CV% 224.65

Calibration results

Aquakem 7.2AQ1

Page:

Alliance Technical Group

284 Sheffield Street, Mountainside, NJ 07092

Reviewed by : RM

Instrument ID : Konelab

10/24/2025 10:33

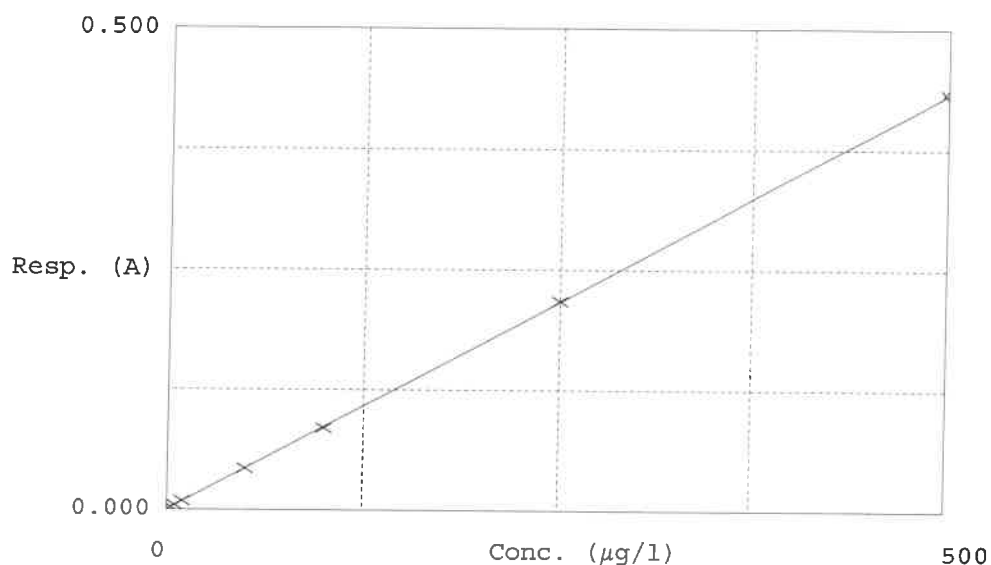
Test Total CN

Accepted 10/24/2025 10:32

Factor 1156
Bias 0

Coeff. of det. 0.999979

Errors



	Calibrator	Response	Calc. con.	Conc.	Errors
1	0.0PPBCN	0.000	0.4210	0.0000	
2	5.0PPBCN	0.005	5.3168	5.0000	6.3
3	10PPBCN	0.009	10.3413	10.0000	3.4
4	50PPBCN	0.043	49.7338	50.0000	-0.5
5	100PPBCN	0.085	98.3173	100.0000	-1.7
6	250PPBCN	0.217	251.0332	250.0000	0.4
7	500PPBCN	0.433	499.8365	500.0000	0.0

10/24/2025
RM

Aquakem v. 7.2AQ1

Results from time period:

Fri Oct 24 14:29:30 2025

Fri Oct 24 14:51:24 2025

Sample Id	Sam/Ctr/c	Test short r	Test type	Result	Result unit	Result date and time	Stat
0.0PPBCN	A	Total CN	P	0.421	µg/l	10/24/2025 10:32:07	
5.0PPBCN	A	Total CN	P	5.3168	µg/l	10/24/2025 10:32:08	
10PPBCN	A	Total CN	P	10.3413	µg/l	10/24/2025 10:32:09	
50PPBCN	A	Total CN	P	49.7338	µg/l	10/24/2025 10:32:10	
100PPBCN	A	Total CN	P	98.3173	µg/l	10/24/2025 10:32:11	
250PPBCN	A	Total CN	P	251.0332	µg/l	10/24/2025 10:32:12	
500PPBCN	A	Total CN	P	499.8365	µg/l	10/24/2025 10:32:13	
ICV1	S	Total CN	P	95.8752	µg/l	10/24/2025 14:29:31	
ICB1	S	Total CN	P	0.9289	µg/l	10/24/2025 14:29:32	
CCV1	S	Total CN	P	242.1566	µg/l	10/24/2025 14:29:35	
CCB1	S	Total CN	P	1.6704	µg/l	10/24/2025 14:29:36	
PB170248BL	S	Total CN	P	1.4249	µg/l	10/24/2025 14:29:39	
Q3434-02	S	Total CN	P	0.6582	µg/l	10/24/2025 14:37:05	
Q3434-02DUP	S	Total CN	P	0.6321	µg/l	10/24/2025 14:37:07	
PB170241BL	S	Total CN	P	0.6912	µg/l	10/24/2025 14:37:08	
Q3427-04	S	Total CN	P	0.741	µg/l	10/24/2025 14:37:10	
Q3427-04DUP	S	Total CN	P	0.8189	µg/l	10/24/2025 14:37:13	
Q3434-01	S	Total CN	P	0.7981	µg/l	10/24/2025 14:37:14	
Q3439-04	S	Total CN	P	0.8291	µg/l	10/24/2025 14:37:15	
Q3439-08	S	Total CN	P	0.6918	µg/l	10/24/2025 14:44:37	
Q3440-04	S	Total CN	P	0.6607	µg/l	10/24/2025 14:44:38	
CCV2	S	Total CN	P	244.758	µg/l	10/24/2025 14:44:42	
CCB2	S	Total CN	P	0.9325	µg/l	10/24/2025 14:44:45	
Q3449-06	S	Total CN	P	0.8173	µg/l	10/24/2025 14:44:46	
Q3451-04	S	Total CN	P	0.7107	µg/l	10/24/2025 14:44:47	
Q3451-08	S	Total CN	P	0.5481	µg/l	10/24/2025 14:51:16	
Q3452-04	S	Total CN	P	0.6139	µg/l	10/24/2025 14:51:17	
CCV3	S	Total CN	P	245.7085	µg/l	10/24/2025 14:51:22	
CCB3	S	Total CN	P	0.8119	µg/l	10/24/2025 14:51:24	

Analytical Summary Report

Analysis Method: 1030
Parameter: Ignitability
Run Number: LB137640

Reviewed By: Eman
Supervisor Review By: Iwona

Seq	LabID	ClientID	DF	matrix	Result Status	Burning Rate	Anal Date	Anal Time
1	Q3427-01	TP-8	1	Solid	NO	0.00	10/24/2025	09:27
2	Q3427-01DUP	TP-8DUP	1	Solid	NO	0.00	10/24/2025	09:35
3	Q3427-04	TP-8	1	Solid	NO	0.00	10/24/2025	09:43
4	Q3434-01	PR132-WC1-20251022	1	Solid	NO	0.00	10/24/2025	09:50
5	Q3439-01	TP-9	1	Solid	NO	0.00	10/24/2025	09:57
6	Q3439-04	TP-9	1	Solid	NO	0.00	10/24/2025	10:05
7	Q3439-05	TP-10	1	Solid	NO	0.00	10/24/2025	10:12
8	Q3439-08	TP-10	1	Solid	NO	0.00	10/24/2025	10:20
9	Q3440-01	JB-2	1	Solid	NO	0.00	10/24/2025	10:27
10	Q3440-04	JB-2	1	Solid	NO	0.00	10/24/2025	10:35
11	Q3446-01	SB-14	1	Solid	YES	0.69	10/24/2025	10:42
12	Q3446-02	SB-15	1	Solid	NO	0.00	10/24/2025	10:50
13	Q3446-03	SB-16	1	Solid	NO	0.00	10/24/2025	10:57
14	Q3446-04	SB-17	1	Solid	NO	0.00	10/24/2025	11:05
15	Q3446-05	SB-18	1	Solid	NO	0.00	10/24/2025	11:12
16	Q3446-06	SB-19	1	Solid	NO	0.00	10/24/2025	11:20
17	Q3446-07	SB-20	1	Solid	NO	0.00	10/24/2025	11:27
18	Q3446-08	SB-21	1	Solid	NO	0.00	10/24/2025	11:35

$$\text{Burning Rate} = \frac{\text{Length (mm)}}{\text{Total Time (sec)}}$$

16137640

WORKLIST(Hardcopy Internal Chain)

WorkList Name : IGN-102425 WorkList ID : 192656 Department : Wet-Chemistry Date : 10-24-2025 08:20:10

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q3427-01	TP-8	Solid	Ignitability	Cool 4 deg C	PSEG03	D41	10/21/2025	1030
Q3427-04	TP-8	Solid	Ignitability	Cool 4 deg C	PSEG03	D41	10/21/2025	1030
Q3434-01	PR132-WC1-20251022	Solid	Ignitability	Cool 4 deg C	AECO02	D41	10/22/2025	1030
Q3439-01	TP-9	Solid	Ignitability	Cool 4 deg C	PSEG03	D41	10/22/2025	1030
Q3439-04	TP-9	Solid	Ignitability	Cool 4 deg C	PSEG03	D41	10/22/2025	1030
Q3439-05	TP-10	Solid	Ignitability	Cool 4 deg C	PSEG03	D41	10/22/2025	1030
Q3439-08	TP-10	Solid	Ignitability	Cool 4 deg C	PSEG03	D41	10/23/2025	1030
Q3440-01	JB-2	Solid	Ignitability	Cool 4 deg C	PSEG03	D41	10/23/2025	1030
Q3440-04	JB-2	Solid	Ignitability	Cool 4 deg C	PSEG03	D41	10/22/2025	1030
Q3446-01	SB-14	Solid	Ignitability	Cool 4 deg C	PSEG03	D31	10/23/2025	1030
Q3446-02	SB-15	Solid	Ignitability	Cool 4 deg C	PSEG03	D31	10/23/2025	1030
Q3446-03	SB-16	Solid	Ignitability	Cool 4 deg C	PSEG03	D31	10/23/2025	1030
Q3446-04	SB-17	Solid	Ignitability	Cool 4 deg C	PSEG03	D31	10/23/2025	1030
Q3446-05	SB-18	Solid	Ignitability	Cool 4 deg C	PSEG03	D31	10/23/2025	1030
Q3446-06	SB-19	Solid	Ignitability	Cool 4 deg C	PSEG03	D31	10/23/2025	1030
Q3446-07	SB-20	Solid	Ignitability	Cool 4 deg C	PSEG03	D31	10/23/2025	1030
Q3446-08	SB-21	Solid	Ignitability	Cool 4 deg C	PSEG03	D31	10/23/2025	1030

Date/Time 10/24/25 08:30
Raw Sample Received by: EM(wc)
Raw Sample Relinquished by: MWC

Date/Time 10/24/25 12:00
Raw Sample Received by: MWC
Raw Sample Relinquished by: EM(wc)

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

Analysis Method: 9034

Parameter: Reactive Sulfide

Run Number: LB137644

ANALYST: rubina

SUPERVISOR REVIEW BY: Iwona

Constant: 16000

Normality1: 0.025

Normality2: 0.025

Reagent/Standard	Lot/Log #
SODIUM THIOSULFATE, 0.025N, 4LITRE	W3248
IODINE SOLUTION .025N 1L	W3213
Starch Solution, 4L	W3149

Seq	Lab ID	True Value (mg/l)	DF	Initial Volume (mL)	Final Volume (ml)	T1 (ml)	T2 Initial	T2 Final	T2 Diff. (ml)	T1 - T2 Diff (mL)	Value Corrected With Blank	Result (ppm)	Anal Date	Anal Time
1	PB170245BL		1	50	50	2.00	0.00	1.92	1.92	0.08	0.00	0.00	10/24/2025	13:20
2	Q3434-02		1	50	50	2.00	0.00	1.88	1.88	0.12	0.04	0.32	10/24/2025	13:23
3	Q3434-02DUP		1	50	50	2.00	0.00	1.88	1.88	0.12	0.04	0.32	10/24/2025	13:26

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

Analysis Method: 9034

ANALYST: rubina

Parameter: Reactive Sulfide

SUPERVISOR REVIEW BY: Iwona

Run Number: LB137645

Constant: 16000

Normality1: 0.025

Normality2: 0.025

Reagent/Standard	Lot/Log #
SODIUM THIOSULFATE, 0.025N, 4LITRE	W3248
IODINE SOLUTION .025N 1L	W3213
Starch Solution, 4L	W3149

Seq	Lab ID	True Value (mg/l)	DF	Initial Weight (g)	Final Volume (ml)	T1 (ml)	T2 Initial	T2 Final	T2 Diff. (ml)	T1 - T2 Diff (mL)	Value Corrected With Blank	Result (ppm)	Anal Date	Anal Time
1	PB170244BL		1	5.00	50	2.00	0.00	1.92	1.92	0.08	0.00	0.00	10/24/2025	13:30
2	Q3434-01		1	5.04	50	2.00	0.00	1.88	1.88	0.12	0.04	3.17	10/24/2025	13:33
3	Q3434-01DUP		1	5.04	50	2.00	0.00	1.88	1.88	0.12	0.04	3.17	10/24/2025	13:36
4	Q3439-04		1	5.01	50	2.00	0.00	1.86	1.86	0.14	0.06	4.79	10/24/2025	13:38
5	Q3439-08		1	5.06	50	2.00	0.00	1.90	1.90	0.10	0.02	1.58	10/24/2025	13:40
6	Q3440-04		1	5.04	50	2.00	0.00	1.88	1.88	0.12	0.04	3.17	10/24/2025	13:43
7	Q3449-06		1	5.01	50	2.00	0.00	1.90	1.90	0.10	0.02	1.60	10/24/2025	13:46

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

Extraction and Analytical Summary Report

Analysis Method: 1664A
Test: TPH
Run Number: LB137651
Analysis Date: 10/27/2025
BalanceID: WC SC-5
OvenID: EXT OVEN-3

ANALYST: jignesh
REVIEWED BY: Iwona
Extraction Date: 10/27/2025
Extraction IN Time: 09:00
Extraction OUT Time: 09:35
Thermometer ID: EXT OVEN#3

Dish #	Lab ID	Client ID	Matrix	pH	Sample Vol (ml)	Final Volume (ml)	Empty Dish Weight (g)	Final Empty Dish Weight (g)	Silica Gel Weight (g)	Weight After Drying (g)	Final Weight After Drying (g)	Change Weight (g)	Result in ppm
1	LB137651BL	LB137651BL	WATER	1.3	1000	100	2.4416	2.4416	3.01	2.4417	2.4417	0.0001	0.1
2	LB137651BS	LB137651BS	WATER	1.3	1000	100	3.1258	3.1258	3.02	3.1425	3.1425	0.0167	16.7
3	LB137651BSD	LB137651BSD	WATER	1.3	1000	100	2.7013	2.7013	3.03	2.7183	2.7183	0.0170	17
4	Q3428-01	Grab	WATER	1.6	1000	100	3.0527	3.0527	3.05	3.0589	3.0589	0.0062	6.2
5	Q3434-02	PR132-WC2-20251022	WATER	1.3	1000	100	3.0375	3.0375	3.02	3.0409	3.0409	0.0034	3.4
6	Q3455-01	MH-10242025	WATER	1.6	1000	100	3.0349	3.0349	3.04	3.0792	3.0792	0.0443	44.3

QC Batch# LB137651 Test: TPH Analysis Date: 10/27/2025

Chemicals Used:

Chemical Name	Chemical Lot #
HEXANE	W3240
pH Paper 0-14	M6069
Sodium Sulfate	EP2655
1:1 HCL	WP115016
Silica Gel	W3246
Sand	N/A

Standards Used:

Standard Name	Amount Used	Standard Lot #
LCSW	5.00 ML	WP115017
LCSWD	5.00 ML	WP115018
MS/MSD	N/A	N/A

BALANCE CALIBRATION / OVEN Dessicator Data

Analytical Balance ID # : WC SC-6

Before Analysis

0.0020 gram Balance: 0.0018 (0.0018-0.0022) In OVEN TEMP1 : 71 °C Dessicator Time In1 : 11:26
 1.0000 gram Balance: 1.0004 (0.9950-1.0050) In Time1: 10:30
 Bal Check Time: 09:10 Out OVEN TEMP1: 71 °C Dessicator Time Out1: 12:10
 Out Time1: 11:25

After Analysis

0.0020 gram Balance: 0.0019 (0.0018-0.0022) In OVEN TEMP2 : 70 °C Dessicator Time In2 : 13:26
 1.0000 gram Balance: 1.0005 (0.9950-1.0050) In Time2: 12:47
 Bal Check Time: 14:02 Out OVEN TEMP2: 71 °C Dessicator Time Out2: 14:00
 Out Time2: 13:25

WORKLIST(Hardcopy Internal Chain)

VB 13751

WorkList Name : tph q3455 WorkList ID : 192684 Department : Wet-Chemistry Date : 10-27-2025 07:53:22

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q3428-01	Grab	Water	TPH	Conc H2SO4 to pH < 2	ARAM01	J13	10/22/2025	1664A
Q3434-02	PR132-WC2-20251022	Water	TPH	Conc H2SO4 to pH < 2	AECO02	D41	10/22/2025	1664A
Q3455-01	MH-10242025	Water	TPH	Conc H2SO4 to pH < 2	EURO03	D31	10/24/2025	1664A

Date/Time 10/24/25 08:10
Raw Sample Received by: [Signature]
Raw Sample Relinquished by: [Signature]

Date/Time 10/24/25 15:30
Raw Sample Received by: [Signature]
Raw Sample Relinquished by: [Signature]

SOP ID : M9012B-Total, Amenable and Reactive Cyanide-21

SDG No : N/A

Start Digest Date: 10/24/2025 Time : 12:15 Temp : N/A

Matrix : SOIL

End Digest Date: 10/24/2025 Time : 13:45 Temp : N/A

Pipette ID : N/A

Balance ID : WC SC-7

Hood ID : HOOD#1

Digestion tube ID : M5595

Block Thermometer ID : N/A

Block ID : MC-1,MC-2

Filter paper ID : N/A

Prep Technician Signature: RM

Weigh By : RM

pH Meter ID : N/A

Supervisor Signature: 12

Standardized 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
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
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
10/24/2025 13:55	RM WC	RM WC
	Preparation Group	Analysis Group

Lab Sample ID	Client Sample ID	Initial Weight (g)	Final Vol (ml)	pH	Sulfide	Oxidizing	Nitrate/ Nitrite	Comment	Prep Pos
PB170241BL	PBS241	5.00	50	N/A	N/A	N/A	N/A	N/A	N/A
Q3427-04DUP	TP-8DUP	5.03	50	N/A	N/A	N/A	N/A	N/A	N/A
Q3427-04	TP-8	5.03	50	N/A	N/A	N/A	N/A	N/A	N/A
Q3434-01	PR132-WC1-20251022	5.07	50	N/A	N/A	N/A	N/A	N/A	N/A
Q3439-04	TP-9	5.01	50	N/A	N/A	N/A	N/A	N/A	N/A
Q3439-08	TP-10	5.03	50	N/A	N/A	N/A	N/A	N/A	N/A
Q3440-04	JB-2	5.01	50	N/A	N/A	N/A	N/A	N/A	N/A
Q3449-06	CF-620-COMP-41	5.07	50	N/A	N/A	N/A	N/A	N/A	N/A
Q3451-04	TP-11	5.05	50	N/A	N/A	N/A	N/A	N/A	N/A
Q3451-08	TP-12	5.03	50	N/A	N/A	N/A	N/A	N/A	N/A
Q3452-04	JB-1	5.05	50	N/A	N/A	N/A	N/A	N/A	N/A

WORKLIST(Hardcopy Internal Chain)

WorkList Name : RCN-10-24-

WorkList ID : 192668

Department : Distillation

Date : 10-24-2025 10:23:19

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q3427-04	TP-8	Solid	Reactive Cyanide	Cool 4 deg C	PSEG03	D41	10/21/2025	9012B
Q3434-01	PR132-WC1-20251022	Solid	Reactive Cyanide	Cool 4 deg C	AECO02	D41	10/22/2025	9012B
Q3439-04	TP-9	Solid	Reactive Cyanide	Cool 4 deg C	PSEG03	D41	10/22/2025	9012B
Q3439-08	TP-10	Solid	Reactive Cyanide	Cool 4 deg C	PSEG03	D41	10/22/2025	9012B
Q3440-04	JB-2	Solid	Reactive Cyanide	Cool 4 deg C	PSEG03	D41	10/23/2025	9012B
Q3448-06	CF-620-COMP-41	Solid	Reactive Cyanide	Cool 4 deg C	PSEG03	D41	10/22/2025	9012B
Q3451-04	TP-11	Solid	Reactive Cyanide	Cool 4 deg C	PSEG03	D21	10/23/2025	9012B
Q3451-08	TP-12	Solid	Reactive Cyanide	Cool 4 deg C	PSEG03	D31	10/23/2025	9012B
Q3452-04	JB-1	Solid	Reactive Cyanide	Cool 4 deg C	PSEG03	D31	10/23/2025	9012B
					PSEG03	D31	10/24/2025	9012B

Date/Time 10/24/2025 10:35
 Raw Sample Received by: RMW
 Raw Sample Relinquished by: RMW

Date/Time 10/24/2025 13:00
 Raw Sample Received by: RMW
 Raw Sample Relinquished by: RMW

SOP ID : M9030B-Sulfide-13

SDG No : N/A

Matrix : SOIL

Pipette ID : WC

Balance ID : WC SC-7

Hood ID : HOOD#2

Block ID : WC-DIST-BLOCK-1

Weigh By : RM

Start Digest Date: 10/24/2025 Time : 11:15 Temp : N/A

End Digest Date: 10/24/2025 Time : 12:45 Temp : N/A

Digestion tube ID : M5595

Block Thermometer ID : N/A

Filter paper ID : N/A

Prep Technician Signature: RM

pH Meter ID : N/A

Supervisor Signature: 12

Standardized 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
0.5M ZINC ACETATE	5.0ML	WP114311
FORMALDEHYDE	2.0ML	W3220
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A

Extraction Conformance/Non-Conformance Comments:

10/24/2025 RM

N/A

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

Lab Sample ID	Client Sample ID	Initial Weight (g)	Final Vol (ml)	pH	Sulfide	Oxidizing	Nitrate/ Nitrite	Comment	Prep Pos
PB170244BL	PBS244	5.00	50	N/A	N/A	N/A	N/A	N/A	N/A
Q3434-01DUP	PR132-WC1-20251022DUP	5.04	50	N/A	N/A	N/A	N/A	N/A	N/A
Q3434-01	PR132-WC1-20251022	5.04	50	N/A	N/A	N/A	N/A	N/A	N/A
Q3439-04	TP-9	5.01	50	N/A	N/A	N/A	N/A	N/A	N/A
Q3439-08	TP-10	5.06	50	N/A	N/A	N/A	N/A	N/A	N/A
Q3440-04	JB-2	5.04	50	N/A	N/A	N/A	N/A	N/A	N/A
Q3449-06	CF-620-COMP-41	5.01	50	N/A	N/A	N/A	N/A	N/A	N/A

WORKLIST(Hardcopy Internal Chain)

WorkList Name : RSUL SOIL- WorkList ID : 192679 Department : Distillation Date : 10-24-2025 10:21:46

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q3434-01	PR132-WC1-20251022	Solid	Reactive Sulfide	Cool 4 deg C	AECO02	D41	10/22/2025	9034
Q3439-04	TP-9	Solid	Reactive Sulfide	Cool 4 deg C	PSEG03	D41	10/22/2025	9034
Q3439-08	TP-10	Solid	Reactive Sulfide	Cool 4 deg C	PSEG03	D41	10/23/2025	9034
Q3440-04	JB-2	Solid	Reactive Sulfide	Cool 4 deg C	PSEG03	D41	10/22/2025	9034
Q3449-06	CF-620-COMP-41	Solid	Reactive Sulfide	Cool 4 deg C	PSEG03	D21	10/23/2025	9034

Date/Time 10/24/2025 10:35
 Raw Sample Received by: [Signature]
 Raw Sample Relinquished by: [Signature]

Date/Time 10/24/2025 13:00
 Raw Sample Received by: [Signature]
 Raw Sample Relinquished by: [Signature]



SOP ID : M9030B-Sulfide-13

SDG No : N/A

Matrix : WATER

Pipette ID : WC

Balance ID : N/A

Hood ID : HOOD#2

Block ID : WC-DIST-BLOCK-1

Weigh By : N/A

Start Digest Date: 10/24/2025 Time : 11:15 Temp : N/A

End Digest Date: 10/24/2025 Time : 12:45 Temp : N/A

Digestion tube ID : M5595

Block Thermometer ID : N/A

Filter paper ID : N/A

Prep Technician Signature: RM

pH Meter ID : N/A

Supervisor Signature: 12

Standardized Name	MLS USED	STD REF. # FROM LOG
PBW	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
0.5M ZINC ACETATE	5.0ML	WP114311
FORMALDEHYDE	2.0ML	W3220
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A

Extraction Conformance/Non-Conformance Comments:

N/A

10/24/2025
RM

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

Lab Sample ID	Client Sample ID	Initial Vol (ml)	Final Vol (ml)	pH	Sulfide	Oxidizing	Nitrate/ Nitrite	Comment	Prep Pos
PB170245BL	PB170245BL	50	50	N/A	N/A	N/A	N/A	N/A	N/A
Q3434-02DUP	PR132-WC2-20251022DUP	50	50	N/A	N/A	N/A	N/A	N/A	N/A
Q3434-02	PR132-WC2-20251022	50	50	N/A	N/A	N/A	N/A	N/A	N/A

WORKLIST(Hardcopy Internal Chain)

WorkList Name : RSL WATER WorkList ID : 192678 Department : Distillation Date : 10-24-2025 08:21:30

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q3434-02	PR132-WC2-20251022	Water	Reactive Sulfide	Cool 4 deg C	AECO02	D41	10/22/2025	9034

Date/Time 10/24/2025 10:35
 Raw Sample Received by: RM (w/c)
 Raw Sample Relinquished by: RM (w/c)

Date/Time 10/24/2025 13:00
 Raw Sample Received by: RM (w/c)
 Raw Sample Relinquished by: RM (w/c)

SOP ID : M9012B-Total, Amenable and Reactive Cyanide-21

SDG No : N/A

Start Digest Date: 10/24/2025 Time : 12:15 Temp : N/A

Matrix : WATER

End Digest Date: 10/24/2025 Time : 13:45 Temp : N/A

Pipette ID : N/A

Balance ID : N/A

Hood ID : HOOD#1

Digestion tube ID : M5595

Block Thermometer ID : N/A

Block ID : MC-1,MC-2

Filter paper ID : N/A

Prep Technician Signature: RM

Weigh By : N/A

pH Meter ID : N/A

Supervisor Signature: 12

Standard Name	MLS USED	STD REF. # FROM LOG
PBW	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
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
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
10/24/2025 1355	RM WJ	RM WJ
	Preparation Group	Analysis Group

Lab Sample ID	Client Sample ID	Initial Vol (ml)	Final Vol (ml)	pH	Sulfide	Oxidizing	Nitrate/ Nitrite	Comment	Prep Pos
PB170248BL	PBW248	50	50	N/A	N/A	N/A	N/A	N/A	N/A
Q3434-02DUP	PR132-WC2-20251022DUP	50	50	N/A	N/A	N/A	N/A	N/A	N/A
Q3434-02	PR132-WC2-20251022	50	50	N/A	N/A	N/A	N/A	N/A	N/A

WORKLIST(Hardcopy Internal Chain)

WorkList Name : RCN-WATER-

WorkList ID : 192667

Department : Distillation

Date : 10-24-2025 08:23:11

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q3434-02	PR132-WC2-20251022	Water	Reactive Cyanide	Cool 4 deg C	AECO02	D41	10/22/2025	9012B

Date/Time 10/24/2025 10:35

Raw Sample Received by: RMLW2

Raw Sample Relinquished by: JF(CAD)

Date/Time 10/24/2025 13:00

Raw Sample Received by: JF(CAD)

Raw Sample Relinquished by: JF(CAD)

Instrument ID: WC PH METER-1

Daily Analysis Runlog For Sequence/QC Batch ID # LB137618

Review By	jignesh	Review On	10/23/2025 9:33:40 AM
Supervise By	Iwona	Supervise On	10/23/2025 10:32:23 AM
SubDirectory	LB137618	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	10/22/25 15:10		Jignesh	OK
2	CAL2	CAL2	CAL	10/22/25 15:11		Jignesh	OK
3	CAL3	CAL3	CAL	10/22/25 15:15		Jignesh	OK
4	ICV	ICV	ICV	10/22/25 15:20		Jignesh	OK
5	CCV1	CCV1	CCV	10/22/25 15:22		Jignesh	OK
6	Q3427-04	TP-8	SAM	10/22/25 15:35		Jignesh	OK
7	Q3427-04DUP	TP-8DUP	DUP	10/22/25 15:37		Jignesh	OK
8	Q3434-01	PR132-WC1-2025102	SAM	10/22/25 15:44		Jignesh	OK
9	CCV2	CCV2	CCV	10/22/25 15:45		Jignesh	OK

Instrument ID: WC PH METER-1

Daily Analysis Runlog For Sequence/QC Batch ID # LB137621

Review By	jignesh	Review On	10/23/2025 9:37:00 AM
Supervise By	Iwona	Supervise On	10/23/2025 10:32:14 AM
SubDirectory	LB137621	Test	pH
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	10/23/25 08:35		jignesh	OK
2	CAL2	CAL2	CAL	10/23/25 08:36		jignesh	OK
3	CAL3	CAL3	CAL	10/23/25 08:37		jignesh	OK
4	ICV	ICV	ICV	10/23/25 08:39		jignesh	OK
5	CCV1	CCV1	CCV	10/23/25 08:40		jignesh	OK
6	Q3434-02	PR132-WC2-2025102	SAM	10/23/25 08:50		jignesh	OK
7	Q3434-02DUP	PR132-WC2-2025102	DUP	10/23/25 08:52		jignesh	OK
8	CCV2	CCV2	CCV	10/23/25 08:55		jignesh	OK

Instrument ID: IGN-1

Daily Analysis Runlog For Sequence/QC Batch ID # LB137627

Review By	rubina	Review On	10/23/2025 2:29:52 PM
Supervise By	Iwona	Supervise On	10/23/2025 4:19:07 PM
SubDirectory	LB137627	Test	Flash Point
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	W3242		

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	ICV	ICV	ICV	10/23/25 09:00		rubina	OK
2	Q3434-02	PR132-WC2-2025102	SAM	10/23/25 09:30		rubina	OK
3	Q3434-02DUP	PR132-WC2-2025102	DUP	10/23/25 10:35		rubina	OK

Instrument ID: KONELAB

Daily Analysis Runlog For Sequence/QC Batch ID # LB137639

Review By	rubina	Review On	10/27/2025 11:40:17 AM
Supervise By	Iwona	Supervise On	10/27/2025 11:49:31 AM
SubDirectory	LB137639	Test	Reactive Cyanide
STD. NAME	STD REF.#		
ICAL Standard	WP115305,WP115306,WP115307,WP115308,WP115309,WP115310,WP115311		
ICV Standard	WP115312		
CCV Standard	WP115306		
ICSA Standard	N/A		
CRI Standard	N/A		
LCS Standard	N/A		
Chk Standard	WP115157,WP114324,WP115313		

Sr#	SampleID	ClientID	QcType	Date	Comment	Operator	Status
1	0.0PPBCN	0.0PPBCN	CAL1	10/24/25 10:32		rubina	OK
2	5.0PPBCN	5.0PPBCN	CAL2	10/24/25 10:32		rubina	OK
3	10PPBCN	10PPBCN	CAL3	10/24/25 10:32		rubina	OK
4	50PPBCN	50PPBCN	CAL4	10/24/25 10:32		rubina	OK
5	100PPBCN	100PPBCN	CAL5	10/24/25 10:32		rubina	OK
6	250PPBCN	250PPBCN	CAL6	10/24/25 10:32		rubina	OK
7	500PPBCN	500PPBCN	CAL7	10/24/25 10:32		rubina	OK
8	ICV1	ICV1	ICV	10/24/25 14:29		rubina	OK
9	ICB1	ICB1	ICB	10/24/25 14:29		rubina	OK
10	CCV1	CCV1	CCV	10/24/25 14:29		rubina	OK
11	CCB1	CCB1	CCB	10/24/25 14:29		rubina	OK
12	PB170248BL	PB170248BL	MB	10/24/25 14:29		rubina	OK
13	Q3434-02	PR132-WC2-2025102	SAM	10/24/25 14:37		rubina	OK
14	Q3434-02DUP	PR132-WC2-2025102	DUP	10/24/25 14:37		rubina	OK
15	PB170241BL	PB170241BL	MB	10/24/25 14:37		rubina	OK
16	Q3427-04	TP-8	SAM	10/24/25 14:37		rubina	OK
17	Q3427-04DUP	TP-8DUP	DUP	10/24/25 14:37		rubina	OK
18	Q3434-01	PR132-WC1-2025102	SAM	10/24/25 14:37		rubina	OK

Instrument ID: KONELAB

Daily Analysis Runlog For Sequence/QC Batch ID # LB137639

Review By	rubina	Review On	10/27/2025 11:40:17 AM
Supervise By	Iwona	Supervise On	10/27/2025 11:49:31 AM
SubDirectory	LB137639	Test	Reactive Cyanide
STD. NAME	STD REF.#		
ICAL Standard	WP115305,WP115306,WP115307,WP115308,WP115309,WP115310,WP115311		
ICV Standard	WP115312		
CCV Standard	WP115306		
ICSA Standard	N/A		
CRI Standard	N/A		
LCS Standard	N/A		
Chk Standard	WP115157,WP114324,WP115313		

19	Q3439-04	TP-9	SAM	10/24/25 14:37		rubina	OK
20	Q3439-08	TP-10	SAM	10/24/25 14:44		rubina	OK
21	Q3440-04	JB-2	SAM	10/24/25 14:44		rubina	OK
22	CCV2	CCV2	CCV	10/24/25 14:44		rubina	OK
23	CCB2	CCB2	CCB	10/24/25 14:44		rubina	OK
24	Q3449-06	CF-620-COMP-41	SAM	10/24/25 14:44		rubina	OK
25	Q3451-04	TP-11	SAM	10/24/25 14:44		rubina	OK
26	Q3451-08	TP-12	SAM	10/24/25 14:51		rubina	OK
27	Q3452-04	JB-1	SAM	10/24/25 14:51		rubina	OK
28	CCV3	CCV3	CCV	10/24/25 14:51		rubina	OK
29	CCB3	CCB3	CCB	10/24/25 14:51		rubina	OK

Instrument ID: FLAME

Daily Analysis Runlog For Sequence/QC Batch ID # LB137640

Review By	Eman	Review On	10/24/2025 3:32:52 PM
Supervise By	Iwona	Supervise On	10/24/2025 3:36:13 PM
SubDirectory	LB137640	Test	Ignitability
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#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	Q3427-01	TP-8	SAM	10/24/25 09:27		Eman	OK
2	Q3427-01DUP	TP-8DUP	DUP	10/24/25 09:35		Eman	OK
3	Q3427-04	TP-8	SAM	10/24/25 09:43		Eman	OK
4	Q3434-01	PR132-WC1-2025102	SAM	10/24/25 09:50		Eman	OK
5	Q3439-01	TP-9	SAM	10/24/25 09:57		Eman	OK
6	Q3439-04	TP-9	SAM	10/24/25 10:05		Eman	OK
7	Q3439-05	TP-10	SAM	10/24/25 10:12		Eman	OK
8	Q3439-08	TP-10	SAM	10/24/25 10:20		Eman	OK
9	Q3440-01	JB-2	SAM	10/24/25 10:27		Eman	OK
10	Q3440-04	JB-2	SAM	10/24/25 10:35		Eman	OK
11	Q3446-01	SB-14	SAM	10/24/25 10:42		Eman	OK
12	Q3446-02	SB-15	SAM	10/24/25 10:50		Eman	OK
13	Q3446-03	SB-16	SAM	10/24/25 10:57		Eman	OK
14	Q3446-04	SB-17	SAM	10/24/25 11:05		Eman	OK
15	Q3446-05	SB-18	SAM	10/24/25 11:12		Eman	OK
16	Q3446-06	SB-19	SAM	10/24/25 11:20		Eman	OK
17	Q3446-07	SB-20	SAM	10/24/25 11:27		Eman	OK
18	Q3446-08	SB-21	SAM	10/24/25 11:35		Eman	OK

Instrument ID: TITRAMETRIC

Daily Analysis Runlog For Sequence/QC Batch ID # LB137644

Review By	rubina	Review On	10/24/2025 4:06:25 PM
Supervise By	Iwona	Supervise On	10/24/2025 4:06:58 PM
SubDirectory	LB137644	Test	Reactive Sulfide
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	W3248,W3213,W3149		

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	PB170245BL	PB170245BL	MB	10/24/25 13:20		rubina	OK
2	Q3434-02	PR132-WC2-2025102	SAM	10/24/25 13:23		rubina	OK
3	Q3434-02DUP	PR132-WC2-2025102	DUP	10/24/25 13:26		rubina	OK

Instrument ID: TITRAMETRIC

Daily Analysis Runlog For Sequence/QC Batch ID # LB137645

Review By	rubina	Review On	10/24/2025 4:06:07 PM
Supervise By	Iwona	Supervise On	10/24/2025 4:06:49 PM
SubDirectory	LB137645	Test	Reactive Sulfide
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	W3248,W3213,W3149		

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	PB170244BL	PB170244BL	MB	10/24/25 13:30		rubina	OK
2	Q3434-01	PR132-WC1-2025102	SAM	10/24/25 13:33		rubina	OK
3	Q3434-01DUP	PR132-WC1-2025102	DUP	10/24/25 13:36		rubina	OK
4	Q3439-04	TP-9	SAM	10/24/25 13:38		rubina	OK
5	Q3439-08	TP-10	SAM	10/24/25 13:40		rubina	OK
6	Q3440-04	JB-2	SAM	10/24/25 13:43		rubina	OK
7	Q3449-06	CF-620-COMP-41	SAM	10/24/25 13:46		rubina	OK

Instrument ID: WC SC-3

Daily Analysis Runlog For Sequence/QC Batch ID # LB137651

Review By	jignesh	Review On	10/27/2025 10:03:35 AM
Supervise By	Iwona	Supervise On	10/28/2025 10:55:05 AM
SubDirectory	LB137651	Test	TPH
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	W3240,M6069,EP2655,WP115016,W3246,N/A,WP115017,WP115018,N/A		

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	LB137651BL	LB137651BL	MB	10/27/25 10:30		jignesh	OK
2	LB137651BS	LB137651BS	LCS	10/27/25 10:30		jignesh	OK
3	LB137651BSD	LB137651BSD	LCSD	10/27/25 10:30		jignesh	OK
4	Q3428-01	Grab	SAM	10/27/25 10:30		jignesh	OK
5	Q3434-02	PR132-WC2-2025102	SAM	10/27/25 10:30		jignesh	OK
6	Q3455-01	MH-10242025	SAM	10/27/25 10:30		jignesh	OK

Prep Standard - Chemical Standard Summary

Order ID : Q3434

Test : Corrosivity,Flash Point,Ignitability,Percent Solids,pH,Reactive Cyanide,Reactive Sulfide,TPH

Prepbatch ID : PB170241,PB170244,PB170245,PB170248,

Sequence ID/Qc Batch ID: LB137618,LB137621,LB137627,LB137639,LB137640,LB137644,LB137645,LB137651,

Standard ID :

EP2655,WP113836,WP113838,WP114311,WP114324,WP115016,WP115017,WP115018,WP115157,WP115304,WP115305,WP115306,WP115307,WP115308,WP115309,WP115310,WP115311,WP115312,WP115313,

Chemical ID :

E3875,E3972,M6069,M6151,W2668,W2817,W2871,W2926,W3009,W3019,W3082,W3093,W3112,W3113,W3139,W3149,W3161,W3178,W3191,W3200,W3203,W3213,W3214,W3217,W3220,W3224,W3240,W3242,W3246,W3248,

Extractions STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3923	Baked Sodium Sulfate	EP2655	10/24/2025	01/28/2026	RUPESHKUMAR SHAH	Extraction_SCALE_2 (EX-SC-2)	None	Riteshkumar Patel 10/24/2025
FROM 4000.00000gram of E3875 = Final Quantity: 4000.000 gram								

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
11	Sodium hydroxide absorbing solution 0.25 N	WP113836	07/08/2025	12/31/2025	Rubina Mughal	WETCHEM_SCALE_8 (WC-SC-7)	None	Iwona Zarych 07/08/2025
FROM 21.00000L of W3112 + 210.00000gram of W3113 = Final Quantity: 21.000 L								

Wet Chemistry STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3371	Cyanide LCS Spike Solution, 5PPM	WP113838	07/08/2025	12/24/2025	Rubina Mughal	None	WETCHEM_FIPETTE_3 (WC)	Iwona Zarych 07/08/2025
FROM 1.00000ml of W3224 + 199.00000ml of WP113836 = Final Quantity: 200.000 ml								

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
160	0.5M ZINC ACETATE	WP114311	08/19/2025	02/17/2026	Rubina Mughal	WETCHEM_SCALE_8 (WC SC-7)	WETCHEM_FIPETTE_3 (WC)	Jignesh Parikh 08/19/2025
FROM 0.88900L of W3112 + 1.00000ml of M6151 + 110.00000gram of W2926 = Final Quantity: 1000.000 ml								

Wet Chemistry STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
607	PYRIDINE-BARBITURIC ACID	WP114324	08/19/2025	02/17/2026	Rubina Mughal	WETCHEM_SCALE_5 (WC SC-5)	Glass Pipette-A	Jignesh Parikh 08/19/2025
FROM 145.00000ml of W3112 + 15.00000gram of W3203 + 15.00000ml of M6151 + 75.00000ml of W3019 = Final Quantity: 250.000 ml								

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
229	1:1 HCL	WP115016	10/02/2025	02/17/2026	Jignesh Parikh	None	None	Iwona Zarych 10/02/2025
FROM 500.00000ml of M6151 + 500.00000ml of W3112 = Final Quantity: 1.000 L								

Wet Chemistry STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
2470	1664A SPIKING SOLN	WP115017	10/02/2025	04/02/2026	Jignesh Parikh	WETCHEM_SCALE_7 (WC SC-6)	None	Iwona Zarych 10/02/2025
FROM 1000.00000ml of E3972 + 4.00000gram of W2817 + 4.00000gram of W2871 = Final Quantity: 1000.000 ml								

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3374	1664A QCS spiking solution-SS	WP115018	10/02/2025	04/02/2026	Jignesh Parikh	WETCHEM_SCALE_7 (WC SC-6)	None	Iwona Zarych 10/02/2025
FROM 1000.00000ml of E3972 + 4.00000gram of W3009 + 4.00000gram of W3082 = Final Quantity: 1000.000 ml								

Wet Chemistry STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
539	CN BUFFER	WP115157	10/10/2025	12/03/2025	Rubina Mughal	WETCHEM_SCALE_8 (WC SC-7)	None	Iwona Zarych 10/14/2025
FROM 138.00000gram of W2668 + 862.00000ml of W3112 = Final Quantity: 1000.000 ml								

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3456	Cyanide Intermediate Working Std, 5PPM	WP115304	10/24/2025	10/25/2025	Rubina Mughal	None	WETCHEM_FIPETTE_3 (WC)	Iwona Zarych 10/24/2025
FROM 0.25000ml of W3214 + 49.75000ml of WP113836 = Final Quantity: 50.000 ml								

Wet Chemistry STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
4	Calibration standard 500 ppb	WP115305	10/24/2025	10/25/2025	Rubina Mughal	None	WETCHEM_F IPETTE_3 (WC)	Iwona Zarych 10/24/2025
FROM 45.00000ml of WP113836 + 5.00000ml of WP115304 = Final Quantity: 50.000 ml								

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3761	Calibration-CCV CN Standard 250 ppb	WP115306	10/24/2025	10/25/2025	Rubina Mughal	None	WETCHEM_F IPETTE_3 (WC)	Iwona Zarych 10/24/2025
FROM 2.50000ml of WP115304 + 47.50000ml of WP113836 = Final Quantity: 50.000 ml								

Wet Chemistry STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
6	Calibration Standard 100 ppb	WP115307	10/24/2025	10/25/2025	Rubina Mughal	None	WETCHEM_FIPETTE_3 (WC)	Iwona Zarych 10/24/2025
FROM 1.00000ml of WP115304 + 49.00000ml of WP113836 = Final Quantity: 50.000 ml								

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
7	Calibration Standard 50 ppb	WP115308	10/24/2025	10/25/2025	Rubina Mughal	None	WETCHEM_FIPETTE_3 (WC)	Iwona Zarych 10/24/2025
FROM 0.50000ml of WP115304 + 49.50000ml of WP113836 = Final Quantity: 50.000 ml								

Wet Chemistry STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
8	Calibration Standard 10 ppb	WP115309	10/24/2025	10/25/2025	Rubina Mughal	None	WETCHEM_FIPETTE_3 (WC)	Iwona Zarych 10/24/2025
FROM 1.00000ml of WP115305 + 49.00000ml of WP113836 = Final Quantity: 50.000 ml								

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
9	Calibration Standard 5 ppb	WP115310	10/24/2025	10/25/2025	Rubina Mughal	None	WETCHEM_FIPETTE_3 (WC)	Iwona Zarych 10/24/2025
FROM 0.50000ml of WP115305 + 49.50000ml of WP113836 = Final Quantity: 50.000 ml								

Wet Chemistry STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
167	0 ppb CN calibration std	WP115311	10/24/2025	10/25/2025	Rubina Mughal	None	None	Iwona Zarych
								10/24/2025

FROM 50.00000ml of WP113836 = Final Quantity: 50.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
2168	RCN ICV STD, 100 PPB	WP115312	10/24/2025	10/25/2025	Rubina Mughal	None	WETCHEM_FIPETTE_3	Iwona Zarych
							(WC)	10/24/2025

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

Wet Chemistry STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
1582	Chloramine T solution, 0.014M	WP115313	10/24/2025	10/25/2025	Rubina Mughal	WETCHEM_S CALE_5 (WC SC-5)	Glass Pipette-A	Iwona Zarych 10/24/2025
FROM 0.08000gram of W3139 + 20.00000ml of W3112 = Final Quantity: 20.000 ml								

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	PC19631-100 / SODIUM SULFATE, ANHYDROUS, PEST GRADE, 1	417203	01/28/2026	07/28/2025 / RUPESH	01/29/2025 / Rajesh	E3875

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9254-03 / Acetone, Ultra Resi (cs/4x4L)	24H1462005	05/24/2027	09/16/2025 / Evelyn	09/04/2025 / Riteshkumar	E3972

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	140440 / TEST PAPERS,PH,0-2.5,.2SENSI, 100PK	80A0441	02/29/2028	09/03/2024 / jignesh	08/19/2024 / Jaswal	M6069

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9530-33 / Hydrochloric Acid, Instra-Analyzed (cs/6x2.5L)	22G2862015	02/17/2026	02/18/2025 / Sagar	01/15/2025 / Sagar	M6151

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	J3818-5 / SODIUM PHOSPHATE, MONOBAS/HYD, CRYST, ACS, 2.5 KG	0000225799	12/03/2025	04/05/2021 / Alexander	02/10/2020 / apatel	W2668

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	A12244 / Stearic acid, 98%, 100 g	U20E006	04/02/2026	04/02/2021 / apatel	04/02/2021 / apatel	W2817

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	H223-57 / Hexadecane, 99.0%	0000266903	05/04/2027	09/07/2021 / apatel	08/26/2021 / apatel	W2871

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	J4296-1 / ZINC ACETATE,DIHYD,CRYST,AC S,500G	383058	07/05/2027	07/05/2022 / ketankumar	07/05/2022 / ketankumar	W2926

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	H223-57 / Hexadecane, 99.0%	SHBP8192	02/27/2028	02/27/2023 / lwona	02/27/2023 / lwona	W3009

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
SIGMA ALDRICH	270970-1L / Pyridine 1L	SHBQ2113	04/03/2028	04/03/2023 / lwona	04/03/2023 / lwona	W3019

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	A12244 / Stearic acid, 98%, 100 g	U23E020	02/26/2029	02/26/2024 / lwona	02/26/2024 / lwona	W3082

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	566002 / BUFFER PH 7.00 GREEN 1PINT PK6	44001f99	12/31/2025	04/03/2024 / jignesh	04/02/2024 / jignesh	W3093

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	DIW / DI Water	Daily Lab-Certified	07/03/2029	07/03/2024 / lwona	07/03/2024 / lwona	W3112

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	PC19510-7 / Sodium Hydroxide Pellets 12 Kg	23B1556310	12/31/2025	07/08/2024 / lwona	07/08/2024 / lwona	W3113

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	JTE494-6 / CHLORAMINE-T BAKER 250GM	10239484	09/09/2029	09/09/2024 / lwona	09/09/2024 / lwona	W3139

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	AL70850-8 / Starch Solution, 4L	4408P62	08/31/2026	10/16/2024 / lwona	10/16/2024 / lwona	W3149

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	AL13850-1 / Buffer Solution, PH2 (500ml)	2411E26	10/31/2026	12/09/2024 / lwona	12/09/2024 / lwona	W3161

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	AL14055-3 / PH 4 BUFFER SOLUTION	2411A93	10/30/2026	04/01/2025 / JIGNESH	01/27/2025 / jignesh	W3178

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	1601-1 / PH 10.01 BUFFER,COLOR CD 475ML	2410F80	03/31/2026	04/01/2025 / JIGNESH	03/13/2025 / jignesh	W3191

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
RICCA CHEMICAL COMPANY	1615-16 / pH 12.00 Buffer	2504F20	09/30/2026	04/11/2025 / lwona	04/11/2025 / lwona	W3200

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	EM-BX0035-3 / Barbituric Acid, 100 gms	WXBF3271V	05/16/2029	04/21/2025 / lwona	04/21/2025 / lwona	W3203

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	AL35830-4 / IODINE SOLUTION .025N 1L	MK25A21527	01/20/2029	05/21/2025 / lwona	05/21/2025 / lwona	W3213

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	RC2543-4 / CYANIDE STD 1000PPM 4OZ	1505H73	11/30/2025	05/21/2025 / lwona	05/21/2025 / lwona	W3214

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	AL14455-3 / buffer solution pH 7 yellow	2504D34	03/31/2027	07/02/2025 / jignesh	06/26/2025 / lwona	W3217

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	EMD-FX0410-5 / FORMALDEHYDE SOLUTION 450ML	MKCW7614	12/31/2026	06/26/2025 / Iwona	06/26/2025 / Iwona	W3220

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	LC135457 / Cyanide Standard, 1000 PPM, Second Source	45060288	12/24/2025	07/07/2025 / Iwona	07/07/2025 / Iwona	W3224

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9262-03 / Hexane, Ultra-Resi (cs/4x4L)	25C0362006	04/30/2026	09/15/2025 / JIGNESH	09/12/2025 / JIGNESH	W3240

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	TCX0014-500ML / p-xylene	WZWEH-WU	10/03/2029	10/06/2025 / rubina	10/03/2025 / Iwona	W3242

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	04667-2.5 / Silica Gel (60-200 mesh), 2.5 KG	072154301	10/03/2030	10/03/2025 / Iwona	10/03/2025 / Iwona	W3246

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	AL69870-8 / SODIUM THIOSULFATE, 0.025N, 4LIT RE	250904J	02/28/2027	10/03/2025 / Iwona	10/03/2025 / Iwona	W3248

Hexadecane, 99.0%



Material No.: H223-57
Batch No.: 0000266903
Manufactured Date: 2020/05/05
Retest Date: 2027/05/04
Revision No: 1

Certificate of Analysis

Test	Specification	Result
Assay (CH ₃ (CH ₂) ₁₄ CH ₃) (by GC)	>= 99.0 %	99.3
Infrared Spectrum	Passes Test	PT

For Laboratory, Research or Manufacturing Use

Country of Origin: US
Packaging Site: Paris Mfg Ctr & DC


Jamie Ethier
Vice President Global Quality

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700
Avantor Performance Materials, LLC
100 Matsonford Rd, Suite 200, Radnor, PA 19087. U.S.A. Phone: 610.386.1700

W2817
REC. 04/02/2021

Product Name: Stearic acid, 98%, Thermo Scientific Chemicals
Catalog Number: A12244.14

CAS Number: 57-11-4
Molecular Formula: C₁₈H₃₆O₂
Molecular Weight: 284.48
InChI Key: QIQXTHQIDYTRH-UHFFFAOYSA-N
SMILES: CCCCCCCCCCCCCCCC(O)=O
Synonym: stearic acid acide stearique hydrofol acid 1855 hydrofol acid 1655 industrene 5016
stearic acid, ion(1-) (8Cl) glycon TP glycon DP acidum stearinicum hydrofol acid 150

Product Specification

Appearance (Color): White
Form: Crystals or powder or crystalline powder or flakes or waxy solid
Assay (Silylated GC): ≥97.5%
Melting Point (clear melt): 67.0-74.0°C

Date Of Print: 11/30/2023

Product Specifications are subject to amendment and may change over time. Data contained is accurate as of the date printed.

W3009
rec. 2/27/2023 12

Product Name:

Hexadecane - ReagentPlus®, 99%

Certificate of Analysis

Product Number:

H6703

Batch Number:

SHBP8192

 $\text{CH}_3(\text{CH}_2)_{14}\text{CH}_3$

Brand:

SIAL

CAS Number:

544-76-3

MDL Number:

MFCD00008998

Formula:

C16H34

Formula Weight:

226.44 g/mol

Quality Release Date:

04 AUG 2022

Test	Specification	Result
Appearance (Color)	Colorless or White	Colorless
Appearance (Form)	Liquid or Solid	Liquid
Infrared Spectrum	Conforms to Structure	Conforms
Refractive index at 20 ° C	1.432 - 1.436	1.435
Purity (GC)	≥ 98.5 %	99.3 %
Color Test	≤ 20 APHA	< 5 APHA


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.



W3019
rec 4/3/23

3050 Spruce Street, Saint Louis, MO 63103, USA

Website: www.sigmaaldrich.comEmail USA: techserv@sial.comOutside USA: eurtechserv@sial.com

Certificate of Analysis

Product Name:

Pyridine - anhydrous, 99.8%

Product Number:

270970

Batch Number:

SHBQ2113

Brand:

SIAL

CAS Number:

110-86-1

MDL Number:

MFCD00011732

Formula:

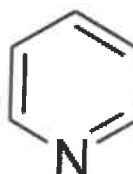
C₅H₅N

Formula Weight:

79.10 g/mol

Quality Release Date:

15 DEC 2022



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)	≤ 0.003 %	0.002 %
Residue on Evaporation	≤ 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.



**PRODUCTOS
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TEL +52 81 13 52 67 67
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CERTIFICATE OF ANALYSIS

PRODUCT :	SODIUM SULFATE CRYSTALS ANHYDROUS		
QUALITY :	ACS (CODE RMB3375)	FORMULA :	Na ₂ SO ₄
SPECIFICATION NUMBER:	6399	RELEASE DATE:	MAY/23/2024
LOT NUMBER :	417203		

TEST	SPECIFICATIONS	LOT VALUES
Assay (Na ₂ SO ₄)	Min. 99.0%	99.8 %
pH of a 5% solution at 25°C	5.2 - 9.2	6.2
Insoluble matter	Max. 0.01%	0.001 %
Loss on ignition	Max. 0.5%	0.1 %
Chloride (Cl)	Max. 0.001%	<0.001 %
Nitrogen compounds (as N)	Max. 5 ppm	<5 ppm
Phosphate (PO ₄)	Max. 0.001%	<0.001 %
Heavy metals (as Pb)	Max. 5 ppm	<5 ppm
Iron (Fe)	Max. 0.001%	<0.001 %
Calcium (Ca)	Max. 0.01%	0.001 %
Magnesium (Mg)	Max. 0.005%	0.001 %
Potassium (K)	Max. 0.008%	0.001 %
Extraction-concentration suitability	Passes test	Passes test
Appearance	Passes test	Passes test
Identification	Passes test	Passes test
Solubility and foreign matter	Passes test	Passes test
Retained on US Standard No. 10 sieve	Max. 1%	0.2 %
Retained on US Standard No. 60 sieve	Min. 94%	96.2 %
Through US Standard No. 60 sieve	Max. 5%	3.5 %
Through US Standard No. 100 sieve	Max. 10%	0.1 %

COMMENTS

QC: PhC Irma Belmares

If you need further details, please call our factory or contact our local distributor.

RE-02-01, Ed. 3

E 3875

Acetone
BAKER RESI-ANALYZED® Reagent
For Organic Residue Analysis

avantor™



Material No.: 9254-03
Batch No.: 24H1462005
Manufactured Date: 2024-05-24
Expiration Date: 2027-05-24
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
Assay ((CH ₃) ₂ CO) (by GC, corrected for water)	>= 99.4 %	99.8 %
Color (APHA)	<= 10	5
Residue after Evaporation	<= 1.0 ppm	0.2 ppm
Substances Reducing Permanganate	Passes Test	Passes Test
Titration Acid (µeq/g)	<= 0.3	0.2
Titration Base (µeq/g)	<= 0.6	<0.1
Water (H ₂ O)	<= 0.5 %	0.2 %
FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)	<= 5	<1
ECD Sensitive Impurities (as Heptachlor Epoxide) Single Peak (pg/mL)	<= 10	1

For Laboratory, Research, or Manufacturing Use
MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD

Country of Origin: United States
Packaging Site: Phillipsburg Mfg Ctr & DC

E3972

Jamie Croak
Director Quality Operations, Bioscience Production

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700

Certificate of Analysis

Product information

Product	pH-Fix 0.3-2.3
REF	92180
LOT	80A0441
Expiration date:	29.02.2028
Date of examination:	23.01.2024
Gradation:	pH 0.3-0.7-1.0-1.3-1.6-1.9-2.3

Confirmation

Hereby we confirm, that the above mentioned product has successfully passed our quality control system in accordance with ISO 9001 and meets the specific quality criteria.

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

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

avantor™



M6151

R → 11/15/25

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 HCl) (by acid–base titrn)	36.5 – 38.0 %	37.9 %
ACS – Color (APHA)	≤ 10	5
ACS – Residue after Ignition	≤ 3 ppm	< 1 ppm
ACS – Specific Gravity at 60°/60°F	1.185 – 1.192	1.191
ACS – Bromide (Br)	≤ 0.005 %	< 0.005 %
ACS – Extractable Organic Substances	≤ 5 ppm	< 1 ppm
ACS – Free Chlorine (as Cl ₂)	≤ 0.5 ppm	< 0.5 ppm
Phosphate (PO ₄)	≤ 0.05 ppm	< 0.03 ppm
Sulfate (SO ₄)	≤ 0.5 ppm	< 0.3 ppm
Sulfite (SO ₃)	≤ 0.8 ppm	0.3 ppm
Ammonium (NH ₄)	≤ 3 ppm	< 1 ppm
Trace Impurities – Arsenic (As)	≤ 0.010 ppm	< 0.003 ppm
Trace Impurities – Aluminum (Al)	≤ 10.0 ppb	1.3 ppb
Arsenic and Antimony (as As)	≤ 5.0 ppb	< 3.0 ppb
Trace Impurities – Barium (Ba)	≤ 1.0 ppb	0.2 ppb
Trace Impurities – Beryllium (Be)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities – Bismuth (Bi)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Boron (B)	≤ 20.0 ppb	< 5.0 ppb
Trace Impurities – Cadmium (Cd)	≤ 1.0 ppb	< 0.3 ppb
Trace Impurities – Calcium (Ca)	≤ 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
Trace Impurities – Germanium (Ge)	≤ 3.0 ppb	< 2.0 ppb
Trace Impurities – Gold (Au)	≤ 4.0 ppb	0.6 ppb
Heavy Metals (as Pb)	≤ 100 ppb	< 50 ppb
Trace 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

 **avantorsm**



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 (Tl)	≤ 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
Trace Impurities – Zirconium (Zr)	≤ 1.0 ppb	0.3 ppb

>>> Continued on page 3 >>>

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

 **avantor**™

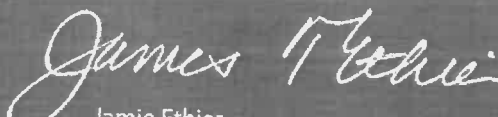


Material No.: 9530-33
Batch No.: 22G2862015

Test	Specification	Result
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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


Jamie Ethier
Vice President Global Quality

Sodium Phosphate, Monobasic, Monohydrate,
Crystal
BAKER ANALYZED® A.C.S. Reagent

(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 ($\text{NaH}_2\text{PO}_4 \cdot \text{H}_2\text{O}$)	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 (Cl)	≤ 5 ppm	< 5
ACS – Sulfate (SO_4)	≤ 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


Jamie Ethier
Vice President Global Quality

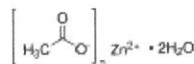
For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700
Avantor Performance Materials, LLC
100 Matsonford Rd, Suite 200, Radnor, PA 19087. U.S.A. Phone: 610.386.1700

Certificate of Analysis

Product Name:

Zinc acetate dihydrate - ACS reagent, $\geq 98\%$

Product Number: 383058
Batch Number: MKCQ9159
Brand: SIGALD
CAS Number: 5970-45-6
MDL Number: MFCD00066961
Formula: $C_4H_6O_4Zn \cdot 2H_2O$
Formula Weight: 219.51 g/mol
Quality Release Date: 06 JAN 2022



W2926
Open 7/5/22
received
on 7/5/22

Test	Specification	Result
Appearance (Color)	White	White
Appearance (Form)	Powder or Crystal or Chunk(s)	Powder
Infrared Spectrum	Conforms to Structure	Conforms
Insoluble Matter	$\leq 0.005\%$	0.003 %
Calcium (Ca)	$\leq 0.005\%$	0.003 %
Chloride (Cl)	≤ 5 ppm	< 5 ppm
Iron (Fe)	≤ 5 ppm	< 5 ppm
Potassium (K)	$\leq 0.01\%$	0.00 %
Magnesium (Mg)	$\leq 0.005\%$	0.003 %
Sodium (Na)	$\leq 0.05\%$	0.03 %
Lead (Pb)	$\leq 0.002\%$	$< 0.001\%$
pH	6.0 - 7.0	6.1
Sulfate (SO ₄)	$\leq 0.005\%$	$< 0.005\%$
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.



Certificate of analysis

W3082 Received on 2/26/2026 by IZ

Product No.: A12244
Product: Stearic acid, 98%
Lot No.: U23E020

Appearance White flakes
Assay 98.7 %

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Certificate of Analysis

W3093
094121
04/03/2024
16

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

°C	0	5	10	15	20	25	30	35	40	45	50
pH	7.12	7.09	7.06	7.04	7.02	7.00	6.99	6.98	6.98	6.97	6.97

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

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

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



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

This test report shall not be reproduced, except in full, without the written approval of Ricca Chemical Company.

Sodium Hydroxide (Pellets)

Material: 0583
Grade: ACS GRADE
Batch Number: 23B1556310

Chemical Formula: NaOH
Molecular Weight: 40
CAS #: 1310-73-2
Appearance:

Manufacture Date: 12/14/2022
Expiration Date: 12/31/2025

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

Internal ID #: 710

Signature

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

Additional Information

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

Product meets analytical specifications of the grades listed.



Sodium Hydroxide (Pellets)

Material: 0583
Grade: ACS GRADE
Batch Number: 23B1556310

Chemical Formula:	NaOH	Manufacture Date:	12/14/2022
Molecular Weight:	40	Expiration Date:	12/31/2025
CAS #:	1310-73-2		
Appearance:		Storage:	Room Temperature

Pellets

Spec Set: 0583ACS

Internal ID #: 710

Signature	Additional Information
We certify that this batch conforms to the specifications listed.	Analysis may have been rounded to significant digits in specification limits.
This document has been electronically produced and is valid without a signature.	Product meets analytical specifications of the grades listed.
Leona Edwardson, Quality Control Sr. Manager - Solon VWR Chemicals, LLC. 28600 Fountain Parkway, Solon OH 44139 USA	

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.



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 (Iodine present)	Passed

Specification	Reference
Starch Solution	APHA (4500-S2- F)
Starch Indicator Solution	APHA (4500-CI 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-CI 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)



Certificate of Analysis

Buffer, Reference Standard, pH 2.00 ± 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.

°C	10	15	20	25	30	35	40	45	50
pH	1.93	1.98	1.98	2.00	2.01	2.03	2.03	2.04	2.04

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

Test	Specification	Result
Appearance	Colorless liquid	Passed

*Not a certified value.

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

pH measurements were performed in our Pocomoke City, MD laboratory under ISO/IEC 17025 accreditation (ANAB Certificate L2387.01) and are certified traceable to National Institute of Standards and Technology (NIST) Standard Reference Material as indicated above via an unbroken chain of comparisons. The uncertainty is calculated from the uncertainty of the measurement variation from sample to sample, the uncertainty in the NIST Standard Reference Material, and the uncertainty of the measurement process. The uncertainty is multiplied by k=2, corresponding to 95% coverage in a normal distribution. Volumetric glassware complies with Class A tolerance requirements of ASTM E 288 and NIST Circular 434; it is calibrated before first use and recalibrated regularly in accordance with ASTM E 542 and NIST Procedure NBSIR 74-461. Balances are calibrated regularly with weights certified traceable to the NIST national mass standard. Thermometers and temperature probes are calibrated before first use and recalibrated regularly with a thermometer traceable to NIST standards. All products are prepared according to master documents that assure manufacture according to validated methods. Batch records document raw material traceability and production and testing history for each lot manufactured.

Part Number	Size / Package Type	Shelf Life (Unopened Container)
1493-1	4 L natural poly	24 months
1493-16	500 mL natural poly	24 months
1493-1CT	4 L Cubitainer®	24 months
1493-2.5	10 L Cubitainer®	24 months
1493-32	1 L natural poly	24 months

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



Jose Pena (11/11/2024)
Operations Manager

This product was tested in an ISO 17025 Accredited Laboratory

This test report shall not be reproduced, except in full, without the written approval of Ricca Chemical Company.

Certificate of Analysis

231758 58

Buffer, Reference Standard, pH 4.00 ± 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 ±0.01 at 25 °C only. All other pH values at their corresponding temperatures are accurate to ± 0.05.

°C	0	5	10	15	20	25	30	35	40	45	50
pH	4.00	4.00	4.00	4.00	4.00	4.00	4.01	4.02	4.03	4.04	4.06

Name	CAS#	Grade
Water	7732-18-5	ACS/ASTM/USP/EP
Potassium Acid Phthalate	877-24-7	Buffer
Preservative	Proprietary	Commercial
Red Dye	Proprietary	Purified

Test	Specification	Result
Appearance	Red liquid	Passed

Test	Certified Value	Uncertainty	NIST SRM#
pH at 25°C (Method: SQCP027, SQCP033)	4.008	0.02	185i, 186-I-g, 186-II-g

Specification	Reference
Commercial Buffer Solutions	
Buffer B	ASTM (D 1293 B)
Buffer B	ASTM (D 5464)
Buffer B	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)
1501-16	500 mL natural poly	24 months
1501-2.5	10 L Cubitainer®	24 months
1501-5	20 L Cubitainer®	24 months

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



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customerservice@riccachemical.com

Certificate of Analysis

Buffer, Reference Standard, pH 10.00 ± 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 ±0.01 at 25 °C only. All other pH values at their corresponding temperatures are accurate to ± 0.05.

°C	0	5	10	15	20	25	30	35	40	50
pH	10.31	10.23	10.17	10.11	10.05	10.00	9.95	9.91	9.87	9.81

Name	CAS#	Grade
Water	7732-18-5	ACS/ASTM/USP/EP
Sodium Carbonate	497-19-8	ACS
Sodium Bicarbonate	144-55-8	ACS
Sodium Hydroxide	1310-73-2	Reagent
Preservative	Proprietary	
Blue Dye	Proprietary	

Test	Specification	Result
Appearance	Blue liquid	Passed

Test	Certified Value	Uncertainty	NIST SRM#
pH at 25°C (Method: SQCP027, SQCP033)	10.009	0.02	186-I-g, 186-II-g, 191d

Specification	Reference
Commercial Buffer Solutions	
Buffer C	ASTM (D 1293 B)
Buffer C	ASTM (D 5464)
	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)
1601-1	4 L natural poly	18 months
1601-16	500 mL natural poly	18 months
1601-1CT	4 L Cubitainer®	18 months
1601-2.5	10 L Cubitainer®	18 months
1601-32	1 L natural poly	18 months
1601-5	20 L Cubitainer®	18 months

Version: 1.3

Lot Number: 2410F80

Product Number: 1601

Page 1 of 2



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.

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

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

Test	Specification	Result
Appearance	Colorless liquid	Passed

*Not a certified value.

Test	Certified Value	Uncertainty	NIST SRM#
pH at 25°C (Method: SQCP027, SQCP033)	12.009	0.02	186-I-g, 186-II-g, 191d

pH measurements were performed in our Pocomoke City, MD laboratory under ISO/IEC 17025 accreditation (ANAB Certificate L2387.01) and are certified traceable to National Institute of Standards and Technology (NIST) Standard Reference Material as indicated above via an unbroken chain of comparisons. The uncertainty is calculated from the uncertainty of the measurement variation from sample to sample, the uncertainty in the NIST Standard Reference Material, and the uncertainty of the measurement process. The uncertainty is multiplied by k=2, corresponding to 95% coverage in a normal distribution. Volumetric glassware complies with Class A tolerance requirements of ASTM E 288 and NIST Circular 434; it is calibrated before first use and recalibrated regularly in accordance with ASTM E 542 and NIST Procedure NBSIR 74-461. Balances are calibrated regularly with weights certified traceable to the NIST national mass standard. Thermometers and temperature probes are calibrated before first use and recalibrated regularly with a thermometer traceable to NIST standards. All products are prepared according to master documents that assure manufacture according to validated methods. Batch records document raw material traceability and production and testing history for each lot manufactured.

Part Number	Size / Package Type	Shelf Life (Unopened Container)
1615-1	4 L natural poly	18 months
1615-16	500 mL clear PET-G	18 months
1615-5	20 L Cubitainer®	18 months

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



Jose Pena (04/08/2025)
Operations Manager

This product was tested in an ISO 17025 Accredited Laboratory

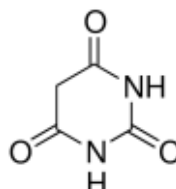
This test report shall not be reproduced, except in full, without the written approval of Ricca Chemical Company.

Certificate of Analysis

Product Name:

Barbituric acid - ReagentPlus®, 99%

Product Number: 185698
Batch Number: WXBFB3271V
Brand: SIAL
CAS Number: 67-52-7
Formula: C₄H₄N₂O₃
Formula Weight: 128,09 g/mol
Quality Release Date: 16 MAY 2024



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



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.





Material	BDHVBDH7206-1
Material Description	IODINE SOLUTION 0.025N
Lot	25A2461008
Expires end of	2029-Jan-20
Molecular mass	0
Last Quality Control	2025-Jan-24
Date of manufacture	2025-Jan-21
Made in	United States
Manufacturer Source Batch	MK25A21527

Additional information

Characteristics	Specifications	Measured values
Prepared to formulation on file	Confirmed	Confirmed
Appearance	Passes Test	Passes Test
Normality, N	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.

VWR International LLC, Radnor Corporate Center, Building One, Suite 200, 100 Matsonford Road, Radnor, PA 19087, USA.

VWR International bv, Haasrode Research Park Zone 2020, Geldenaaksebaan 464, 3001 Leuven, Belgium

BDHVBDH72 25A2461008 Page 1 of 126

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)

Certificate of Analysis

Buffer, Reference Standard, pH 7.00 ± 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.

°C	0	5	10	15	20	25	30	35	40	45	50
pH	7.12	7.09	7.06	7.04	7.02	7.00	6.99	6.98	6.98	6.97	6.97

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

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

Test	Certified Value	Uncertainty	NIST SRM#
pH at 25°C (Method: SQCP027, SQCP033)	7.003	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 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)



Jose Pena (04/03/2025)
Operations Manager

This product was tested in an ISO 17025 Accredited Laboratory

This test report shall not be reproduced, except in full, without the written approval of Ricca Chemical Company.

Certificate of Analysis

Product Name:

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

Product Number: 252549

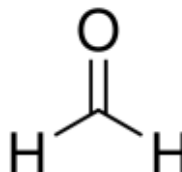
Batch Number: MKCW7614

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 H ₂ SO ₄	36.5 - 38.0 %	36.6 %
Residue on ignition (Ash)	≤ 0.005 %	0.004 %
Color Test	≤ 10 APHA	5 APHA
Chloride (Cl)	≤ 5 ppm	< 5 ppm
Iron (Fe)	≤ 5 ppm	< 1 ppm
Heavy Metals	≤ 5 ppm	2 ppm
by ICP-OES		
Sulfate (SO ₄)	< = 0.002%	< = 0.002%
Titrateable 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.



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



Michael Monteleone
Chemistry Supervisor - Quality Control

ISO9001:2015 Registration #0306-01

n-Hexane 95%
ULTRA RESI-ANALYZED
For Organic Residue Analysis

 **avantorsTM**



W3240
JP
Op4tel. 07/15/2025

Material No.: 9262-03
Batch No.: 25C0362006
Manufactured Date: 2025-01-29
Expiration Date: 2026-04-30
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)	<= 5	1
ECD Sensitive Impurities (as HeptachlorEpoxide) Single Peak (pg/mL)	<= 10	6
ECD-Sensitive Impurities (as EthyleneDibromide) - Single Impurity Peak (ng/mL)	<= 5	4
Assay (Total Saturated C ₆ Isomers) (by GC, corrected for water)	>= 99.5 %	100.0 %
Assay (as n-Hexane) (by GC, corrected for water)	>= 95 %	100 %
Color (APHA)	<= 10	10
Residue after Evaporation	<= 1.0 ppm	0.2 ppm
Substances Darkened by H ₂ SO ₄	Passes Test	Passes Test
Water (by KF, coulometric)	<= 0.05 %	<0.01 %

For Laboratory, Research, or Manufacturing Use
MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD

Country of Origin: United States
Packaging Site: Phillipsburg Mfg Ctr & DC



Jamie Croak
Director Quality Operations, Bioscience Production



W3242 Received on 10/3/25 by IZ

Certificate of Analysis

10/06/2025(JST)

TOKYO CHEMICAL INDUSTRY CO.,LTD.
T-PLUS Nihonbashi-Kodemmacho
16-12 Nihonbashi-kodemmacho, Chuo-ku, Tokyo 103-0001, Japa

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

TCI Lot numbers are 4-5 characters in length. Characters listed after the first 4-5 characters are control numbers for internal purpose only.
The contents of the specifications are subject to change without advance notice. The specification values displayed here are the most up to date values. There may be cases where the product labels display a different specification, however, the product quality still meets the latest specification.

Customer Service:

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

Takuya Nishioka
Quality Assurance Department Manager

Certificate of Analysis

Product information

Product: Silica 60, 0.063 - 0.200 mm
REF: 815330.25
LOT: 072154301

Technical data

Material: Synthetic amorphous silica (irregular shaped)
Description: White powder

Parameter	Specifications	Result
Specific surface (m ² /g, N2 adsorption) :	450 - 550	537
Particle size distribution (screen analysis) :	< 63 µm max. 5 %	0.3
	> 200 µm max. 5 %	0.1
pH value :	6.0 - 7.5	7
Water content (%) :	< 7	3.6
Pore volume (mL/g, N2 adsorption) :	0.65 - 0.85	0.82
Mean pore size (Å, N2 adsorption) :	50 - 70	62

Expiry

This product has no stated expiration date or shelf life.

We recommend to use the product within a time period of 5 years after date of QC release.

This time period is valid only if the product is stored under dry and frost-free conditions.

After 5 years we recommend retesting the adsorbent to make sure that the expected performance is still given.

Confirmation

Hereby we confirm, that the above mentioned product has successfully passed our quality control system in accordance with ISO 9001 and meets the specific quality criteria.

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

Date of measurement: 16.02.2023 22:00

Certificate of Analysis

Sodium Thiosulfate, 0.0250 Normal (N/40)

Lot Number: 250904J

Product Number: 7900

Manufacture Date: SEP 03, 2025

Expiration Date: FEB 2027

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
Organic Preservative	Proprietary	
Sodium Carbonate	497-19-8	ACS
Sodium Thiosulfate Pentahydrate	10102-17-7	ACS

Test	Specification	Result	NIST SRM#
Appearance	Colorless liquid	Passed	
Assay (vs. Potassium Iodate/Starch)	0.02499-0.02501 N at 20°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-CI 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
7900-32	1 L natural poly	18 months

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



Jose Pena (09/03/2025)
Operations Manager

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PERCENT SOLID

Supervisor: Iwona
Analyst: jignesh
Date: 10/23/2025

OVENTEMP IN Celsius(°C): 107
Time IN: 17:15
In Date: 10/22/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
OvenID: M OVEN#1

OVENTEMP OUT Celsius(°C): 104
Time OUT: 08:15
Out Date: 10/23/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: % SOLID-OVEN

QC:LB137614

Lab ID	Client SampleID	Dish #	Dish Wt(g) (A)	Sample Wt(g)	Dish + Sample Wt(g) (B)	Dish+Dry Sample Wt(g) (C)	% Solid	Comments
Q3419-01	PR-132-S16-015094-20251021	1	1.15	11.01	12.16	7.14	54.4	
Q3419-02	Q3419-01MS	2	1.15	11.01	12.16	7.14	54.4	
Q3419-03	Q3419-01MSD	3	1.15	11.01	12.16	7.14	54.4	
Q3419-04	PR-132-S16-119133-20251021	4	1.16	10.07	11.23	6.37	51.7	
Q3419-05	PR-132-S16-094119-20251021	5	1.19	11.07	12.26	6.38	46.9	
Q3422-01	PR132-S15-000008-20251017	6	1.18	11.02	12.2	7.58	58.1	
Q3424-01	PR132-DP3-20251021	7	1.15	10.36	11.51	5.91	45.9	
Q3424-02	PR132-S11-010080-20251021	8	1.12	10.72	11.84	6.49	50.1	
Q3424-03	PR132-S14-00094-20251021	9	1.14	11.34	12.48	6.82	50.1	
Q3427-01	TP-8	10	1.11	10.77	11.88	10.84	90.3	
Q3427-02	TP-8-EPH	11	1.18	10.97	12.15	10.98	89.3	
Q3427-03	TP-8-VOC	12	1.19	10.26	11.45	10.52	90.9	
Q3429-01	40309	13	1.00	1.00	2.00	2.00	100.0	WIPE SAMPLE
Q3429-02	40310	14	1.00	1.00	2.00	2.00	100.0	WIPE SAMPLE
Q3430-01	BUR-25-0095	15	1.00	1.00	2.00	2.00	100.0	WIPE SAMPLE
Q3431-01	EO-02-10222025	16	1.11	10.55	11.66	10.64	90.3	
Q3431-02	EO-02-10222025-E2	17	1.17	10.59	11.76	10.59	89.0	
Q3434-01	PR132-WC1-20251022	18	1.13	10.43	11.56	7.17	57.9	

$$\% \text{ Solid} = \frac{(C-A) * 100}{(B-A)}$$

WORKLIST(Hardcopy Internal Chain)

137614

WorkList Name : %1-102225 WorkList ID : 192597 Department : Wet-Chemistry Date : 10-22-2025 09:03:13

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q3419-01	PR-132-S16-015094-20251021	Solid	Percent Solids	Cool 4 deg C	AECO02	D41	10/21/2025	Chemtech -SO
Q3419-02	Q3419-01MS	Solid	Percent Solids	Cool 4 deg C	AECO02	D41	10/21/2025	Chemtech -SO
Q3419-03	Q3419-01MSD	Solid	Percent Solids	Cool 4 deg C	AECO02	D41	10/21/2025	Chemtech -SO
Q3419-04	PR-132-S16-119133-20251021	Solid	Percent Solids	Cool 4 deg C	AECO02	D41	10/21/2025	Chemtech -SO
Q3419-05	PR-132-S16-094119-20251021	Solid	Percent Solids	Cool 4 deg C	AECO02	D41	10/21/2025	Chemtech -SO
Q3422-01	PR132-S15-000008-20251017	Solid	Percent Solids	Cool 4 deg C	AECO02	D41	10/21/2025	Chemtech -SO
Q3424-01	PR132-DP3-20251021	Solid	Percent Solids	Cool 4 deg C	AECO02	D31	10/21/2025	Chemtech -SO
Q3424-02	PR132-S11-010080-20251021	Solid	Percent Solids	Cool 4 deg C	AECO02	D31	10/21/2025	Chemtech -SO
Q3424-03	PR132-S14-00094-20251021	Solid	Percent Solids	Cool 4 deg C	AECO02	D31	10/21/2025	Chemtech -SO
Q3427-01	TP-8	Solid	Percent Solids	Cool 4 deg C	PSEG03	D41	10/21/2025	Chemtech -SO
Q3427-02	TP-8-EPH	Solid	Percent Solids	Cool 4 deg C	PSEG03	D41	10/21/2025	Chemtech -SO
Q3427-03	TP-8-VOC	Solid	Percent Solids	Cool 4 deg C	PSEG03	D41	10/21/2025	Chemtech -SO
Q3429-01	40309	Solid	Percent Solids	Cool 4 deg C	PSEG03	D51	10/22/2025	Chemtech -SO
Q3429-02	40310	Solid	Percent Solids	Cool 4 deg C	PSEG03	D51	10/22/2025	Chemtech -SO
Q3430-01	BUR-25-0095	Solid	Percent Solids	Cool 4 deg C	PSEG03	D51	10/22/2025	Chemtech -SO
Q3431-01	EO-02-10222025	Solid	Percent Solids	Cool 4 deg C	PSEG05	D41	10/22/2025	Chemtech -SO
Q3431-02	EO-02-10222025-E2	Solid	Percent Solids	Cool 4 deg C	PSEG05	D41	10/22/2025	Chemtech -SO
Q3434-01	PR132-WC1-20251022	Solid	Percent Solids	Cool 4 deg C	AECO02	D41	10/22/2025	Chemtech -SO

Date/Time 10/22/25 15:00

Raw Sample Received by: SO WWC

Raw Sample Relinquished by: [Signature]

Date/Time

Raw Sample Received by: [Signature]

Raw Sample Relinquished by: [Signature]



SHIPPING DOCUMENTS

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CLIENT INFORMATION

REPORT TO BE SENT TO:

COMPANY: AECOM
ADDRESS: 605 3rd Ave
CITY: New York STATE: NY ZIP: 10138
ATTENTION: Robert Forstner
PHONE: 212-377-8721 FAX:

CLIENT PROJECT INFORMATION

PROJECT NAME: Port Richmond 132
PROJECT NO.: 60693745 LOCATION: Staten Isl
PROJECT MANAGER: Rob Forstner
e-mail: Robert.Forstner@aecom.com
PHONE: 11 FAX:

CLIENT BILLING INFORMATION

BILL TO: AECOM PO#: 11
ADDRESS: 11
CITY: STATE: ZIP:
ATTENTION: Rob Forstner PHONE: 11

ANALYSIS

DATA TURNAROUND INFORMATION

FAX (RUSH) DAYS*
HARDCOPY (DATA PACKAGE): DAYS*
EDD: DAYS*

*TO BE APPROVED BY CHEMTECH

STANDARD HARDCOPY TURNAROUND TIME IS 10 BUSINESS

DATA DELIVERABLE INFORMATION

☐ Level 1 (Results Only) ☐ Level 4 (QC + Full Raw Data)
☐ Level 2 (Results + QC) ☐ NJ Reduced ☐ US EPA CLP
☐ Level 3 (Results + QC) ☐ NYS ASP A ☒ NYS ASP B
+ Raw Data ☐ Other
☐ EDD FORMAT

1. SVOC 2. Pesticides 3. Hg Metals 4. Corrosivity Light 5. TPH 6. VOC 7. Flash Point 8. 9.

PRESERVATIVES

COMMENTS

ALLIANCE SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE		SAMPLE COLLECTION		# OF BOTTLES										COMMENTS
			COMP	GRAB	DATE	TIME		1	2	3	4	5	6	7	8	9	
1.	PR132-WC1-20281022	S		X	10/22	10:18	9	X	X	X	X	X	X				
2.	PR132-WC2-20281022	A		X	10/22	10:30	7	X	X	X	X	X	X	X			
3.	TB	A			10/22		3										
4.																	
5.																	
6.																	
7.																	
8.																	
9.																	
10.																	

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION INCLUDING COURIER DELIVERY

RELINQUISHED BY SAMPLER:	DATE/TIME:	RECEIVED BY:	Conditions of bottles or coolers at receipt:	☐ COMPLIANT ☐ NON COMPLIANT ☐ COOLER TEMP	3.8 °C
1. Jim Alderson	10/22/25 1pm	1. [Signature]	Comments:		
RELINQUISHED BY SAMPLER:	DATE/TIME:	RECEIVED BY:			
2.		2.			
RELINQUISHED BY SAMPLER:	DATE/TIME:	RECEIVED BY:			
3. [Signature]	10-22-25	3.			

Page ____ of ____

CLIENT: ☐ Hand Delivered ☐ Other

Shipment Complete

☐ YES ☐ NO

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Laboratory Certification

Certified By	License No.
Connecticut	PH-0830
DOD ELAP (ANAB)	L2219
Maine	2024021
Maryland	296
New Hampshire	255425
New Jersey	20012
New York	11376
Pennsylvania	68-00548
Soil Permit	525-24-234-08441
Texas	TX-C25-00189
Virginia	460312

LOGIN REPORT/SAMPLE TRANSFER

Order ID : Q3434	AECO02	Order Date : 10/22/2025 1:40:00 PM	Project Mgr :
Client Name : AECOM		Project Name : AE1-CTY 3.2.Z-PR-DOCK	Report Type : NYS ASP B
Client Contact : Rob Forstner		Receive DateTime : 10/22/2025 2:16:00 PM	EDD Type : EQUIS
Invoice Name : AECOM		Purchase Order :	Hard Copy Date :
Invoice Contact : Rob Forstner			Date Signoff :

LAB ID	CLIENT ID	MATRIX	SAMPLE DATE	SAMPLE TIME	TEST	TEST GROUP	METHOD	FAX DATE	DUE DATES
Q3434-01	PR132-WC1-20251022	Solid	10/22/2025	10:18					
					VOC-TCLVOA-10		8260D	10 Bus. Days	
Q3434-02	PR132-WC2-20251022	Water	10/22/2025	10:30					
					VOC-TCLVOA-10		8260D	10 Bus. Days	
Q3434-03	TB	Water	10/22/2025	10:00					
					VOC-TCLVOA-10		8260D	10 Bus. Days	

Relinquished By :

Date / Time :

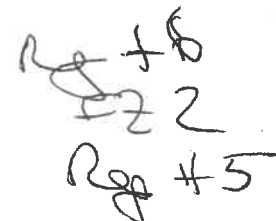

10-22-25 1505

Received By :

Date / Time :


10/22/25 15:05

Storage Area : VOA Refridgerator Room


Rg #6
Rg #2
Rg #5