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

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

Table Of Contents for Q3434

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

Cover Page

Order ID : Q3434

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

Client : AECOM

Lab Sample Number	Client Sample Number
Q3434-01	PR132-WC1-20251022
Q3434-02	PR132-WC2-20251022
Q3434-03	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 : _____

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.

Signature_____

284 Sheffield Street, Mountainside NJ 07092
Tel. 908-789-8900 Fax: 908-789-8922

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.

_____ _____

QA REVIEW Date

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

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 Castody	✓
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

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

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-WC1-20251022**	**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-WC2-20251022**	**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

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

Report of Analysis

Client:	AECOM	Date Collected:	10/22/25 10:18
Project:	AE1-CTY 3.2.Z-PR-DOCK-Des-ODC - 60693795-1719206	Date Received:	10/22/25
Client Sample ID:	PR132-WC1-20251022	SDG No.:	Q3434
Lab Sample ID:	Q3434-01	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

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

Report of Analysis

Client:	AECOM	Date Collected:	10/22/25 10:30
Project:	AE1-CTY 3.2.Z-PR-DOCK-Des-ODC - 60693795-1719206	Date Received:	10/22/25
Client Sample ID:	PR132-WC2-20251022	SDG No.:	Q3434
Lab Sample ID:	Q3434-02	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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

RAW DATA

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)

VB 13 F618

WorkList Name : corrsovity 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: SB WC1

Raw Sample Relinquished by:

Date/Time 10/22/25 17:40

Raw Sample Received by:

Raw Sample Relinquished by: SB WC1

Reviewed By:lwona
On:10/23/2025
10:32:23 AM
Inst Id :WC PH
METER-1

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]

Reviewed By:lwona
On:10/23/2025
10:32:14 AM
Inst Id :WC PH
METER-1

Reviewed By:Iwona
On:10/23/2025 4:19:07 PM
Inst Id :IGN-1
LB :LB137627

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)

LB137627

WorkList Name : fp-10-23. **WorkList ID :** 192645 **Department :** Wet-Chemistry **Date :** 10-23-2025 08:15:27

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 (WC)
Raw Sample Relinquished by: JM (WC)

Date/Time 10/23/2025 11:15
Raw Sample Received by: JM (WC)
Raw Sample Relinquished by: RM (WC)

Reviewed By:iwona On:10/23/2025 4:19:07 PM Inst Id :IGN-1 LB :LB137627

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

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

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

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

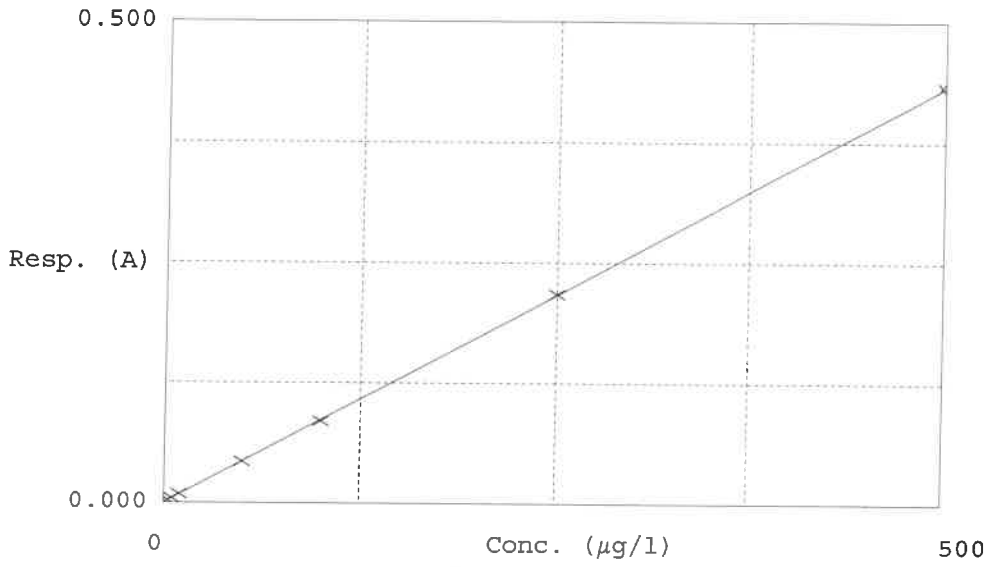
Test Total CN

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

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

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/cA	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	

Reviewed By:Iwona
On:10/24/2025 3:36:13 PM
Inst Id :FLAME
LB :LB137640

Analytical Summary Report

Analysis Method: 1030 **Reviewed By:** Eman

Parameter: Ignitability **Supervisor Review By:** Iwona

Run Number: LB137640

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

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

1b137640

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	D41	10/22/2025	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: MCoC1

Date/Time 10/24/25 12:00
Raw Sample Received by: MCoC1
Raw Sample Relinquished by: EM(WC)

Reviewed By:iwona
On:10/24/2025 3:36:13 PM
Inst Id :FLAME
LB :LB137640

CHEMTECH

Analytical Summary Report

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

CHEMTECH

Analytical Summary Report

Analysis Method: 9034
Parameter: Reactive Sulfide
Run Number: LB137645

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 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
Extration IN Time: 09:00
Extration 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)**
1.0000 gram Balance: 1.0004 **(0.9950-1.0050)**
Bal Check Time: 09:10

In OVEN TEMP1 : 71 °C **Dessicator Time In1 :** 11:26
In Time1: 10:30
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)**
1.0000 gram Balance: 1.0005 **(0.9950-1.0050)**
Bal Check Time: 14:02

In OVEN TEMP2 : 70 °C **Dessicator Time In2 :** 13:26
In Time2: 12:47
Out OVEN TEMP2: 71 °C **Dessicator Time Out2:** 14:00
Out Time2: 13:25

WORKLIST(Hardcopy Internal Chain)

VB 137(51)

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 10/27/25 08:10

Raw Sample Received by:

Raw Sample Relinquished by:

Date/Time 10/27/25 15:30

Raw Sample Received by:

Raw Sample Relinquished by:

Reviewed By:lwona
On:10/28/2025
10:55:05 AM
Inst Id :WC SC-3
LB :LB137651

Alliance TECHNICAL GROUP

Soil/Sludge Reactive Cyanide Preparation Sheet

PB170241

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

Pippete 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

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

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

Alliance TECHNICAL GROUP

Soil/Sludge Reactive Cyanide Preparation Sheet

PB170241

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	10/23/2025	9012B
Q3440-04	JB-2	Solid	Reactive Cyanide	Cool 4 deg C	PSEG03	D41	10/22/2025	9012B
Q3449-06	CF-620-COMP-41	Solid	Reactive Cyanide	Cool 4 deg C	PSEG03	D21	10/23/2025	9012B
Q3451-04	TP-11	Solid	Reactive Cyanide	Cool 4 deg C	PSEG03	D31	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	10/24/2025	9012B

Date/Time 10/24/2025 10:35
Raw Sample Received by: RM(wc)
Raw Sample Relinquished by: [signature]

Date/Time 10/24/2025 13:00
Raw Sample Received by: [signature]
Raw Sample Relinquished by: RM(wc)

Alliance TECHNICAL GROUP

Soil/Sludge Reactive Sulfide Preparation Sheet

PB170244

SOP ID : M9030B-Sulfide-13

SDG No : N/A

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

Matrix : SOIL

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

Pippete ID : WC

Balance ID : WC SC-7

Hood ID : HOOD#2 **Digestion tube ID :** M5595 **Block Thermometer ID :** N/A

Block ID : WC-DIST-BLOCK-1 **Filter paper ID :** N/A **Prep Technician Signature:** RM

Weigh By : RM **pH Meter ID :** N/A **Supervisor Signature:** 12

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

Chemical Used	ML/SAMPLE USED	Lot Number
0.5M 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

Alliance TECHNICAL GROUP

Soil/Sludge Reactive Sulfide Preparation Sheet

PB170244

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	10/22/2025	9034
Q3440-04	JB-2	Solid	Reactive Sulfide	Cool 4 deg C	PSEG03	D41	10/23/2025	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: RM (WC)
Raw Sample Relinquished by: [signature]

Date/Time 10/24/2025 13:00
Raw Sample Received by: [signature]
Raw Sample Relinquished by: RM (WC)

Alliance TECHNICAL GROUP

Water Reactive Sulfide Preparation Sheet

PB170245

SOP ID : M9030B-Sulfide-13

SDG No : N/A

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

Matrix : WATER

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

Pippete ID : WC

Balance ID : N/A

Hood ID : HOOD#2

Digestion tube ID : M5595

Block Thermometer ID : N/A

Block ID : WC-DIST-BLOCK-1

Filter paper ID : N/A

Prep Technician Signature: RM

Weigh By : N/A

pH Meter ID : N/A

Supervisor Signature: 12

Standared 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:

10/24/2025 R14

N/A

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

Alliance TECHNICAL GROUP

Water Reactive Sulfide Preparation Sheet

PB170245

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 (WC)
Raw Sample Relinquished by: [signature]

Date/Time 10/24/2025 13:00
Raw Sample Received by: [signature]
Raw Sample Relinquished by: RM (WC)

Alliance TECHNICAL GROUP

Water Reactive Cyanide Preparation Sheet

PB170248

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

Pippete 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: [signature]

Standared 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 WC	RM WC
	Preparation Group	**Analysis Group**

Alliance TECHNICAL GROUP

Water Reactive Cyanide Preparation Sheet

PB170248

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: RM (WC)
Raw Sample Relinquished by: JP (CAM)

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

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

Instrument ID: WC PH METER-1

Daily Analysis Runlog For Sequence/QCBatch 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

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

Instrument ID: WC PH METER-1

Daily Analysis Runlog For Sequence/QCBatch 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

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

Instrument ID: IGN-1

Daily Analysis Runlog For Sequence/QCBatch 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

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

Instrument ID: KONELAB

Daily Analysis Runlog For Sequence/QCBatch 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

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

Instrument ID: KONELAB

Daily Analysis Runlog For Sequence/QCBatch 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

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

Instrument ID: FLAME

Daily Analysis Runlog For Sequence/QCBatch 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

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

Instrument ID: TITRAMETRIC

Daily Analysis Runlog For Sequence/QCBatch 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

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

Instrument ID: TITRAMETRIC

Daily Analysis Runlog For Sequence/QCBatch 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

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

Instrument ID: WC SC-3

Daily Analysis Runlog For Sequence/QCBatch 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

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

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,

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

Extractions STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
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

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
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

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

Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3371	Cyanide LCS Spike Solution, 5PPM	WP113838	07/08/2025	12/24/2025	Rubina Mughal	None	WETCHEM_PIPETTE_3 (WC)	Iwona Zarych 07/08/2025

FROM 1.00000ml of W3224 + 199.00000ml of WP113836 = Final Quantity: 200.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
160	0.5M ZINC ACETATE	WP114311	08/19/2025	02/17/2026	Rubina Mughal	WETCHEM_SCALE_8 (WCSC-7)	WETCHEM_PIPETTE_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

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

Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
607	PYRIDINE-BARBITURIC ACID	WP114324	08/19/2025	02/17/2026	Rubina Mughal	WETCHEM_SCALE_5 (WCSC-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

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
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

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

Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
2470	1664A SPIKING SOLN	WP115017	10/02/2025	04/02/2026	Jignesh Parikh	WETCHEM_SCALE_7 (WCSC-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

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3374	1664A QCS spiking solution-SS	WP115018	10/02/2025	04/02/2026	Jignesh Parikh	WETCHEM_SCALE_7 (WCSC-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

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

Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
539	CN BUFFER	WP115157	10/10/2025	12/03/2025	Rubina Mughal	WETCHEM_SCALE_8 (WCSC-7)	None	Iwona Zarych 10/14/2025

FROM 138.00000gram of W2668 + 862.00000ml of W3112 = Final Quantity: 1000.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3456	Cyanide Intermediate Working Std, 5PPM	WP115304	10/24/2025	10/25/2025	Rubina Mughal	None	WETCHEM_PIPETTE_3 (WC)	Iwona Zarych 10/24/2025

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

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

Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
4	Calibation standard 500 ppb	WP115305	10/24/2025	10/25/2025	Rubina Mughal	None	WETCHEM_PIPETTE_3 (WC)	Iwona Zarych 10/24/2025

FROM 45.00000ml of WP113836 + 5.00000ml of WP115304 = Final Quantity: 50.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3761	Calibration-CCV CN Standard 250 ppb	WP115306	10/24/2025	10/25/2025	Rubina Mughal	None	WETCHEM_PIPETTE_3 (WC)	Iwona Zarych 10/24/2025

FROM 2.50000ml of WP115304 + 47.50000ml of WP113836 = Final Quantity: 50.000 ml

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

Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
6	Calibration Standard 100 ppb	WP115307	10/24/2025	10/25/2025	Rubina Mughal	None	WETCHEM_PIPETTE_3 (WC)	Iwona Zarych 10/24/2025

FROM 1.00000ml of WP115304 + 49.00000ml of WP113836 = Final Quantity: 50.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
7	Calibration Standard 50 ppb	WP115308	10/24/2025	10/25/2025	Rubina Mughal	None	WETCHEM_PIPETTE_3 (WC)	Iwona Zarych 10/24/2025

FROM 0.50000ml of WP115304 + 49.50000ml of WP113836 = Final Quantity: 50.000 ml

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

Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
8	Calibration Standard 10 ppb	WP115309	10/24/2025	10/25/2025	Rubina Mughal	None	WETCHEM_PIPETTE_3 (WC)	Iwona Zarych 10/24/2025

FROM 1.00000ml of WP115305 + 49.00000ml of WP113836 = Final Quantity: 50.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
9	Calibration Standard 5 ppb	WP115310	10/24/2025	10/25/2025	Rubina Mughal	None	WETCHEM_PIPETTE_3 (WC)	Iwona Zarych 10/24/2025

FROM 0.50000ml of WP115305 + 49.50000ml of WP113836 = Final Quantity: 50.000 ml

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

Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
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

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
2168	RCN ICV STD, 100 PPB	WP115312	10/24/2025	10/25/2025	Rubina Mughal	None	WETCHEM_PIPETTE_3 (WC)	Iwona Zarych 10/24/2025

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

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

Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1582	Chloramine T solution, 0.014M	WP115313	10/24/2025	10/25/2025	Rubina Mughal	WETCHEM_SCALE_5 (WCSC-5)	Glass Pipette-A	Iwona Zarych 10/24/2025

FROM 0.08000gram of W3139 + 20.00000ml of W3112 = Final Quantity: 20.000 ml

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

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	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, CRYS, 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

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

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
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,CRYS,ACS,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

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

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	DIW / DI Water	Daily Lab-Certified	07/03/2029	07/03/2024 / Iwona	07/03/2024 / Iwona	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 / Iwona	07/08/2024 / Iwona	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 / Iwona	09/09/2024 / Iwona	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 / Iwona	10/16/2024 / Iwona	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 / Iwona	12/09/2024 / Iwona	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

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

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	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 / Iwona	04/11/2025 / Iwona	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 / Iwona	04/21/2025 / Iwona	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 / Iwona	05/21/2025 / Iwona	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 / Iwona	05/21/2025 / Iwona	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 / Iwona	W3217

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

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	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,4LITRE	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

ThermoFisher SCIENTIFIC

W2817
Rec. 04/02/2021

Product Specification

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:	QIQXTHQIDYTFRH-UHFFFAOYSA-N
SMILES:	CCCCCCCCCCCCCCCCCC(O)=O
Synonym:	stearic acid acide stearique hydrofol acid 1855 hydrofol acid 1655 industrene 5016 stearic acid, ion(1-) (8CI) glycon TP glycon DP acidum stearinicul 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.

Sigma-Aldrich

W3009

Rec. 2/27/2023 12

3050 Spruce Street, Saint Louis, MO 63103, USA
Website: www.sigmaaldrich.com
Email USA: techserv@sial.com
Outside USA: eurtechserv@sial.com

Certificate of Analysis

Product Name:
Hexadecane - ReagentPlus®, 99%

$CH_3(CH_2)_{14}CH_3$

Product Number:	**H6703**
Batch Number:	**SHBP8192**
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.

Sigma-Aldrich.

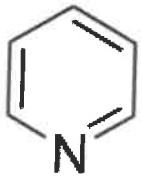
W3019
Rec 4/3/23

3050 Spruce Street, Saint Louis, MO 63103, USA
Website: www.sigmaaldrich.com
Email USA: techserv@sial.com
Outside USA: eurtechserv@sial.com

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 QUIMICOS MONTERREY, S.A. DE C.V.

MIRADOR 201, COL. MIRADOR
MONTERREY, N.L. MÉXICO
CP 64070
TEL +52 81 13 52 57 57
www.pqm.com.mx

CERTIFICATE OF ANALYSIS

PRODUCT :	SODIUM SULFATE CRYSTALS ANHYDROUS		
QUALITY :	ACS (CODE **RMB3375**)	FORMULA :	Na_2SO_4
SPECIFICATION NUMBER:	6399	RELEASE DATE:	MAY/23/2024
LOT NUMBER :	417203		

TEST	SPECIFICATIONS	LOT VALUES
Assay (Na_2SO_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 foreing 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™ | J.T.Baker

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 ($(CH_3)_2CO$) (by GC, corrected forwater)	>= 99.4 %	99.8 %
Color (APHA)	<= 10	5
Residue after Evaporation	<= 1.0 ppm	0.2 ppm
Substances Reducing Permanganate	Passes Test	Passes Test
Titrable Acid (µeq/g)	<= 0.3	0.2
Titrable Base (µeq/g)	<= 0.6	<0.1
Water (H_2O)	<= 0.5 %	0.2 %
FID-Sensitive Impurities (as 2-Octanol)Single Impurity Peak (ng/mL)	<= 5	<1
ECD Sensitive Impurities (as HeptachlorEpoxide) 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

R: 8/19/24 M6069

MACHEREY-NAGEL

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.

MACHEREY-NAGEL GmbH & Co. KG
Valencienner Str. 11
52355 Düren · Germany
www.mn-net.com

DE Tel.: +49 24 21 969-0 info@mn-net.com
CH Tel.: +41 62 388 55 00 sales-ch@mn-net.com
FR Tel.: +33 388 68 22 68 sales-fr@mn-net.com
US Tel.: +1 888 321 62 24 sales-us@mn-net.com

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

avantor™ | J.T.Baker®

M6151

R→ 1/15/25

Material No.: 9530-33
Batch No.: 22G2862015
Manufactured Date: 2022-06-15
Retest Date: 2027-06-14
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
ACS – Assay (as 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

avantor™ | J.T.Baker®

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™ | J.T.Baker®

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

Test	Specification	Result

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

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

James T Ethier

Jamie Ethier
Vice President Global Quality

W2668 Received on 02/10/2020 by AP

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 ($NaH_2PO_4 \cdot H_2O$)	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

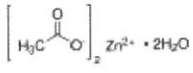
For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700
Avantor Performance Materials, LLC
100 Matsonford Rd, Suite 200, Radnor, PA 19087. U.S.A. Phone: 610.386.1700

3050 Spruce Street, Saint Louis, MO 63103, USA
Website: www.sigmaaldrich.com
Email USA: techserv@sial.com
Outside USA: eurtechserv@sial.com

W2926
open 7/5/22
received
on
7/5/22

Certificate of Analysis

Product Name:
Zinc acetate dihydrate - ACS reagent, ≥98%



Product Number:	**383058**
Batch Number:	**MKCQ9159**
Brand:	SIGALD
CAS Number:	5970-45-6
MDL Number:	MFCD00066961
Formula:	C4H6O4Zn · 2H2O
Formula Weight:	219.51 g/mol
Quality Release Date:	06 JAN 2022

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

Larry Coers, Director
Quality Control
Milwaukee, WI US

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

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 %

This document has been electronically generated and does not require a signature.

Order our products online **www.alfa.com**

ThermoFisher SCIENTIFIC

RICCA CHEMICAL COMPANY®

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

W3093 09412.. 04/03/2024 LG

Certificate of Analysis

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.

Certificate of Analysis

Sodium Hydroxide (Pellets)

Material: 0583

Grade: ACS GRADE

Batch Number: 23B1556310

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

Pellets

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

Storage: Room Temperature

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.

Certificate of Analysis

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

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.

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

Order our products online **thermofisher.com/chemicals**

This document has been electronically generated and does not require a signature.

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.

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

W3149 Received on 10/16/24 by IZ

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-Cl B)
Starch Indicator	APHA (4500-SO32- B)
Starch indicator solution	APHA (2350 B)
Starch indicator solution	APHA (2350 E)
Starch Solution	APHA (510 B)
Starch Solution	APHA (5530 C)
Starch Indicator	APHA (4500-Cl 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)

Paul Brandon (08/28/2024)
Production Manager

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

RICCA CHEMICAL COMPANY®

W3161 Rec. on 12/09/24 by IZ

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

Certificate of Analysis

Buffer, Reference Standard, pH 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.

RICCA CHEMICAL COMPANY®

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

Certificate of Analysis

W3178 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	*Not a certified value.

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

Specification	Reference
Commercial Buffer Solutions	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)

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

W3191 W3191 Receive Date: 03/18/25 JP

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	*Not a certified value.

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

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

W3200 Received on 04/11/2025 by IZ

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

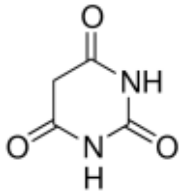
This test report shall not be reproduced, except in full, without the written approval of Ricca Chemical Company.

3050 Spruce Street, Saint Louis, MO 63103, USA
Website: www.sigmaaldrich.com
Email USA: techserv@sial.com
Outside USA: eurtechserv@sial.com

Certificate of Analysis

Product Name:
Barbituric acid - ReagentPlus® , 99%

Product Number:	**185698**
Batch Number:	**WXBF3271V**
Brand:	SIAL
CAS Number:	67-52-7
Formula:	C4H4N2O3
Formula Weight:	128,09 g/mol
Quality Release Date:	16 MAY 2024



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 %) VPCT	≥ 98 %	100 %

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.

N3213 Received on 5/21/25 by 12

VWR BDH CHEMICALS

Certificate of Analysis

[redacted]

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 infomation

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

RICCA CHEMICAL COMPANY®

448 West Fork Dr
Arlington, TX 76012
http://www.riccachemical.com
1-888-GO-RICCA
customerservice@riccachemical.com

W3214 Received on 5/21/25 by IZ

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 certifiec 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)

Ernest Mahan (05/08/2025)
Plant Manager

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

RICCA CHEMICAL COMPANY®

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

Certificate of Analysis

Buffer, Reference Standard, pH 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.

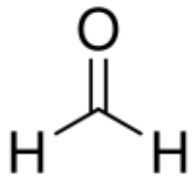
3050 Spruce Street, Saint Louis, MO 63103, USA
Website: www.sigmaaldrich.com
Email USA: techserv@sial.com
Outside USA: eurtechserv@sial.com

Certificate of Analysis

Product Name:

Formaldehyde solution - ACS reagent, 37 wt. % in H_2O, 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 H2SO4	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 by ICP-OES	≤ 5 ppm	2 ppm
Sulfate (SO4)	< = 0.002%	< = 0.002%
Titratable Acid (meq/g)	≤ 0.006	< 0.006
Note Stabilized with 10% to 15% Methanol	Confirmed	Conforms
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.

LabChem
Part of TCP Analytical Group
Jackson's Pointe Commerce Park- Building 1000
1010 Jackson's Pointe Court, Zelienople, PA 16063

Certificate of Analysis

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

Product Code: **LC13545**

Manufacture Date: June 25, 2025

Lot Number: **45060288**

Expiration Date: December 24, 2025

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

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

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

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

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

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

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

Michael Monteleone

Michael Monteleone
Chemistry Supervisor - Quality Control

ISO9001:2015 Registration #0306-01

2025070315:30:45ahoffman-0-0

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

avantor™ | J.T.Baker

W3240
JP
Opuhel. 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) (byGC, corrected for water)	>= 99.5 %	100.0 %
Assay (as n-Hexane) (by GC, correctedfor water)	>= 95 %	100 %
Color (APHA)	<= 10	10
Residue after Evaporation	<= 1.0 ppm	0.2 ppm
Substances Darkened by H_2SO_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

JCroak
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

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, Japan

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:	Synthethic amorphus 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

RICCA CHEMICAL COMPANY®

W3248 Received on 10/08/25 by IZ

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

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-Cl B)
Standard Sodium Thiosulfate Titrant	APHA (4500-O C)
Standard Sodium Thiosulfate Titrant, 0.025 M	APHA (5530 C)
Standard Sodium Thiosulfate Solution (0.025 N)	EPA (SW-846) (9031)
Standard Sodium Thiosulfate solution (0.025 N)	EPA (SW-846) (9034)

Volumetric glassware complies with Class A tolerance requirements of ASTM E 288 and NIST Circular 434; it is calibrated before first use and recalibrated regularly in accordance with ASTM E 542 and NIST Procedure NBSIR 74-461. Balances are calibrated regularly with weights certified traceable to the NIST national mass standard. Thermometers and temperature probes are calibrated before first use and recalibrated regularly with a thermometer traceable to NIST standards. All products are prepared according to master documents that assure manufacture according to validated methods. Batch records document raw material traceability and production and testing history for each lot manufactured.

Part Number	Size / Package Type	Shelf Life (Unopened Container)
7900-1	4 L natural poly	18 months
7900-16	500 mL natural poly	18 months
7900-32	1 L natural poly	18 months

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

Jose Pena (09/03/2025)
Operations Manager

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

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	

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

VB 137614

WORKLIST(Hardcopy Internal Chain)

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: JB WC
Raw Sample Relinquished by:

Date/Time 10/22/25 17:25
Raw Sample Received by:
Raw Sample Relinquished by: JB WC

SHIPPING DOCUMENTS

Alliance TECHNICAL GROUP

284 Sheffield Street, Mountainside, NJ 07092
(908) 789-8900 · Fax (908) 789-8922
www.chemtech.net

ALLIANCE PROJECT NO.
QUOTE NO. Q3439
COC Number 2045129

CLIENT INFORMATION

REPORT TO BE SENT TO:
COMPANY: AECOM
ADDRESS: 605 3rd Ave
CITY New York STATE: NY ZIP: 10158
ATTENTION: Robert Forstner
PHONE: 212-377-8721 FAX:

CLIENT PROJECT INFORMATION

PROJECT NAME: Port Richmond 132
PROJECT NO.: 60693795 LOCATION: Staten Isl
PROJECT MANAGER: Rob Forstner
e-mail: Robert.Forstner@aecom.com
PHONE: " FAX:

CLIENT BILLING INFORMATION

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

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

ANALYSIS

1. SVOC
2. Pesticide TCL
3. Hg Metals
4. Corrosivity, Ignit, Rxt Cyanide/Sulfide
5. TPH
6. VOC
7. Flash Point
8.
9.

ALLIANCE SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	COMP	GRAB	DATE	TIME	# OF BOTTLES	1	2	3	4	5	6	7	8	9	COMMENTS
1.	PR132-WC1-20251022	S		X	10/22	10:18	9	X	X	X	X	X	X				
2.	PR132-WC2-20251022	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.																	

PRESERVATIVES — Specify Preservatives: A-HCl, B-HNO3, C-H2SO4, D-NaOH, E-ICE, F-OTHER

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

RELINQUISHED BY SAMPLER:	DATE/TIME:	RECEIVED BY:
1. Jim Alderson	10/22/25 1pm	1. [signature] 1300 10-22-25
2.		2.
3. [signature]	1416 10-22-25	3.

Conditions of bottles or coolers at receipt: ☐ COMPLIANT ☐ NON COMPLIANT ☐ COOLER TEMP 3.8 °C
Comments:

Page ____ of ____

CLIENT: ☐ Hand Delivered ☐ Other

Shipment Complete ☐ YES ☐ NO

Q3434-GENCHEM

WHITE - ALLIANCE COPY FOR RETURN TO CLIENT YELLOW - ALLIANCE COPY PINK - SAMPLER COPY

Alliance TECHNICAL GROUP
284 Sheffield Street, Mountainside NJ 07092 (908)-789-8900 Fax : 908 789 8922

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

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

LOGIN REPORT/SAMPLE TRANSFER

Order ID : Q3434 AECO02
Client Name : AECOM
Client Contact : Rob Forstner
Invoice Name : AECOM
Invoice Contact : Rob Forstner

Order Date : 10/22/2025 1:40:00 PM
Project Name : AE1-CTY 3.2.Z-PR-DOCK
Receive DateTime : 10/22/2025 2:16:00 PM
Purchase Order :

Project Mgr :
Report Type : NYS ASP B
EDD Type : EQUIS
Hard Copy Date :
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

Relinguished By :
Date / Time : 10-22-25 1505

Received By : Sam
Date / Time : 10/22/25 1515

Storage Area : VOA Refridgerator Room

Rq +6
+2
Rq +5