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

Cover Page

Order ID : Q1956

Project ID : Bergen Point Fueling System

Client : CDM Smith

Lab Sample Number	Client Sample Number
Q1956-01	SB1-3-4
Q1956-02	SB2-4-5
Q1956-03	Q1956-02MS
Q1956-04	Q1956-02MSD
Q1956-05	COMP1
Q1956-06	SB91-3-4
Q1956-07	FB-05022025
Q1956-09	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: 5/8/2025

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012

Alliance TECHNICAL GROUP

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

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APPENDIX A

QA REVIEW GENERAL DOCUMENTATION

Project #: **Q1956**

	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: **NILESH PRAJAPATI** **Date:** **05/08/2025**

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LAB CHRONICLE

OrderID:	Q1956	**OrderDate:**	5/2/2025 3:14:35 PM
Client:	CDM Smith	**Project:**	Bergen Point Fueling System
Contact:	Marcie Ann Encinas	**Location:**	L31,VOA Ref. #2 Soil,VOA Ref. #3 Water

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q1956-05	**COMP1**	**SOIL**			**05/02/25 13:30**			**05/02/25**
			Corrosivity	9045D			05/05/25 15:20	
			Ignitability	1030			05/05/25 13:50	
			Reactive Cyanide	9012B		05/07/25	05/07/25 14:07	
			Reactive Sulfide	9034		05/07/25	05/07/25 12:06	

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TECHNICAL GROUP

SAMPLE DATA

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Report of Analysis

Client:	CDM Smith	Date Collected:	05/02/25 13:30
Project:	Bergen Point Fueling System	Date Received:	05/02/25
Client Sample ID:	COMP1	SDG No.:	Q1956
Lab Sample ID:	Q1956-05	Matrix:	SOIL
		% Solid:	100

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Corrosivity	7.52	H	1	0	0	pH		05/05/25 15:20	9045D
Ignitability	NO		1	0	0	oC		05/05/25 13:50	1030
Reactive Cyanide	0.011	J	1	0.0084	0.050	mg/Kg	05/07/25 09:00	05/07/25 14:07	9012B
Reactive Sulfide	1.59	J	1	0.20	10.0	mg/Kg	05/07/25 09:00	05/07/25 12:06	9034

Comments: pH result reported at temperature 21.2 °C

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
D = Dilution
Q = indicates LCS control criteria did not meet requirements
H = Sample Analysis Out Of Hold Time

J = Estimated Value
B = Analyte Found in Associated Method Blank
* = indicates the duplicate analysis is not within control limits.
E = Indicates the reported value is estimated because of the presence of interference.
OR = Over Range
N =Spiked sample recovery not within control limits

QC RESULT SUMMARY

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
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Initial and Continuing Calibration Verification

Client: CDM Smith **SDG No.:** Q1956

Project: Bergen Point Fueling System **RunNo.:** LB135675

Analyte		Units	Result	True Value	% Recovery	Acceptance Window (%R)	Analysis Date
Sample ID:	**ICV**						
Corrosivity		pH	7.01	7	100	90-110	05/05/2025
Sample ID:	**CCV1**						
Corrosivity		pH	2.01	2.00	101	90-110	05/05/2025
Sample ID:	**CCV2**						
Corrosivity		pH	12.02	12.00	100	90-110	05/05/2025

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Initial and Continuing Calibration Verification

Client: CDM Smith **SDG No.:** Q1956

Project: Bergen Point Fueling System **RunNo.:** LB135696

Analyte	Units	Result	True Value	% Recovery	Acceptance Window (%R)	Analysis Date
Sample ID: ICV1						
Reactive Cyanide	mg/L	0.093	0.099	94	85-115	05/07/2025
Sample ID: CCV1						
Reactive Cyanide	mg/L	0.25	0.25	100	90-110	05/07/2025
Sample ID: CCV2						
Reactive Cyanide	mg/L	0.24	0.25	96	90-110	05/07/2025

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Initial and Continuing Calibration Blank Summary

Client: CDM Smith **SDG No.:** Q1956

Project: Bergen Point Fueling System **RunNo.:** LB135696

Analyte	Units	Result	Acceptance Limits	Conc Qual	MDL	RDL	Analysis Date
Sample ID: ICB1							
Reactive Cyanide	mg/L	0.0016	0.0025	J	0.00096	0.005	05/07/2025
Sample ID: CCB1							
Reactive Cyanide	mg/L	0.00098	0.0025	J	0.00096	0.005	05/07/2025
Sample ID: CCB2							
Reactive Cyanide	mg/L	0.0011	0.0025	J	0.00096	0.005	05/07/2025

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Preparation Blank Summary

Client: CDM Smith **SDG No.:** Q1956

Project: Bergen Point Fueling System

Analyte	Units	Result	Acceptance Limits	Conc Qual	MDL	RDL	Analysis Date
Sample ID: PB167874BL							
Reactive Cyanide	mg/Kg	< 0.0250	0.0250	U	0.0084	0.05	05/07/2025
Sample ID: PB167881BL							
Reactive Sulfide	mg/Kg	< 5.0000	5.0000	U	0.201	10	05/07/2025

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Duplicate Sample Summary

Client: CDM Smith
Project: Bergen Point Fueling System
Client ID: MH-PDUP
SDG No.: Q1956
Sample ID: Q1947-01
Percent Solids for Spike Sample: 79.5

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		05/05/2025

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Duplicate Sample Summary

Client: CDM Smith
Project: Bergen Point Fueling System
Client ID: COMP1DUP
SDG No.: Q1956
Sample ID: Q1956-05
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	7.52		7.53		1	0.13		05/05/2025
Reactive Cyanide	mg/Kg	+/-20	0.011	J	0.013	J	1	17		05/07/2025
Reactive Sulfide	mg/Kg	+/-20	1.59	J	1.58	J	1	0.63		05/07/2025

RAW DATA

Analytical Summary Report

Analysis Method: 1030 **Reviewed By:** rubina

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

Run Number: LB135666

Seq	LabID	ClientID	DF	matrix	Result Status	Burning Rate	Anal Date	Anal Time
1	Q1947-01	MH-P	1	Solid	NO	0.00	05/05/2025	12:50
2	Q1947-01DUP	MH-PDUP	1	Solid	NO	0.00	05/05/2025	12:57
3	Q1947-04	MH-P	1	Solid	NO	0.00	05/05/2025	13:05
4	Q1947-05	MH-O	1	Solid	NO	0.00	05/05/2025	13:12
5	Q1947-08	MH-O	1	Solid	NO	0.00	05/05/2025	13:20
6	Q1951-01	MH-KK	1	Solid	NO	0.00	05/05/2025	13:28
7	Q1951-04	MH-KK	1	Solid	NO	0.00	05/05/2025	13:35
8	Q1955-01	LAW-25-0066	1	Solid	NO	0.00	05/05/2025	13:43
9	Q1956-05	COMP1	1	Solid	NO	0.00	05/05/2025	13:50

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

WORKLIST(Hardcopy Internal Chain)

LB135666

WorkList Name : IGN-5-5 **WorkList ID :** 189328 **Department :** Wet-Chemistry **Date :** 05-05-2025 13:11:30

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1947-01	MH-P	Solid	Ignitability	Cool 4 deg C	PSEG03	L41	05/02/2025	1030
Q1947-04	MH-P	Solid	Ignitability	Cool 4 deg C	PSEG03	L41	05/02/2025	1030
Q1947-05	MH-O	Solid	Ignitability	Cool 4 deg C	PSEG03	L41	05/02/2025	1030
Q1947-08	MH-O	Solid	Ignitability	Cool 4 deg C	PSEG03	L41	05/02/2025	1030
Q1951-01	MH-KK	Solid	Ignitability	Cool 4 deg C	PSEG03	L41	05/02/2025	1030
Q1951-04	MH-KK	Solid	Ignitability	Cool 4 deg C	PSEG03	L31	05/02/2025	1030
Q1955-01	LAW-25-0066	Solid	Ignitability	Cool 4 deg C	PSEG03	L31	05/02/2025	1030
Q1956-05	COMP1	Solid	Ignitability	Cool 4 deg C	PSEG03	L41	05/02/2025	1030
					CAMP02	L31	05/02/2025	1030

Date/Time 05/05/2025 12.30

Raw Sample Received by: RM (CWC)

Raw Sample Relinquished by:

Date/Time 05/05/2025 14.2

Raw Sample Received by:

Raw Sample Relinquished by: RM (CWC)

Reviewed By:Iwona
On:5/6/2025 10:16:17 AM
Inst Id :WC PH METER-1

Analytical Summary Report

Analysis Method: 9045D
Analyst By : jignesh
Parameter: Corrosivity
Supervisor Review By : Iwona
Run Number: LB135675
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	W3071
Buffer Solution, PH2 (500ml)	W3161
Buffer Solution, PH12 (500ml)	W3072

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

True Value of CCV1 = 2.00 Control Limits[+/- 0.1].

True Value of CCV2 = 12.00 Control Limits[+/- 0.1].

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	05/05/2025	15:00
2	CAL2	1	Water	NA	NA	20.2	7.00	05/05/2025	15:01
3	CAL3	1	Water	NA	NA	20.2	10.02	05/05/2025	15:05
4	ICV	1	Water	NA	NA	20.3	7.01	05/05/2025	15:10
5	CCV1	1	Water	NA	NA	20.2	2.01	05/05/2025	15:11
6	Q1956-05	1	Solid	20.02	20	21.2	7.52	05/05/2025	15:20
7	Q1956-05DUP	1	Solid	20.03	20	21.3	7.53	05/05/2025	15:21
8	Q1960-03	1	Solid	20.04	20	22.2	7.05	05/05/2025	15:30
9	CCV2	1	Water	NA	NA	20.3	12.02	05/05/2025	15:35

WORKLIST(Hardcopy Internal Chain)

VB135675

WorkList Name : corrsovity q1956 **WorkList ID :** 189321 **Department :** Wet-Chemistry **Date :** 05-05-2025 11:15:30

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1956-05	COMP1	Solid	Corrosivity	Cool 4 deg C	CAMP02	L31	05/02/2025	9045D
Q1960-03	72-11933	Solid	Corrosivity	Cool 4 deg C	PSEG03	L51	05/05/2025	9045D

Date/Time 05/05/25 14:30
Raw Sample Received by:
Raw Sample Relinquished by:

Date/Time 05/05/25 17:30
Raw Sample Received by:
Raw Sample Relinquished by:

LB135696

Reviewed By:
On:
Inst Id :Konelab 20
LB :LB135696

Test results | Aquakem 7.2AQ1 | Page: 1

CHEMTECH CONSULTING GROUP INC
284 Sheffield Street, Mountainside, NJ 07092

Reviewed by : RM | Instrument ID : Konelab

5/7/2025 14:29

Test: Total CN

Sample Id	Result	Dil. 1 +	Response	Errors
ICV1	93.499	0.0	0.061	
ICB1	1.627	0.0	0.001	
CCV1	249.971	0.0	0.164	
CCB1	0.985	0.0	0.001	
PB167874BL	0.824	0.0	0.001	
Q1956-05	1.138	0.0	0.001	
Q1956-05DUP	1.364	0.0	0.001	
Q1955-01	0.690	0.0	0.001	
Q1960-03	1.146	0.0	0.001	
Q1964-04	1.188	0.0	0.001	
Q1966-03	1.360	0.0	0.001	
Q1968-04	1.031	0.0	0.001	
Q1968-08	1.129	0.0	0.001	
CCV2	244.671	0.0	0.160	
CCB2	1.097	0.0	0.001	

N	15
Mean	40.115
SD	87.4110
CV%	217.90

Reviewed By:
On:
Inst Id :Konelab 20
LB :LB135696

Aquakem v. 7.2AQ1
Results from time period:
Wed May 07 14:00:11 2025
Wed May 07 14:14:30 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	1.024	µg/l	5/7/2025 10:11:56	
5.0PPBCN	A	Total CN	P	5.4111	µg/l	5/7/2025 10:11:57	
10PPBCN	A	Total CN	P	10.9055	µg/l	5/7/2025 10:11:58	
50PPBCN	A	Total CN	P	47.916	µg/l	5/7/2025 10:11:59	
100PPBCN	A	Total CN	P	100.5029	µg/l	5/7/2025 10:12:00	
250PPBCN	A	Total CN	P	248.3098	µg/l	5/7/2025 10:12:01	
500PPBCN	A	Total CN	P	500.9307	µg/l	5/7/2025 10:12:02	
ICV1	S	Total CN	P	93.4987	µg/l	5/7/2025 14:00:11	
ICB1	S	Total CN	P	1.6272	µg/l	5/7/2025 14:00:14	
CCV1	S	Total CN	P	249.9707	µg/l	5/7/2025 14:00:15	
CCB1	S	Total CN	P	0.9845	µg/l	5/7/2025 14:00:18	
PB167874BL	S	Total CN	P	0.8237	µg/l	5/7/2025 14:00:19	
Q1956-05	S	Total CN	P	1.1384	µg/l	5/7/2025 14:07:45	
Q1956-05DUP	S	Total CN	P	1.3637	µg/l	5/7/2025 14:07:47	
Q1955-01	S	Total CN	P	0.6899	µg/l	5/7/2025 14:07:49	
Q1960-03	S	Total CN	P	1.1462	µg/l	5/7/2025 14:07:50	
Q1964-04	S	Total CN	P	1.1879	µg/l	5/7/2025 14:07:51	
Q1966-03	S	Total CN	P	1.3602	µg/l	5/7/2025 14:07:52	
Q1968-04	S	Total CN	P	1.0309	µg/l	5/7/2025 14:07:53	
Q1968-08	S	Total CN	P	1.1293	µg/l	5/7/2025 14:14:23	
CCV2	S	Total CN	P	244.671	µg/l	5/7/2025 14:14:28	
CCB2	S	Total CN	P	1.0965	µg/l	5/7/2025 14:14:30	

Calibration results Aquakem 7.2AQ1

CHEMTECH CONSULTING GROUP INC
284 Sheffield Street, Mountainside, NJ 07092

Reviewed by : RM Instrument ID : Konelab

5/7/2025 10:12

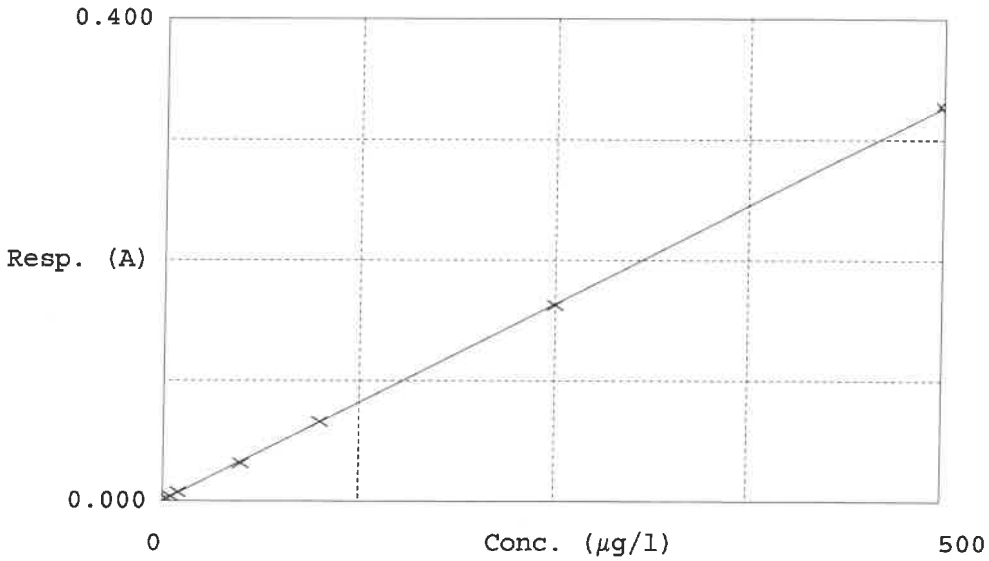
Test Total CN

Accepted 5/7/2025 10:12

Factor 1530
Bias 0

Coeff. of det. 0.999950

Errors



	Calibrator	Response	Calc. con.	Conc.	Errors
1	0.0PPBCN	0.001	1.0240	0.0000	8.2
2	5.0PPBCN	0.004	5.4111	5.0000	
3	10PPBCN	0.007	10.9055	10.0000	9.1
4	50PPBCN	0.032	47.9160	50.0000	-4.2
5	100PPBCN	0.066	100.5029	100.0000	0.5
6	250PPBCN	0.163	248.3098	250.0000	-0.7
7	500PPBCN	0.328	500.9307	500.0000	0.2

05/07/2025
RM

CHEMTECH

Analytical Summary Report

Analysis Method: 9034
Parameter: Reactive Sulfide
Run Number: LB135697

ANALYST: rubina
SUPERVISOR REVIEW BY: Iwona
Constant: 16000
Normality1: 0.025
Normality2: 0.025

Reagent/Standard	Lot/Log #
SODIUM THIOSULFATE,0.025N,4LITRE	W3105
IODINE SOLUTION .025N 1L	W3114
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	PB167881BL		1	5.00	50	2.00	0.00	1.92	1.92	0.08	0.00	0.00	05/07/2025	12:00
2	Q1955-01		1	5.06	50	2.00	0.00	1.84	1.84	0.16	0.08	6.32	05/07/2025	12:03
3	Q1956-05		1	5.04	50	2.00	0.00	1.90	1.90	0.10	0.02	1.59	05/07/2025	12:06
4	Q1956-05DUP		1	5.06	50	2.00	0.00	1.90	1.90	0.10	0.02	1.58	05/07/2025	12:09
5	Q1960-03		1	5.06	50	2.00	0.00	1.84	1.84	0.16	0.08	6.32	05/07/2025	12:12
6	Q1964-04		1	5.04	50	2.00	0.00	1.86	1.86	0.14	0.06	4.76	05/07/2025	12:15
7	Q1966-03		1	5.01	50	2.00	0.00	1.88	1.88	0.12	0.04	3.19	05/07/2025	12:17
8	Q1968-04		1	5.05	50	2.00	0.00	1.86	1.86	0.14	0.06	4.75	05/07/2025	12:19
9	Q1968-08		1	5.02	50	2.00	0.00	1.88	1.88	0.12	0.04	3.19	05/07/2025	12:22

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

Alliance TECHNICAL GROUP

Soil/Sludge Reactive Cyanide Preparation Sheet

PB167874

SOP ID : M9012B-Total, Amenable and Reactive Cyanide-20

SDG No : N/A

Matrix : SOIL

Pippete ID : N/A

Balance ID : WC SC-7

Hood ID : HOOD#1

Block ID : MC-1,MC-2

Weigh By : RM

Start Digest Date: 05/07/2025 **Time :** 09:00 **Temp :** N/A

End Digest Date: 05/07/2025 **Time :** 10:30 **Temp :** N/A

Digestion tube ID : M5595

Filter paper ID : N/A

pH Meter ID : N/A

Block Thermometer ID : N/A

Prep Technician Signature: RM

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	WP111294
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
05/07/2025 10.40	RM (WC)	RM (WC)
	Preparation Group	Analysis Group

Alliance TECHNICAL GROUP

Soil/Sludge Reactive Cyanide Preparation Sheet

PB167874

Lab Sample ID	Client Sample ID	Initial Weight (g)	Final Vol (ml)	pH	Sulfide	Oxidizing	Nitrate/ Nitrite	Comment	Prep Pos
PB167874BL	PBS874	5.00	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1955-01	LAW-25-0066	5.07	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1956-05	COMP1	5.02	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1956-05DUP	COMP1DUP	5.06	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1960-03	72-11933	5.06	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1964-04	MH-LL	5.07	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1966-03	SILICA-GEL	5.01	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1968-04	MH-M	5.07	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1968-08	MH-M	5.06	50	N/A	N/A	N/A	N/A	N/A	N/A

WORKLIST(Hardcopy Internal Chain)

WorkList Name : rcn-05-07 **WorkList ID :** 189354 **Department :** Distillation **Date :** 05-07-2025 08:29:14

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1955-01	LAW-25-0066	Solid	Reactive Cyanide	Cool 4 deg C	PSEG03	L41	05/02/2025	9012B
Q1956-05	COMP1	Solid	Reactive Cyanide	Cool 4 deg C	CAMP02	L31	05/02/2025	9012B
Q1960-03	72-11933	Solid	Reactive Cyanide	Cool 4 deg C	PSEG03	L51	05/05/2025	9012B
Q1964-04	MH-LL	Solid	Reactive Cyanide	Cool 4 deg C	PSEG03	L31	05/06/2025	9012B
Q1966-03	SILICA-GEL	Solid	Reactive Cyanide	Cool 4 deg C	PSEG03	L41	05/06/2025	9012B
Q1968-04	MH-M	Solid	Reactive Cyanide	Cool 4 deg C	PSEG03	L41	05/06/2025	9012B
Q1968-08	MH-M	Solid	Reactive Cyanide	Cool 4 deg C	PSEG03	L41	05/06/2025	9012B

Date/Time 05/07/2025 08.35
Raw Sample Received by: RM (WC)
Raw Sample Relinquished by:

Date/Time 05/07/2025 09.20
Raw Sample Received by:
Raw Sample Relinquished by: RM (WC)

Alliance TECHNICAL GROUP

Soil/Sludge Reactive Sulfide Preparation Sheet

PB167881

SOP ID : M9030B-Sulfide-12

SDG No : N/A

Matrix : SOIL

Pippete ID : WC

Balance ID : WC SC-7

Hood ID : HOOD#1

Block ID : MC-1, MC-2

Weigh By : RM

Start Digest Date: 05/07/2025 **Time :** 09:00 **Temp :** N/A

End Digest Date: 05/07/2025 **Time :** 10:30 **Temp :** N/A

Digestion tube ID : M5595

Filter paper ID : N/A

pH Meter ID : N/A

Block Thermometer ID : N/A

Prep Technician Signature: RM

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	WP111004
FORMALDEHYDE	2.0ML	W2725
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:

05/07/2025 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

PB167881

Lab Sample ID	Client Sample ID	Initial Weight (g)	Final Vol (ml)	pH	Sulfide	Oxidizing	Nitrate/ Nitrite	Comment	Prep Pos
PB167881BL	PBS881	5.00	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1955-01	LAW-25-0066	5.06	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1956-05	COMP1	5.04	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1956-05DUP	COMP1DUP	5.06	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1960-03	72-11933	5.06	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1964-04	MH-LL	5.04	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1966-03	SILICA-GEL	5.01	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1968-04	MH-M	5.05	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1968-08	MH-M	5.02	50	N/A	N/A	N/A	N/A	N/A	N/A

WORKLIST(Hardcopy Internal Chain)

WorkList Name : rsul-05-07 **WorkList ID :** 189355 **Department :** Distillation **Date :** 05-07-2025 08:29:19

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1955-01	LAW-25-0066	Solid	Reactive Sulfide	Cool 4 deg C	PSEG03	L41	05/02/2025	9034
Q1956-05	COMP1	Solid	Reactive Sulfide	Cool 4 deg C	CAMP02	L31	05/02/2025	9034
Q1960-03	72-11933	Solid	Reactive Sulfide	Cool 4 deg C	PSEG03	L51	05/05/2025	9034
Q1964-04	MH-LL	Solid	Reactive Sulfide	Cool 4 deg C	PSEG03	L31	05/06/2025	9034
Q1966-03	SILICA-GEL	Solid	Reactive Sulfide	Cool 4 deg C	PSEG03	L41	05/06/2025	9034
Q1968-04	MH-M	Solid	Reactive Sulfide	Cool 4 deg C	PSEG03	L41	05/06/2025	9034
Q1968-08	MH-M	Solid	Reactive Sulfide	Cool 4 deg C	PSEG03	L41	05/06/2025	9034

Date/Time 05/07/2025 08.35
Raw Sample Received by: RM CWC
Raw Sample Relinquished by: MP CWC

Date/Time 05/07/2025 09.20
Raw Sample Received by: MP CWC
Raw Sample Relinquished by: RM CWC

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Instrument ID: FLAME

Daily Analysis Runlog For Sequence/QCBatch ID # LB135666

Review By	rubina	Review On	5/5/2025 4:34:18 PM
Supervise By	Iwona	Supervise On	5/5/2025 4:34:29 PM
SubDirectory	LB135666	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	Q1947-01	MH-P	SAM	05/05/25 12:50		rubina	OK
2	Q1947-01DUP	MH-PDUP	DUP	05/05/25 12:57		rubina	OK
3	Q1947-04	MH-P	SAM	05/05/25 13:05		rubina	OK
4	Q1947-05	MH-O	SAM	05/05/25 13:12		rubina	OK
5	Q1947-08	MH-O	SAM	05/05/25 13:20		rubina	OK
6	Q1951-01	MH-KK	SAM	05/05/25 13:28		rubina	OK
7	Q1951-04	MH-KK	SAM	05/05/25 13:35		rubina	OK
8	Q1955-01	LAW-25-0066	SAM	05/05/25 13:43		rubina	OK
9	Q1956-05	COMP1	SAM	05/05/25 13:50		rubina	OK

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Instrument ID: WC PH METER-1

Daily Analysis Runlog For Sequence/QCBatch ID # LB135675

Review By	jignesh	Review On	5/6/2025 9:07:34 AM
Supervise By	Iwona	Supervise On	5/6/2025 10:16:17 AM
SubDirectory	LB135675	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,W3071,W3161,W3072

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	CAL1	CAL1	CAL	05/05/25 15:00		Jignesh	OK
2	CAL2	CAL2	CAL	05/05/25 15:01		Jignesh	OK
3	CAL3	CAL3	CAL	05/05/25 15:05		Jignesh	OK
4	ICV	ICV	ICV	05/05/25 15:10		Jignesh	OK
5	CCV1	CCV1	CCV	05/05/25 15:11		Jignesh	OK
6	Q1956-05	COMP1	SAM	05/05/25 15:20		Jignesh	OK
7	Q1956-05DUP	COMP1DUP	DUP	05/05/25 15:21		Jignesh	OK
8	Q1960-03	72-11933	SAM	05/05/25 15:30		Jignesh	OK
9	CCV2	CCV2	CCV	05/05/25 15:35		Jignesh	OK

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Instrument ID: KONELAB

Daily Analysis Runlog For Sequence/QCBatch ID # LB135696

Review By		Review On	
Supervise By		Supervise On	
SubDirectory	LB135696	Test	Reactive Cyanide

STD. NAME	STD REF.#
ICAL Standard	WP112977,WP112978,WP112979,WP112980,WP112981,WP112982,WP112983
ICV Standard	WP112985
CCV Standard	WP112978
ICSA Standard	N/A
CRI Standard	N/A
LCS Standard	N/A
Chk Standard	WP112643,WP112900,WP112985

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	0.0PPBCN	0.0PPBCN	CAL1	05/07/25 10:11		rubina	OK
2	5.0PPBCN	5.0PPBCN	CAL2	05/07/25 10:11		rubina	OK
3	10PPBCN	10PPBCN	CAL3	05/07/25 10:11		rubina	OK
4	50PPBCN	50PPBCN	CAL4	05/07/25 10:11		rubina	OK
5	100PPBCN	100PPBCN	CAL5	05/07/25 10:12		rubina	OK
6	250PPBCN	250PPBCN	CAL6	05/07/25 10:12		rubina	OK
7	500PPBCN	500PPBCN	CAL7	05/07/25 10:12		rubina	OK
8	ICV1	ICV1	ICV	05/07/25 14:00		rubina	OK
9	ICB1	ICB1	ICB	05/07/25 14:00		rubina	OK
10	CCV1	CCV1	CCV	05/07/25 14:00		rubina	OK
11	CCB1	CCB1	CCB	05/07/25 14:00		rubina	OK
12	PB167874BL	PB167874BL	MB	05/07/25 14:00		rubina	OK
13	Q1956-05	COMP1	SAM	05/07/25 14:07		rubina	OK
14	Q1956-05DUP	COMP1DUP	DUP	05/07/25 14:07		rubina	OK
15	Q1955-01	LAW-25-0066	SAM	05/07/25 14:07		rubina	OK
16	Q1960-03	72-11933	SAM	05/07/25 14:07		rubina	OK
17	Q1964-04	MH-LL	SAM	05/07/25 14:07		rubina	OK
18	Q1966-03	SILICA-GEL	SAM	05/07/25 14:07		rubina	OK

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Instrument ID: KONELAB

Daily Analysis Runlog For Sequence/QCBatch ID # LB135696

Review By		Review On	
Supervise By		Supervise On	
SubDirectory	LB135696	Test	Reactive Cyanide

STD. NAME	STD REF.#
ICAL Standard	WP112977,WP112978,WP112979,WP112980,WP112981,WP112982,WP112983
ICV Standard	WP112985
CCV Standard	WP112978
ICSA Standard	N/A
CRI Standard	N/A
LCS Standard	N/A
Chk Standard	WP112643,WP112900,WP112985

19	Q1968-04	MH-M	SAM	05/07/25 14:07		rubina	OK
20	Q1968-08	MH-M	SAM	05/07/25 14:14		rubina	OK
21	CCV2	CCV2	CCV	05/07/25 14:14		rubina	OK
22	CCB2	CCB2	CCB	05/07/25 14:14		rubina	OK

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Instrument ID: TITRAMETRIC

Daily Analysis Runlog For Sequence/QCBatch ID # LB135697

Review By	rubina	Review On	5/7/2025 2:52:01 PM
Supervise By	Iwona	Supervise On	5/7/2025 2:52:14 PM
SubDirectory	LB135697	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	W3105,W3114,W3149

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	PB167881BL	PB167881BL	MB	05/07/25 12:00		rubina	OK
2	Q1955-01	LAW-25-0066	SAM	05/07/25 12:03		rubina	OK
3	Q1956-05	COMP1	SAM	05/07/25 12:06		rubina	OK
4	Q1956-05DUP	COMP1DUP	DUP	05/07/25 12:09		rubina	OK
5	Q1960-03	72-11933	SAM	05/07/25 12:12		rubina	OK
6	Q1964-04	MH-LL	SAM	05/07/25 12:15		rubina	OK
7	Q1966-03	SILICA-GEL	SAM	05/07/25 12:17		rubina	OK
8	Q1968-04	MH-M	SAM	05/07/25 12:19		rubina	OK
9	Q1968-08	MH-M	SAM	05/07/25 12:22		rubina	OK

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Prep Standard - Chemical Standard Summary

Order ID : Q1956

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

Prepbatch ID : PB167874,PB167881,

Sequence ID/Qc Batch ID: LB135666,LB135675,LB135696,LB135697,

Standard ID :
WP111004,WP111294,WP112643,WP112900,WP112976,WP112977,WP112978,WP112979,WP112980,WP112981,WP112982,WP112983,WP112985,

Chemical ID :
M6121,M6151,W2668,W2725,W2926,W3019,W3071,W3072,W3093,W3105,W3112,W3113,W3114,W3139,W3149,W3154,W3161,W3178,W3191,W3203,

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Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
160	0.5M ZINC ACETATE	WP111004	12/09/2024	05/13/2025	Rubina Mughal	WETCHEM_SCALE_8 (WCSC-7)	WETCHEM_PIPETTE_3 (WC)	Iwona Zarych 12/09/2024

FROM 0.88900L of W3112 + 1.00000ml of M6121 + 110.00000gram of W2926 = Final Quantity: 1000.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
11	Sodium hydroxide absorbing solution 0.25 N	WP111294	01/07/2025	07/07/2025	Niha Farheen Shaik	WETCHEM_SCALE_5 (WCSC-5)	None	Iwona Zarych 01/07/2025

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

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Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
539	CN BUFFER	WP112643	04/09/2025	10/09/2025	Niha Farheen Shaik	WETCHEM_SCALE_5 (WCSC-5)	None	Iwona Zarych 04/09/2025

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
607	PYRIDINE-BARBITURIC ACID	WP112900	05/01/2025	08/18/2025	Rubina Mughal	WETCHEM_SCALE_8 (WCSC-7)	Glass Pipette-A	Iwona Zarych 05/01/2025

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

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Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3456	Cyanide Intermediate Working Std, 5PPM	WP112976	05/07/2025	05/08/2025	Rubina Mughal	None	WETCHEM_PIPETTE_3 (WC)	Iwona Zarych 05/07/2025

FROM 0.25000ml of W3154 + 49.75000ml of WP111294 = Final Quantity: 50.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
4	Calibation standard 500 ppb	WP112977	05/07/2025	05/08/2025	Rubina Mughal	None	WETCHEM_PIPETTE_3 (WC)	Iwona Zarych 05/07/2025

FROM 45.00000ml of WP111294 + 5.00000ml of WP112976 = Final Quantity: 50.000 ml

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Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3761	Calibration-CCV CN Standard 250 ppb	WP112978	05/07/2025	05/08/2025	Rubina Mughal	None	WETCHEM_PIPETTE_3 (WC)	Iwona Zarych 05/07/2025

FROM 2.50000ml of WP112976 + 47.50000ml of WP111294 = Final Quantity: 50.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
6	Calibration Standard 100 ppb	WP112979	05/07/2025	05/08/2025	Rubina Mughal	None	WETCHEM_PIPETTE_3 (WC)	Iwona Zarych 05/07/2025

FROM 1.00000ml of WP112976 + 49.00000ml of WP111294 = Final Quantity: 50.000 ml

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Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
7	Calibration Standard 50 ppb	WP112980	05/07/2025	05/08/2025	Rubina Mughal	None	WETCHEM_PIPETTE_3 (WC)	Iwona Zarych 05/07/2025

FROM 0.50000ml of WP112976 + 49.50000ml of WP111294 = Final Quantity: 50.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
8	Calibration Standard 10 ppb	WP112981	05/07/2025	05/08/2025	Rubina Mughal	None	WETCHEM_PIPETTE_3 (WC)	Iwona Zarych 05/07/2025

FROM 1.00000ml of WP112977 + 49.00000ml of WP111294 = Final Quantity: 50.000 ml

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Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
9	Calibration Standard 5 ppb	WP112982	05/07/2025	05/08/2025	Rubina Mughal	None	WETCHEM_PIPETTE_3 (WC)	Iwona Zarych 05/07/2025

FROM 0.50000ml of WP112977 + 49.50000ml of WP111294 = Final Quantity: 50.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
167	0 ppb CN calibration std	WP112983	05/07/2025	05/08/2025	Rubina Mughal	None	None	Iwona Zarych 05/07/2025

FROM 50.00000ml of WP111294 = Final Quantity: 50.000 ml

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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	WP112985	05/07/2025	05/08/2025	Rubina Mughal	WETCHEM_SCALE_5 (WCSC-5)	Glass Pipette-A	Iwona Zarych 05/07/2025

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

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CHEMICAL RECEIPT LOG BOOK

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)	0000275677	05/13/2025	11/13/2024 / Eman	10/13/2024 / Eman	M6121

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	08/18/2025	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.	EMD-FX0410-5 / FORMALDEHYDE SOLUTION 450ML	60045	06/22/2025	08/19/2024 / Iwona	06/22/2020 / apatel	W2725

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 #
SIGMA ALDRICH	270970-1L / Pyridine 1L	SHBQ2113	04/03/2028	04/03/2023 / Iwona	04/03/2023 / Iwona	W3019

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	AL14455-3 / buffer solution pH 7 yellow	4308H30	07/31/2025	01/02/2024 / JIGNESH	12/06/2023 / Iwona	W3071

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	AL14940-1 / Buffer Solution, PH12 (500ml)	2310P21	04/30/2025	01/02/2024 / JIGNESH	12/07/2023 / Iwona	W3072

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

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	AL69870-8 / SODIUM THIOSULFATE,0.025N,4LITRE	4403S13	09/30/2025	04/22/2024 / Iwona	04/22/2024 / Iwona	W3105

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

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.	AL35830-4 / IODINE SOLUTION .025N 1L	2405D89	05/31/2025	07/10/2024 / Iwona	07/10/2024 / Iwona	W3114

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.	RC2543-4 / CYANIDE STD 1000PPM 4OZ	1411J58	05/31/2025	12/02/2024 / Iwona	12/02/2024 / Iwona	W3154

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 #
PCI Scientific Supply, Inc.	EM-BX0035-3 / Barbituric Acid, 100 gms	WXBF3271V	05/16/2029	04/21/2025 / Iwona	04/21/2025 / Iwona	W3203

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W3071
Rec 12/6/23

Certificate of Analysis 12

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

Lot Number: 4308H30 **Product Number:** 1551

Manufacture Date: AUG 09, 2023
Expiration Date: JUL 2025

The certified value for this product is confirmed in independent testing by a second qualified chemist.
The NIST traceable pH value is certified to ±0.01 at 25 °C only. All other pH values at their corresponding temperatures are accurate to ± 0.05.

°C	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

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

Test	Certified Value	Uncertainty	NIST SRM#
pH at 25°C (Method: SQCP027, SQCP033)	7.002	0.02	186-I-g, 186-II-g, 191d

Specification	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)
1551-2.5	10 L Cubitainer®	24 months
1551-5	20 L Cubitainer®	24 months

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

Paul Brandon (08/09/2023)
Production Manager
This document is designed to comply with ISO Guide 31 "Reference Materials -- Contents of Certificates and Labels."

This product was tested in an ISO 17025 Accredited Laboratory

Sigma-Aldrich.

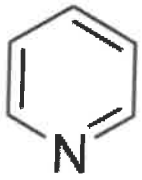
W3019
Rec 4/3/23

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

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W3072
rec. 12/01/23
12

Certificate of Analysis

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

Lot Number: 2310P21 **Product Number:** 1615

Manufacture Date: OCT 24, 2023
Expiration Date: APR 2025

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

°C	15	20	25	30	35	40
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

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

Test	Certified Value	Uncertainty	NIST SRM#
pH at 25°C (Method: SQCP027, SQCP033)	12.005	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
1615-32	1 L natural poly	18 months
1615-5	20 L Cubitainer®	18 months

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

Sharon Travers (10/24/2023)
Operations Manager
This document is designed to comply with ISO Guide 31 "Reference Materials -- Contents of Certificates and Labels."

This product was tested in an ISO 17025 Accredited Laboratory

W2723, W2724, W2725, W2726 Received on 6/22/20 by AP

Certificate of Analysis

Date of Release:	2/26/2020
Name:	Formaldehyde Solution GR ACS Meets ACS Specifications
Item No:	FX0410 all size codes
Lot / Batch No:	60045
Country of Origin:	USA

Characteristic	Requirement		Results	Units
	Min.	Max.		
Assay	36.5	38.0	36.71	%
Chloride (Cl)		5	<5	ppm
Color (APHA)		10	<10	
Form			Passes test	
Heavy metals (as Pb)		5	<5	ppm
Iron (Fe)		5	0.6	ppm
Residue after ignition		0.005	<0.0050	%
Sulfate (SO4)		0.002	<0.0020	%
Titrable acid		0.006	<0.0060	meq/g

Heather Sinn,
_____
Quality Control Manager
This document has been produced electronically and is valid without a signature.

EMD Millipore Corporation, an affiliate of Merck KGaA, Darmstadt, Germany
290 Concord Road
Billerica, MA 01821
U.S.A

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

avantor™ | J.T.Baker®

R → 10/13/24
Met dig

M 6121

Material No.: 9530-33
Batch No.: 0000275677
Manufactured Date: 2020/12/16
Retest Date: 2025/12/15
Revision No: 1

Certificate of Analysis

Test	Specification	Result
ACS - Assay (as HCl) (by acid-base titrn)	36.5 - 38.0 %	37.6
ACS - Color (APHA)	<= 10	5
ACS - Residue after Ignition	<= 3 ppm	1
ACS - Specific Gravity at 60°/60°F	1.185 - 1.192	1.190
ACS - Bromide (Br)	<= 0.005 %	< 0.005
ACS - Extractable Organic Substances	<= 5 ppm	1
ACS - Free Chlorine (as Cl_2)	<= 0.5 ppm	< 0.5
Phosphate (PO_4)	<= 0.05 ppm	< 0.03
Sulfate (SO_4)	<= 0.5 ppm	< 0.3
Sulfite (SO_3)	<= 0.8 ppm	0.3
Ammonium (NH_4)	<= 3 ppm	< 1
Trace Impurities - Arsenic (As)	<= 0.010 ppm	< 0.003
Trace Impurities - Aluminum (Al)	<= 10.0 ppb	< 0.2
Arsenic and Antimony (as As)	<= 5 ppb	< 3
Trace Impurities - Barium (Ba)	<= 1.0 ppb	< 0.2
Trace Impurities - Beryllium (Be)	<= 1.0 ppb	< 0.2
Trace Impurities - Bismuth (Bi)	<= 10.0 ppb	< 1.0
Trace Impurities - Boron (B)	<= 20.0 ppb	< 5.0
Trace Impurities - Cadmium (Cd)	<= 1.0 ppb	< 0.3
Trace Impurities - Calcium (Ca)	<= 50.0 ppb	29.7
Trace Impurities - Chromium (Cr)	<= 1.0 ppb	< 0.4
Trace Impurities - Cobalt (Co)	<= 1.0 ppb	< 0.3
Trace Impurities - Copper (Cu)	<= 1.0 ppb	< 0.1
Trace Impurities - Gallium (Ga)	<= 1.0 ppb	< 0.2

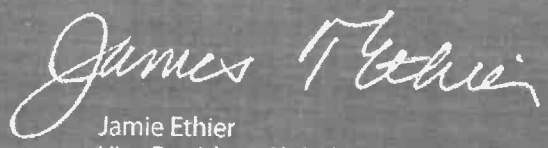
For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700
Avantor Performance Materials, LLC
100 Matsonford Rd, Suite 200, Radnor, PA 19087. U.S.A. Phone: 610.386.1700

Material No.: 9530-33
Batch No.: 0000275677

Test	Specification	Result
Trace Impurities - Germanium (Ge)	<= 3.0 ppb	< 2.0
Trace Impurities - Gold (Au)	<= 4.0 ppb	< 0.2
Heavy Metals (as Pb)	<= 100 ppb	< 50
Trace Impurities - Iron (Fe)	<= 15.0 ppb	<1
Trace Impurities - Lead (Pb)	<= 1.0 ppb	< 0.5
Trace Impurities - Lithium (Li)	<= 1.0 ppb	0.2
Trace Impurities - Magnesium (Mg)	<= 10.0 ppb	0.4
Trace Impurities - Manganese (Mn)	<= 1.0 ppb	< 0.4
Trace Impurities - Mercury (Hg)	<= 0.5 ppb	0.1
Trace Impurities - Molybdenum (Mo)	<= 10.0 ppb	< 5.0
Trace Impurities - Nickel (Ni)	<= 4.0 ppb	< 0.3
Trace Impurities - Niobium (Nb)	<= 1.0 ppb	< 0.2
Trace Impurities - Potassium (K)	<= 9.0 ppb	< 2.0
Trace Impurities - Selenium (Se), For Information Only	ppb	1.0
Trace Impurities - Silicon (Si)	<= 100.0 ppb	< 10.0
Trace Impurities - Silver (Ag)	<= 1.0 ppb	< 0.3
Trace Impurities - Sodium (Na)	<= 100.0 ppb	< 5.0
Trace Impurities - Strontium (Sr)	<= 1.0 ppb	< 0.2
Trace Impurities - Tantalum (Ta)	<= 1.0 ppb	< 0.9
Trace Impurities - Thallium (Tl)	<= 5.0 ppb	< 2.0
Trace Impurities - Tin (Sn)	<= 5.0 ppb	< 0.8
Trace Impurities - Titanium (Ti)	<= 1.0 ppb	0.2
Trace Impurities - Vanadium (V)	<= 1.0 ppb	< 0.2
Trace Impurities - Zinc (Zn)	<= 5.0 ppb	0.3
Trace Impurities - Zirconium (Zr)	<= 1.0 ppb	< 0.1

For Laboratory, Research or Manufacturing Use
Product Information (not specifications):
Appearance (clear, fuming liquid)
Meets ACS Specifications

Country of Origin: US
Packaging Site: Phillipsburg 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

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

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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

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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

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

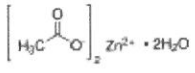
For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700
Avantor Performance Materials, LLC
100 Matsonford Rd, Suite 200, Radnor, PA 19087. U.S.A. Phone: 610.386.1700

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

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Batesville, IN 47006
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1-888-GO-RICCA
customerservice@riccachemical.com

W3093 0941 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

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W3105 Received on 4/22/24 by IZ

Certificate of Analysis

Sodium Thiosulfate, 0.0250 Normal (N/40)

Lot Number: 4403S13 **Product Number:** 7900

Manufacture Date: MAR 29, 2024
Expiration Date: SEP 2025

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

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

Test	Specification	Result	NIST SRM#
Appearance	Colorless liquid	Passed	
Assay (vs. Potassium Iodate/Starch)	0.02499-0.02501 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
7900-1CT	4 L Cubitainer®	18 months
7900-32	1 L natural poly	18 months

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

Paul Brandon (03/29/2024)
Production Manager
This document is designed to comply with ISO Guide 31 "Reference Materials -- Contents of Certificates and Labels."

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.

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Certificate of Analysis

Iodine (Iodine-Iodide), 0.0250 Normal (N/40), 1 mL = 0.4008 mg S^{2-}

Lot Number: 2405D89 **Product Number:** 3975

Manufacture Date: MAY 10, 2024
Expiration Date: MAY 2025

Name	CAS#	Grade
Water	7732-18-5	ACS/ASTM/USP/EP
Potassium Iodide	7681-11-0	ACS
Iodine	7553-56-2	ACS

Test	Specification	Result	NIST SRM#
Appearance	Dark brown liquid	Passed	
Assay (vs. Sodium Thiosulfate/Starch)	0.02498-0.02502 N at 20°C	0.02502 N at 20°C	136

Specification	Reference
Standard Iodine Solution, 0.0250 N	APHA (4500-S2- F)
Iodine Solution (approximately 0.025 N)	EPA (SW-846) (9031)
Standard Iodine Solution, 0.0250 N	EPA (376.1)
Iodine Solution (approximately 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)
3975-1	4 L amber glass	12 months
3975-16	500 mL amber glass	12 months
3975-32	1 L amber glass	12 months

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

Jose Pena (05/10/2024)
Operations Manager

ThermoFisher SCIENTIFIC

Certificate of Analysis

W3139 Received on 9/9/24 by IZ

Product No.:	A12044
Product:	Chloramine-T trihydrate, 98%
Lot No.:	10239484

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

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W3149 Received on 10/16/24 by IZ

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Certificate of Analysis

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

Lot Number: 4408P62 **Product Number:** 8000

Manufacture Date: AUG 28, 2024
Expiration Date: AUG 2026

This product is Mercury-free.

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

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

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W3154 Rec. on 12/2/24 by IZ

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Certificate of Analysis

Cyanide Standard, 1000 ppm CN^-

Lot Number: 1411J58 **Product Number:** 2543

Manufacture Date: NOV 22, 2024
Expiration Date: MAY 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

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)

Luis Briceno (11/22/2024)
Operations Supervisor

RICCA CHEMICAL COMPANY®

W3161 Rec. on 12/09/24 by IZ

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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

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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)

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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

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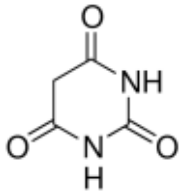
Outside USA: eurtechserv@sial.com

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

PERCENT SOLID

Supervisor: Iwona
Analyst: jignesh
Date: 5/6/2025

OVENTEMP IN Celsius(°C): 107
Time IN: 17:05
In Date: 05/05/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
OvenID: M OVEN#1

OVENTEMP OUT Celsius(°C): 103
Time OUT: 08:30
Out Date: 05/06/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: % SOLID- OVEN

QC: LB135668

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
Q1956-01	SB1-3-4	1	1.17	9.98	11.15	10.05	89.0	
Q1956-02	SB2-4-5	2	1.18	10.62	11.8	11.11	93.5	
Q1956-03	Q1956-02MS	3	1.18	10.62	11.8	11.11	93.5	
Q1956-04	Q1956-02MSD	4	1.18	10.62	11.8	11.11	93.5	
Q1956-06	SB91-3-4	5	1.14	10.65	11.79	10.75	90.2	
Q1957-01	AT090P-SD05-050125-00	6	1.15	10.74	11.89	3.3	20.0	
Q1957-02	AT090P-SD03-050125-00	7	1.18	10.90	12.08	3.97	25.6	
Q1957-03	AT090P-SD04-050125-00	8	1.19	10.36	11.55	2.09	8.7	
Q1958-01	SS050P-SD28-043025-00	9	1.16	10.21	11.37	9.51	81.8	
Q1958-02	SS050P-SD29-043025-00	10	1.17	9.97	11.14	3.2	20.4	
Q1958-03	SS050P-SD30-050225-00	11	1.19	10.62	11.81	9.59	79.1	
Q1958-04	SS050P-SD31-050225-00	12	1.19	10.13	11.32	9.18	78.9	
Q1959-01	SOIL-PILE	13	1.18	10.18	11.36	10.11	87.7	
Q1960-01	344	14	1.00	1.00	2.00	2.00	100.0	stone sample,100% solids
Q1960-02	72-11933	15	1.15	10.38	11.53	10.24	87.6	
Q1961-01	EO-01-050225	16	1.18	10.08	11.26	10.53	92.8	
Q1961-02	EO-01-050225-E2	17	1.14	10.18	11.32	10.88	95.7	
Q1962-01	HD-01-050525	18	1.18	10.10	11.28	9.87	86.0	
Q1962-02	HD-01-050525-E2	19	1.19	10.43	11.62	9.91	83.6	

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

WORKLIST(Hardcopy Internal Chain)

LB1356668

WorkList Name : %1-050525-1 **WorkList ID :** 189298 **Department :** Wet-Chemistry **Date :** 05-05-2025 08:48:32

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1956-01	SB1-3-4	Solid	Percent Solids	Cool 4 deg C	CAMP02	L31	05/01/2025	Chemtech -SO
Q1956-02	SB2-4-5	Solid	Percent Solids	Cool 4 deg C	CAMP02	L31	05/02/2025	Chemtech -SO
Q1956-03	Q1956-02MS	Solid	Percent Solids	Cool 4 deg C	CAMP02	L31	05/02/2025	Chemtech -SO
Q1956-04	Q1956-02MSD	Solid	Percent Solids	Cool 4 deg C	CAMP02	L31	05/02/2025	Chemtech -SO
Q1956-06	SB91-3-4	Solid	Percent Solids	Cool 4 deg C	CAMP02	L31	05/02/2025	Chemtech -SO
Q1957-01	AT090P-SD05-050125-00	Solid	Percent Solids	Cool 4 deg C	CAMP02	L31	05/01/2025	Chemtech -SO
Q1957-02	AT090P-SD03-050125-00	Solid	Percent Solids	Cool 4 deg C	WEST04	L51	05/01/2025	Chemtech -SO
Q1957-03	AT090P-SD04-050125-00	Solid	Percent Solids	Cool 4 deg C	WEST04	L51	05/01/2025	Chemtech -SO
Q1958-01	SS050P-SD28-043025-00	Solid	Percent Solids	Cool 4 deg C	WEST04	L51	05/01/2025	Chemtech -SO
Q1958-02	SS050P-SD29-043025-00	Solid	Percent Solids	Cool 4 deg C	WEST04	L51	04/30/2025	Chemtech -SO
Q1958-03	SS050P-SD30-050225-00	Solid	Percent Solids	Cool 4 deg C	WEST04	L51	04/30/2025	Chemtech -SO
Q1958-04	SS050P-SD31-050225-00	Solid	Percent Solids	Cool 4 deg C	WEST04	L51	05/02/2025	Chemtech -SO
Q1959-01	SOIL-PILE	Solid	Percent Solids	Cool 4 deg C	WEST04	L51	05/02/2025	Chemtech -SO
Q1960-01	344	Solid	Percent Solids	Cool 4 deg C	PSEG04	L41	05/05/2025	Chemtech -SO
Q1960-02	72-11933	Solid	Percent Solids	Cool 4 deg C	PSEG03	L51	05/05/2025	Chemtech -SO
Q1961-01	EO-01-050225	Solid	Percent Solids	Cool 4 deg C	PSEG03	L51	05/05/2025	Chemtech -SO
Q1961-02	EO-01-050225-E2	Solid	Percent Solids	Cool 4 deg C	PSEG05	L51	05/05/2025	Chemtech -SO
Q1962-01	HD-01-050525	Solid	Percent Solids	Cool 4 deg C	PSEG05	L51	05/05/2025	Chemtech -SO
Q1962-02	HD-01-050525-E2	Solid	Percent Solids	Cool 4 deg C	PSEG05	L51	05/05/2025	Chemtech -SO

Date/Time 05/05/25 15:20
Raw Sample Received by: JR WQ
Raw Sample Relinquished by: SM

Date/Time 05/05/25 17:15
Raw Sample Received by: SM
Raw Sample Relinquished by: JR WQ

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. Q19560
COC Number 2046701

CLIENT INFORMATION

REPORT TO BE SENT TO:
COMPANY: CDM Smith
ADDRESS: 110 Fieldcrest Avenue #8 6th Floor
CITY Edison STATE: NJ ZIP: 08837
ATTENTION: Marcie Encinas
PHONE: 732-590-4679 FAX: 732-225-7851

CLIENT PROJECT INFORMATION

PROJECT NAME: Bergen Point Project
PROJECT NO.: 99939 LOCATION: W. Babylon, NY
PROJECT MANAGER: Marcie Encinas
e-mail: ENcinasMA@CDMSmith.com
PHONE: 732-590-4679 FAX: 732-225-7851

CLIENT BILLING INFORMATION

BILL TO: CDM Smith PO#:
ADDRESS: 110 Fieldcrest Avenue, #8 Floor 6th
CITY Edison STATE: NJ ZIP: 08837
ATTENTION: Marcie Encinas PHONE: 732-590-4690

DATA TURNAROUND INFORMATION

FAX (RUSH) _____ DAYS*
HARDCOPY (DATA PACKAGE): _____ DAYS*
EDD: _____ DAYS*
*TO BE APPROVED BY CHEMTECH
STANDARD HARDCOPY TURNAROUND TIME IS 10 BUSINESS

DATA DELIVERABLE INFORMATION

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

ANALYSIS

1: TCL VOC
2: TCL SVOC
3: TAL METALS
4: PCBs
5: PESTICIDES
6: HERBICIDES
7: PRO/GRO
8: FULL TCLP
9: RCRA CHARAC

ALLIANCE SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE COMP	SAMPLE TYPE GRAB	SAMPLE COLLECTION DATE	SAMPLE COLLECTION TIME	# OF BOTTLES	PRESERVATIVES 1	2	3	4	5	6	7	8	9	COMMENTS
1.	SB1 - 3-4'	Soil		X	5/1/25	9:00am	13	X	X	X	X	X	X	X			E
2.	SB2-4-5'	Soil		X	5/2/25	12:00pm	13	X	X	X	X	X	X	X			E
3.	COMP1	Soil	X		5/2/25	1:30pm	3								X	X	E
4.	SB91 - 3-4'	Soil		X	5/1/25	9:20am	13	X	X	X	X	X	X	X	X		E
5.	SB2 - MS	Soil		X	5/2/25	12:30pm	13	X	X	X	X	X	X	X			E
6.	SB2 - MSD	Soil		X	5/2/25	12:40pm	13	X	X	X	X	X	X	X			E
7.	FB-05022025	Aqueous		X	5/2/25	11:00am	9	X	X	X	X	X	X	X			E, A, B
8.																	
9.																	
10.																	

← Specify Preservatives
A-HCl D-NaOH
B-HN03 E-ICE
C-H2SO4 F-OTHER

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

RELINQUISHED BY SAMPLER:	DATE/TIME:	RECEIVED BY:
1.	5.2.2025 1404	1.
2.		2.
3.	5.2.2025 1826	3.

Conditions of bottles or coolers at receipt: ☐ COMPLIANT ☐ NON COMPLIANT ☒ COOLER TEMP 2.3 °C
Comments: IR Gun #1 (Adjusted Factor + 1)

Page _____ of

CLIENT: ☐ Hand Delivered ☐ Other _____

Shipment Complete ☐ YES ☐ NO

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

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

Laboratory Certification

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

QA Control Code: A2070148

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

LOGIN REPORT/SAMPLE TRANSFER

Order ID : Q1956 CAMP02
Client Name : CDM Smith
Client Contact : Marcie Ann Encinas
Invoice Name : CDM Smith
Invoice Contact : Marcie Ann Encinas

Order Date : 5/2/2025 3:14:35 PM
Project Name : Bergen Point Fueling Syste
Receive DateTime : 5/2/2025 ~~12:00:00~~ AM 18:26
Purchase Order :

Project Mgr :
Report Type : NYS ASP A
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
Q1956-01	SB1-3-4	Solid	05/01/2025	09:00					
					VOC-TCLVOA-10		8260D		10 Bus. Days
Q1956-02	SB2-4-5	Solid	05/02/2025	12:00					
					VOC-TCLVOA-10		8260D		10 Bus. Days
Q1956-03	Q1956-02MS	Solid	05/02/2025	12:30					
					VOC-TCLVOA-10		8260D		10 Bus. Days
Q1956-04	Q1956-02MSD	Solid	05/02/2025	12:40					
					VOC-TCLVOA-10		8260D		10 Bus. Days
Q1956-06	~~SB19~~-3-4 SB91	Solid	05/01/2025	09:30					
					VOC-TCLVOA-10		8260D		10 Bus. Days
Q1956-07	FB-05022025	Water	05/02/2025	11:00					
					VOC-TCLVOA-10		8260-Low		10 Bus. Days

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

LOGIN REPORT/SAMPLE TRANSFER

Order ID : Q1956 CAMP02
Client Name : CDM Smith
Client Contact : Marcie Ann Encinas
Invoice Name : CDM Smith
Invoice Contact : Marcie Ann Encinas

Order Date : 5/2/2025 3:14:35 PM
Project Name : Bergen Point Fueling Syste
Receive DateTime : 5/2/2025 ~~12:00:00~~ 15:26 AM
Purchase Order :

Project Mgr :
Report Type : NYS ASP A
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
Q1956-09 TB		water	5/2/25	12:00	VOC-TCLVOA-10		8260-LOW		10 Bus Days.

Relinguished By : [signature]
Date / Time : 5/5/25 0835

Received By : [signature]
Date / Time : 5/5/25 08:35
Storage Area : VOA Refridgerator Room

Rep # 6
FZ-2