

DATA PACKAGE GENERAL CHEMISTRY

PROJECT NAME: RFP 918

WESTON SOLUTIONS, INC.

1090 King Georges Post Road

Suite 201

Edison, NJ - 08837-3703

Phone No: 732-585-4410

ORDER ID: Q3321

ATTENTION: Smita Sumbaly





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3) Case Narrative

4) Qualifier Page

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14.2) Lab Certificate

14.3) Internal COC

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Order ID: Q3321

Project ID: RFP 918

Client: Weston Solutions, Inc.

Lab Sample Number Client Sample Number

Q3321-01 P001-DS-01 Q3321-02 P001-DS-01

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: 10/16/2025

NYDOH CERTIFICATION NO - 11376 NJDEP CERTIFICATION NO - 20012

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

CASE NARRATIVE

Weston Solutions, Inc. Project Name: RFP 918

Project # N/A Order ID # Q3321 Test Name: Cyanide

A. Number of Samples and Date of Receipt:

1 Solid sample was received on 10/09/2025.

B. Parameters:

According to the Chain of Custody document, the following analyses were requested: Cyanide. This data package contains results for Cyanide.

C. Analytical Techniques:

The analysis of Cyanide was based on method 9012B.

D. QA/ QC Samples:

The Holding Times were met for all analysis.

The Blank Spike met requirements for all compounds.

The Duplicate analysis met criteria for all compounds.

The Matrix Spike analysis met criteria for all compounds.

The Matrix Spike 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:

Calculation for CN Soil Sample:

Concentration or Result (
$$\mu$$
g/L) = $\frac{C \times Vf \times DF}{1000}$
W x S

Where,

C = Instrument response in μ g/L CN from the calibration curve.

Vf = Final prepared (absorbing solution) volume (mL)

W = Initial aliquot amount (g) (Fraction of Sample amount taken in prep)

S = % Solids / 100 (Fraction of Percent Solids)

DF = Dilution Factor

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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

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DATA REPORTING QUALIFIERS- INORGANIC

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

J	Indicates the reported value was obtained from a reading that was less than the Contract Required Detection Limit (CRDL), but greater than or equal to the Instrument Detection Limit (IDL).
U	Indicates the analyte was analyzed for, but not detected.

ND	Indicates the analyte was analyzed for, but not detected		

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

M Indicates Duplicate injection precision not	met.
---	------

N	Indicates the spiked	sample recovery	is not within	control limits.
---	----------------------	-----------------	---------------	-----------------

S	Indicates the reported value was determined by the Method of Standard
	Addition (MSA).

- * Indicates that the duplicate analysis is not within control limits.
- + Indicates the correlation coefficient for the MSA is less than 0.995.
- D Indicates the reported value is from a secondary analysis with a dilution factor. The original analysis exceeded the calibration range.

M	Method	qualifiers
		1

"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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ALLIANCE 284 Sheffield Street, Mountainside New Jersey 07092 NEW JERSEY LAB ID#: 20012: NEW YORK LAB ID#: 11376

GENERAL CHEMISTRY CONFORMANCE/NON-CONFORMANCE SUMMARY

ORDE	SR ID: Q3321 MAT	MATRIX: Solid			
METH	IOD: 9012B				
1.	Blank Contamination - If yes, list compounds and concentrations in ea	ch blank:	NA	NO ✓	YES
2.	Matrix Spike Duplicate Recoveries Met Criteria				✓
	If not met, list those compounds and their recoveries which fall outside range.	e the acceptable			
	The Blank Spike met requirements for all compounds.				
3.	Sample Duplicate Analysis Met QC Criteria				\checkmark
	If not met, list those compounds and their recoveries which fall outside range.	e the acceptable			
4.	Digestion Holding Time Met				✓
	If not met, list number of days exceeded for each sample:				
ADDIT	TIONAL COMMENTS:				
QA RE	VIEW	Date			

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APPENDIX A

QA REVIEW GENERAL DOCUMENTATION

Project #: Q3321

	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)	<u> </u>
Check chain-of-custody for proper relinquish/return of samples	<u> </u>
Is the chain of custody signed and complete	<u> </u>
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	<u> </u>
COVER PAGE:	
Do numbers of samples correspond to the number of samples in the Chain of Custody on login page	<u> </u>
Do lab numbers and client Ids on cover page agree with the Chain of Custody	<u> </u>
CHAIN OF CUSTODY:	
Do requested analyses on Chain of Custody agree with form I results	<u> </u>
Do requested analyses on Chain of Custody agree with the log-in page	' ' ' <u>'</u> <u>'</u>
Were the correct method log-in for analysis according to the Analytical Request and Chain of Castody	<u> </u>
Were the samples received within hold time	<u> </u>
Were any problems found with the samples at arrival recorded in the Sample Management Laboratory Chronicle	<u> </u>
ANALYTICAL:	
Was method requirement followed?	<u> </u>
Was client requirement followed?	<u> </u>
Does the case narrative summarize all QC failure?	' ' ' ' '
All runlogs and manual integration are reviewed for requirements	<u> </u>
All manual calculations and /or hand notations verified	<u>✓</u>

QA Review Signature: SOHIL JODHANI Date: 10/16/2025

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LAB CHRONICLE

OrderID: Q3321

Client: Weston Solutions, Inc.

Contact: Smita Sumbaly

OrderDate: 10/9/2025 10:30:00 AM

Project: RFP 918
Location: D41,VOA Ref. #2 Soil

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q3321-01	P001-DS-01	SOIL			10/08/25			10/09/25
					14:15			
			Cyanide	9012B		10/13/25	10/14/25	
							09:54	

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SAMPLE DATA

Q



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

Fax: 908 789 8922

Report of Analysis

Client: Weston Solutions, Inc. Date Collected: 10/08/25 14:15

 Project:
 RFP 918
 Date Received:
 10/09/25

 Client Sample ID:
 P001-DS-01
 SDG No.:
 Q3321

 Lab Sample ID:
 Q3321-01
 Matrix:
 SOIL

 % Solid:
 78.4

Parameter	Conc. Qua.	DF MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.	
Cyanide	0.99	1 0.052	0.31	ma/K a	10/13/25 14:00	10/14/25 09:54	9012B	

Comments:

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

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QC RESULT SUMMARY



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

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Initial and Continuing Calibration Verification

Client: Weston Solutions, Inc. SDG No.: Q3321

Project: RFP 918 RunNo.: LB137516

Analyte		Units	Result	True Value	% Recovery	Acceptance Window (%R)	Analysis Date
Sample ID:	ICV1	-					40/44/0007
Cyanide		mg/L	0.096	0.099	97	90-110	10/14/2025
Sample ID:	CCV1						
Cyanide		mg/L	0.24	0.25	96	90-110	10/14/2025
Sample ID:	CCV2						
Cyanide		mg/L	0.24	0.25	96	90-110	10/14/2025

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Initial and Continuing Calibration Blank Summary

Client:	Weston Solutions, Inc.	SDG No.:	Q3321
Project:	RFP 918	RunNo.:	LB137516

Analyte		Units	Result	Acceptance Limits	Conc Qual	MDL	RDL	Analysis Date
Sample ID: Cyanide	ICB1	mg/L	< 0.0025	0.0025	Ū	0.00096	0.005	10/14/2025
Sample ID: Cyanide	CCB1	mg/L	< 0.0025	0.0025	Ŭ	0.00096	0.005	10/14/2025
Sample ID: Cyanide	CCB2	mg/L	< 0.0025	0.0025	U	0.00096	0.005	10/14/2025

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Preparation Blank Summary

Client: Weston Solutions, Inc. SDG No.: Q3321

Project: RFP 918

Analyte	Units	Result	Acceptance Limits	Conc Qual	MDL	RDL	Analysis Date
Sample ID: Cyanide	PB170075BL mg/Kg	0.042	0.1250	J	0.042	0.25	10/14/2025

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

Matrix Spike Summary

Client: Weston Solutions, Inc. SDG No.: Q3321

Project: RFP 918 Sample ID: Q3321-01

Client ID: P001-DS-01MS Percent Solids for Spike Sample: 78.4

Analyte	Units	Acceptance Limit %R	Spiked Result	Conc. Qualifier	Sample Result	Conc. Qualifier	Spike Added	Dilution Factor	% Rec	Qual	Analysis Date
Cyanide	mg/Kg	75-125	3.40		0.99		2.5	1	96		10/14/2025

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Matrix Spike Summary

Client: Weston Solutions, Inc. SDG No.: Q3321

Project: RFP 918 Sample ID: Q3321-01

Client ID: P001-DS-01MSD Percent Solids for Spike Sample: 78.4

		Acceptance	Spiked	Conc.	Sample	Conc.	Spike	Dilution	%		Analysis
Analyte	Units	Limit %R	Result	Qualifier	Result	Qualifier	Added	Factor	Rec	Qual	Date
Cvanide	mg/Kg	75-125	3.40		0.99		2.5	1	96		10/14/2025

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Duplicate Sample Summary

Client: Weston Solutions, Inc. SDG No.: Q3321

Project: RFP 918 **Sample ID:** Q3321-01

Client ID: P001-DS-01DUP Percent Solids for Spike Sample: 78.4

Analyte	Units	Acceptance Limit	Sample Result	Conc. Qualifier	Duplicate Result	Conc. Qualifier	Dilution Factor	RPD/ AD	Qual	Analysis Date	
Cyanide	mg/Kg	+/-20	0.99		0.97		1	2		10/14/2025	

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Duplicate Sample Summary

Client: Weston Solutions, Inc. SDG No.: Q3321

Project: RFP 918 Sample ID: Q3321-01

Client ID: P001-DS-01MSD Percent Solids for Spike Sample: 78.4

Analyte	Units	Acceptance Limit	Sample Result	Conc. Qualifier	Duplicate Result	Conc. Qualifier	Dilution Factor	RPD/ AD	Qual	Analysis Date	
Cyanide	mg/Kg	+/-20	3.40		3.40		1	0		10/14/2025	

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Fax: 908 789 8922

Laboratory Control Sample Summary

Client: Weston Solutions, Inc. SDG No.: Q3321

Project: RFP 918 **Run No.:** LB137516

Analyte		Units	True Value	Result	Conc. Qualifier	% Recovery	Dilution Factor	Acceptance Limit %R	Analysis Date
Sample ID	PB170075BS								
Cvanide		mg/Kg	5	4 80		96	1	85-115	10/14/2025

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RAW DATA

Reviewed By:Iwona Cb 13 + 516 AM

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Test results

Aquakem 7.2AQ1

Page: LB:LB137516 Test results Page:

> Alliance Technical Group 284 Sheffield Street, Mountainside, NJ 07092

Reviewed by : RM Instrument ID : Konelab

10/14/2025 10:19

Test: Total (CN
---------------	----

Sample Id	Result	Dil. 1 +	Response	Errors	
ICV1 ICB1 CCV1 CCB1 PB170075BL PB170075BS LOWPB170075 HIGHPB170075 Q3321-01 Q3321-01DUP Q3321-01MS Q3321-01MSD Q3337-01 Q3337-03 CCV2 CCB2	95.540 0.732 238.767 0.777 0.848 95.270 10.115 483.229 16.078 15.827 54.571 55.325 11.109 4.731 240.367 0.537	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0.086 0.001 0.215 0.001 0.001 0.086 0.009 0.435 0.015 0.015 0.049 0.050 0.010 0.005	101% (90-110) 97% (90-110)	10/14/2025 RM

N	16
Mean	82.739
SD	132.6064
CV%	160.27

Q3321-GENCHEM

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Aquakem v. 7.2AQ1

Results from time period:

Tue Oct 14 08:54:39 2025

Tue Oct 14 10:18:49 2025

Sample Id	Sam/Ctr/o	FTest short	r Test type	Result	Result unit	Result date and time	Stat
0.0PPBCN	Α	Total CN	Р	0.2291	µg/l	10/14/2025 9:13:26	
5.0PPBCN	Α	Total CN	Р	5.3249	µg/l	10/14/2025 9:13:27	
10PPBCN	Α	Total CN	Ρ	10.1874	µg/l	10/14/2025 9:13:28	
50PPBCN	Α	Total CN	Р	48.0572	µg/l	10/14/2025 9:13:29	
100PPBCN	Α	Total CN	Р	102.1669	µg/l	10/14/2025 9:13:30	
250PPBCN	Α	Total CN	Р	248.5611	µg/l	10/14/2025 9:13:31	
500PPBCN	Α	Total CN	Р	500.4734	µg/l	10/14/2025 9:13:32	
ICV1	S	Total CN	P	95.5395	µg/l	10/14/2025 9:46:38	
ICB1	S	Total CN	Р	0.7321	µg/l	10/14/2025 9:46:40	
CCV1	S	Total CN	Р	238.7666	µg/l	10/14/2025 9:46:42	
CCB1	S	Total CN	Р	0.7769	μg/l	10/14/2025 9:46:45	
PB170075BL	S	Total CN	P	0.8475	µg/l	10/14/2025 9:46:46	
PB170075BS	S	Total CN	Р	95.2701	µg/l	10/14/2025 9:54:10	
LOWPB170075	S	Total CN	P	10.1155	μg/l	10/14/2025 9:54:11	
HIGHPB170075	S	Total CN	Р	483.2288	µg/l	10/14/2025 9:54:15	
Q3321-01	S	Total CN	P	16.0775	µg/l	10/14/2025 9:54:18	
Q3321-01DUP	S	Total CN	Р	15.8269	µg/l	10/14/2025 9:54:19	
Q3321-01MS	S	Total CN	Р	54.5709	µg/l	10/14/2025 10:01:45	
Q3321-01MSD	S	Total CN	P	55.3245	µg/l	10/14/2025 10:01:46	
Q3337-01	S	Total CN	Р	11.1088	µg/l	10/14/2025 10:01:49	
Q3337-03	S	Total CN	Р	ا 4.7308	µg/l	10/14/2025 10:01:50	
CCV2	S	Total CN	Р	240.3672 μ	µg/l	10/14/2025 10:01:54	
CCB2	S	Total CN	Р	0.5369 լ	ug/l	10/14/2025 10:07:56	

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LB:LB137516

Calibration results

Aquakem 7.2AQ1

Page:

284 Sheffield Street, Mountainside, NJ 07092

Alliance Technical Group

Reviewed by : RM Instrument ID : Konelab

10/14/2025 9:13

Test Total CN

Accepted

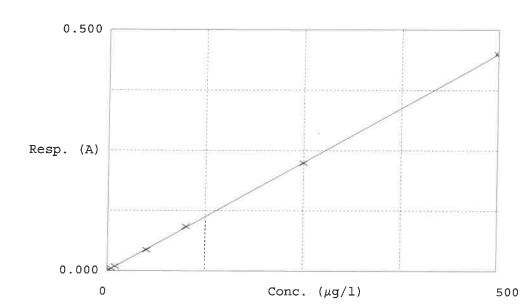
10/14/2025 9:13

Factor Bias

1112

Coeff. of det. 0.999947

Errors



	Calibrator	Response	Calc. con.	Conc.	Errors
1	0.0PPBCN	0.000	0.2291	0.0000	_
2	5.0PPBCN	0.005	5.3249	5.0000	6.5
3	10PPBCN	0.009	10.1874	10.0000	1.9
4	50PPBCN	0.044	48.0572	50.0000	-3.9
5	100PPBCN	0.092	102.1669	100.0000	•
6	250PPBCN	0.224	248.5611	250.0000	2.2
7	500PPBCN	0.450	500.4734	500.0000	-0.6
					0.1

10/14/2025 RM

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PB170075

Temp: 124 °C



SOP ID:	M9012B-Total.	Amenable and	Reactive Cyanide-21
	TIDOTED TOCAL,	ATTICITUDE GITG	Medective Cyanilde-21

SDG No: N/A

Matrix: SOIL End Digest Date: 10/13/2025 Time: 15:30 **Temp:** 126 °C

Time: 14:00

Pippete ID: WC

Balance ID: WC SC-7

Hood ID:

HOOD#1

Digestion tube ID: M5595 Block Thermometer ID: WC CYANIDE

Start Digest Date: 10/13/2025

Block ID: MC-1,MC-2 Filter paper ID: N/A **Prep Technician Signature:**

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

Standared Name	MLS USED	STD REF. # FROM LOG	
LCSS	1.0ML	WP113838	
MS/MSD SPIKE SOL.	0.40ML	WP113837	
PBS003	50.0ML	W3112	
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
50% v/v H2SO4	5.0ML	WP112826
51% w/v MgCL2	2.0ML	WP112827
N/A	N/A	N/A

LAB SAMPLE ID	CLIENT SAMPLE ID	Wt(g)/Vol(ml)	Comment
S0	50	N/A	N/A
S5.0	S5.0	N/A	N/A
S10.0	S10.0	N/A	N/A
S100.0	S100.0	N/A	N/A
S250.0	S250.0	N/A	N/A
S500.0	S500.0	N/A	N/A
ICV	ICV	0.5ML	W3012
ICB	ICB	N/A	N/A
CCV	ccv	N/A	N/A
ССВ	ССВ	N/A	N/A
Midrange	Midrange	N/A	N/A
HIGHSTD	HIGHSTD	5.0ML	WP113837
LOWSTD	LOWSTD	0.1ML	WP113837

Extraction Conformance/Non-Conformance Comments:

N/A

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
0/13/2025 154	of Mac	RM Lws
	Preparation Group	Analysis Group



Lab Sample ID	Client Sample ID	Initial Weight (g)	Final Vol (ml)	pH	Sulfide	Oxidizing	Nitrate/ Nitrite	Comment	Prep Pos	1 1 2
PB170075BL	PBS075	1.00	50	N/A	N/A	N/A	N/A	N/A	N/A	-T
PB170075BS	LCS075	1.00	50	N/A	N/A	N/A	N/A	N/A	N/A	1
Q3321-01DUP	P001-DS-01DUP	1.04	50	N/A	N/A	N/A	N/A	N/A	N/A	I
Q3321-01MS	P001-DS-01MS	1.03	50	N/A	N/A	N/A	N/A	N/A	N/A	- -
Q3321-01MSD	P001-DS-01MSD	1.04	50	N/A	N/A	N/A	N/A	N/A	N/A	- 00 L
Q3321-01	P001-DS-01	1.04	50	N/A	N/A	N/A	N/A	N/A	N/A	1
Q3337-01	LAYDOWN-YARD-1	1.02	50	N/A	N/A	N/A	N/A	N/A	N/A	1
Q3337-03	LAYDOWN-YARD-2	1.04	50	N/A	N/A	N/A	N/A	N/A	N/A	1

WORKLIST(Hardcopy Internal Chain)

Raw Sample Received by: Date/Time

Raw Sample Relinquished by:

Page 1 of 1

Date/Time 10/13/2015

Raw Sample Relinquished by: Raw Sample Received by:



Instrument ID:

KONELAB

Daily Analysis Runlog For Sequence/QCBatch ID # LB137516

Review By	rubina		Review On	10/14/2025 2:23:18 PM
Supervise By	By Iwona		Supervise On	10/15/2025 9:51:07 AM
SubDirectory	ubDirectory LB137516 T		Test	Cyanide
STD. NAME	TD. NAME STD REF.#			
ICAL Standard		WP115170,WP115171,V	WP115172,WP115173,WP115174,WP1	15175,WP115176
ICV Standard		W3012		
CCV Standard		WP115171		
ICSA Standard		N/A		
CRI Standard		N/A		
LCS Standard	LCS Standard WP113838			
Chk Standard WP115157,WP114324,WP115178				

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	0.0PPBCN	0.0PPBCN	CAL1	10/14/25 09:13		rubina	ОК
2	5.0PPBCN	5.0PPBCN	CAL2	10/14/25 09:13		rubina	ОК
3	10PPBCN	10PPBCN	CAL3	10/14/25 09:13		rubina	ОК
4	50PPBCN	50PPBCN	CAL4	10/14/25 09:13		rubina	ок
5	100PPBCN	100PPBCN	CAL5	10/14/25 09:13		rubina	ОК
6	250PPBCN	250PPBCN	CAL6	10/14/25 09:13		rubina	ок
7	500PPBCN	500PPBCN	CAL7	10/14/25 09:13		rubina	ОК
8	ICV1	ICV1	ICV	10/14/25 09:46		rubina	ОК
9	ICB1	ICB1	ICB	10/14/25 09:46		rubina	ок
10	CCV1	CCV1	CCV	10/14/25 09:46		rubina	ОК
11	CCB1	CCB1	ССВ	10/14/25 09:46		rubina	ОК
12	PB170075BL	PB170075BL	МВ	10/14/25 09:46		rubina	ОК
13	PB170075BS	PB170075BS	LCS	10/14/25 09:54		rubina	ОК
14	LOWPB170075	LOWPB170075	SAM	10/14/25 09:54		rubina	ОК
15	HIGHPB170075	HIGHPB170075	SAM	10/14/25 09:54		rubina	ОК
16	Q3321-01	P001-DS-01	SAM	10/14/25 09:54		rubina	ОК
17	Q3321-01DUP	P001-DS-01DUP	DUP	10/14/25 09:54		rubina	ОК
18	Q3321-01MS	P001-DS-01MS	MS	10/14/25 10:01		rubina	ОК

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Instrument ID:

KONELAB

Daily Analysis Runlog For Sequence/QCBatch ID # LB137516

Review By	rubina		Review On	10/14/2025 2:23:18 PM
Supervise By	Iwona		Supervise On	10/15/2025 9:51:07 AM
SubDirectory	Directory LB137516		Test	Cyanide
STD. NAME		STD REF.#		
ICAL Standard		WP115170,WP115171,	WP115172,WP115173,WP115174,WP1	15175,WP115176
ICV Standard		W3012		
CCV Standard		WP115171		
ICSA Standard		N/A		
CRI Standard	CRI Standard N/A			
LCS Standard WP113838				
Chk Standard WP115157,WP114324,WP115178				

1	19	Q3321-01MSD	P001-DS-01MSD	MSD	10/14/25 10:01	rubina	ок
2	20	Q3337-01	LAYDOWN-YARD-1	SAM	10/14/25 10:01	rubina	ОК
2	21	Q3337-03	LAYDOWN-YARD-2	SAM	10/14/25 10:01	rubina	ОК
2	22	CCV2	CCV2	CCV	10/14/25 10:01	rubina	OK
2	23	CCB2	CCB2	ССВ	10/14/25 10:07	rubina	ОК

Q3321-GENCHEM **29 of 65**

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Prep Standard - Chemical Standard Summary

Order ID: Q3321

Test: Cyanide, Percent Solids

Prepbatch ID: PB170075,

Sequence ID/Qc Batch ID: LB137516,

Standard ID:

WP112826,WP112827,WP113836,WP113837,WP113838,WP114324,WP115157,WP115169,WP115170,WP115171,WP115172,WP115173,WP115174,WP115175,WP115176,WP115178,

Chemical ID:

Q3321-GENCHEM **30 of 65**

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Recipe				Expiration	<u>Prepared</u>			Supervised By
<u>ID</u>	<u>NAME</u>	<u>NO.</u>	Prep Date	<u>Date</u>	<u>By</u>	<u>ScaleID</u>	<u>PipetteID</u>	Iwona Zarych
1714	Sulfuric Acid, 50% (v/v)	WP112826	04/25/2025	10/25/2025	Rubina Mughal	None	None	·
								04/25/2025
FROM	1000.00000ml of M6041 + 1000.0000	00ml of W31	12 = Final Q	uantity: 2000.0	00 ml			

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	<u>ScaleID</u>	<u>PipetteID</u>	Supervised By Iwona Zarych
3214	1 3	WP112827	04/25/2025	10/25/2025		WETCHEM_S	None	•
	2.5M(51%W/V)					CALE_8 (WC		04/25/2025

FROM 500.0000ml of W3112 + 510.00000gram of W3152 = Final Quantity: 1000.000 ml

Q3321-GENCHEM **31 of 65**

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Recipe ID	<u>NAME</u>	NO.	Prep Date	Expiration Date	Prepared By	<u>ScaleID</u>	<u>PipetteID</u>	Supervised By Iwona Zarych
11	,	WP113836	07/08/2025	12/31/2025	Rubina Mughal	_	None	
	solution 0.25 N					CALE_8 (WC		07/08/2025
EDOM	21 00000L of W3112 + 210 00000gra	am of W3113	R = Final Oua	ntity: 21 000 T		SC-7)		

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

Recipe ID	NAME.	NO.	Prep Date	Expiration Date	Prepared By	<u>ScaleID</u>	<u>PipettelD</u>	Supervised By Iwona Zarych
3850	Cyanide MS-MSD spiking solution, 5PPM	<u>WP113837</u>	07/08/2025	11/30/2025	Rubina Mughal	None	WETCHEM_P IPETTE_3 (WC)	07/08/2025

FROM 1.00000ml of W3214 + 199.00000ml of WP113836 = Final Quantity: 200.000 ml

Q3321-GENCHEM **32 of 65**

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Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	<u>ScaleID</u>	<u>PipetteID</u>	Supervised By Iwona Zarych
3371	Cyanide LCS Spike Solution, 5PPM	<u>WP113838</u>	07/08/2025	12/24/2025	Rubina Mughal	None	WETCHEM_F IPETTE_3	07/08/2025
FROM	1.00000ml of W3224 + 199.00000ml	of WP11383	36 = Final Qເ	uantity: 200.000) ml		(WC)	

Recipe ID	<u>NAME</u>	NO.	Prep Date	Expiration Date	Prepared By	<u>ScaleID</u>	<u>PipetteID</u>	Supervised By Jignesh Parikh
607	PYRIDINE-BARBITURIC ACID	WP114324	08/19/2025	02/17/2026	Rubina Mughal	_		
						CALE_5 (WC	Pipette-A	08/19/2025

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

Q3321-GENCHEM **33 of 65**



Recipe				Expiration	Prepared			Supervised By	
<u>ID</u>	NAME	NO.	Prep Date	<u>Date</u>	Ву	<u>ScaleID</u>	<u>PipetteID</u>	Iwona Zarych	
539	CN BUFFER	WP115157	10/10/2025	12/03/2025	Rubina Mughal	WETCHEM_S	None		
						CALE_8 (WC		10/14/2025	
FROM	SC-7)								

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	<u>ScaleID</u>	<u>PipettelD</u>	Supervised By Iwona Zarych
3456	Cyanide Intermediate Working Std, 5PPM	<u>WP115169</u>	10/14/2025	10/15/2025	Rubina Mughal	None	WETCHEM_F IPETTE_3	10/14/2025

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

Q3321-GENCHEM **34 of 65**



Recipe				Expiration	Prepared			Supervised By		
<u>ID</u>	<u>NAME</u>	NO.	Prep Date	<u>Date</u>	Ву	<u>ScaleID</u>	<u>PipetteID</u>	Iwona Zarych		
4	Calibation standard 500 ppb	WP115170	10/14/2025	10/15/2025	Rubina Mughal	None	WETCHEM_F IPETTE 3			
							(WC)	10/14/2025		
FROM	,									

Recipe ID	NAME_	<u>NO.</u>	Prep Date	Expiration Date	Prepared By	<u>ScaleID</u>	<u>PipetteID</u>	Supervised By Iwona Zarych
3761	Calibration-CCV CN Standard 250 ppb	<u>WP115171</u>	10/14/2025	10/15/2025	Rubina Mughal	None	WETCHEM_F IPETTE_3 (WC)	10/14/2025

FROM 2.50000ml of WP115169 + 47.50000ml of WP113836 = Final Quantity: 50.000 ml

Q3321-GENCHEM **35 of 65**



Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	<u>ScaleID</u>	<u>PipetteID</u>	Supervised By Iwona Zarych		
6	Calibration Standard 100 ppb	WP115172	10/14/2025	10/15/2025	Rubina Mughal	None	WETCHEM_P			
							IPETTE_3	10/14/2025		
FROM	(WC)									

FROIN	1.0000001111 01 441	113103	43.000001111 01 111	113030	- i iiiai	Quantity. 50.000	1111

Recipe				Expiration	<u>Prepared</u>			Supervised By
<u>ID</u>	NAME	<u>NO.</u>	Prep Date	<u>Date</u>	<u>By</u>	<u>ScaleID</u>	<u>PipetteID</u>	Iwona Zarych
7	Calibration Standard 50 ppb	WP115173	10/14/2025	10/15/2025	Rubina Mughal	None	WETCHEM_F	
							IPETTE_3	10/14/2025

FROM 0.50000ml of WP115169 + 49.50000ml of WP113836 = Final Quantity: 50.000 ml

Q3321-GENCHEM **36 of 65**



Wet Chemistry STANDARD PREPARATION LOG

Recipe				Expiration	<u>Prepared</u>			Supervised By
<u>ID</u>	NAME	<u>NO.</u>	Prep Date	<u>Date</u>	<u>By</u>	<u>ScaleID</u>	<u>PipetteID</u>	Iwona Zarych
8	Calibration Standard 10 ppb	<u>WP115174</u>	10/14/2025	10/15/2025	Rubina Mughal	None	WETCHEM_P IPETTE_3	10/14/2025
FROM	1.00000ml of WP115170 + 49.00000	ml of WP11	3836 = Final	Quantity: 50.00	00 ml		(WC)	

9 Calibration Standard 5 ppb WP115175 10/14/2025 10/15/2025 Rubina Mughal None WETCHEM_F IPETTE_3 10/14/2025	Recipe ID	NAME	<u>NO.</u>	Prep Date	Expiration Date	Prepared By	<u>ScaleID</u>	<u>PipetteID</u>	Supervised By Iwona Zarvch
0.1(0)	9	Calibration Standard 5 ppb	<u>WP115175</u>	10/14/2025	10/15/2025	Rubina Mughal	None	IPETTE_3	,

FROM 0.50000ml of WP115170 + 49.50000ml of WP113836 = Final Quantity: 50.000 ml

Q3321-GENCHEM 37 of 65



Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME 0 ppb CN calibration std	NO. WP115176	Prep Date 10/14/2025	Expiration Date 10/15/2025	Prepared By Rubina Mughal	<u>ScaleID</u> None	<u>PipettelD</u> None	Supervised By Iwona Zarych
								10/14/2025
FROM	50.00000ml of WP113836 = Final Q	uantity: 50.0	00 ml					

Recipe ID	<u>NAME</u>	<u>NO.</u>	Prep Date	Expiration Date	Prepared By	<u>ScaleID</u>	<u>PipetteID</u>	Supervised By Iwona Zarych
1582	Chloramine T solution, 0.014M	WP115178	10/14/2025	10/15/2025	Rubina Mughal	WETCHEM_S	Glass	-
						CALE_5 (WC	Pipette-A	10/14/2025

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-9673-33 / Sulfuric Acid, Instra-Analyzed (cs/6c2.5L)	23D2462010	03/20/2028	08/16/2024 / mohan	08/16/2024 / mohan	M6041
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 #
EPA	/ ICV-CN	ICV6-400	12/31/2025	01/08/2025 / lwona	02/20/2020 / Iwona	W3012
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
Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	DIW / DI Water	Daily Lab-Certified	07/03/2029	07/03/2024 / lwona	07/03/2024 / Iwona	W3112

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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.	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.	01237-10KG / Megnasium Chloride Hexahydrate ACS 10KG	002126-2019-201	11/25/2029	11/25/2024 / Iwona	11/25/2024 / Iwona	W3152
Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	EM-BX0035-3 / Barbituric Acid, 100 gms	WXBF3271V	05/16/2029	04/21/2025 / lwona	04/21/2025 / Iwona	W3203
Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date /	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 /	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

Q3321-GENCHEM **40 of 65**

W3019 lec 4/3/23

3050 Spruce Street, Saint Louis, MO 63103, USA

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

Product Name:

Certificate of Analysis

Pyridine - anhydrous, 99.8%

Product Number:

270970

Batch Number:

SHBQ2113

Brand:

SIAL

CAS Number:

110-86-1

MDL Number:

MFCD00011732

Formula:

C5H5N

Formula Weight:

79.10 g/mol

Quality Release Date:

15 DEC 2022



Specification	Result
Colorless	Colorless
Liquid	Liquid
·	Conforms
> 99.75 %	99.99 %
_ < 0.003 %	0.002 %
< 0.0005 %	< 0.0001 %
	Colorless Liquid Conforms to Structure > 99.75 % < 0.003 %

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.





QUALITY ASSURANCE TECHNICAL SUPPORT LABORATORY "An ISO 9001:2015 Certified Program"

Instructions for QATS Reference Material: Inorganic ICV Solutions

QATS LABORATORY INORGANIC REFERENCE MATERIAL INITIAL CALIBRATION VERIFICATION SOLUTIONS (ICV1, ICV5, AND ICV6)

NOTE: These instructions are for advisory purposes only. If any apparent conflict exists between these instructions and the analytical protocol or your contract, disregard these instructions.

APPLICATION: For use with the CLP SFAM01.0 SOW and revisions.

CAUTION: Read instructions carefully before opening bottle(s) and proceeding with

the analyses.

Contains Metals in Dilute Acidic or Cyanide in Basic Aqueous Solutions HAZARDOUS MATERIAL

> Safety Data Sheets Available Upon Request

W2160, W2161, W2162, W2163, W2164 Receive by AP on 9/2/2016

(A) SAMPLE DESCRIPTION

Enclosed is a set of one (1) or more Aqueous Inorganic Reference Materials containing various analyte concentrations. ICV1 and ICV5 are in a matrix of dilute nitric acid. ICV6 is in a matrix of dilute basic solution. For the reference material source in reporting ICVs use "USEPA". For the reference material lot number for the ICV1, ICV5, and ICV6 solutions use "ICV1-1014", "ICV5-0415", and "ICV6-0400", respectively.

(B) BREAKAGE OR MISSING ITEMS

Check the contents of the shipment carefully for any broken, leaking, or missing items. Check that the seal is intact on each bottle. Refer to the enclosed chain of custody record. Report any problems to Mr. Keith Strout, APTIM Federal Services, LLC, at (702) 895-8722. If requested, return the chain-of-custody record with appropriate annotations and signatures to the address provided below.

QUALITY ASSURANCE TECHNICAL SUPPORT LABORATORY
APTIM Federal Services, LLC
2700 Chandler Avenue - Building C
Las Vegas, NV 89120

(C) ANALYSIS OF SAMPLES

The Initial Calibration Verification Solutions (ICVs) are to be used to evaluate the accuracy of the initial calibrations of ICP, AA, and Cyanide colorimetric instruments, and are to be used with the CLP SOWs and revisions. The values for each element in the ICVs are listed below in μ g/L (ppb) for the resulting solution(s) after the dilution of the concentrate(s) according to the following instructions. Use Class 'A' glassware to prepare the solution(s).

ICV1-1014 For ICP-AES analysis, use a 10-fold dilution by pipetting 10 mL of the ICV1 concentrate into a 100 mL volumetric flask and dilute to volume with 2% (v/v) nitric

acid.

Page 1 of 2

QATS Form 20-007F188R00, 04-19-2021





RMs ICV 1, 5, 6 SFAM.docx

The Quality Assurance Technical Support (QATS) contract is operated by APTIM Federal Services, LLC.

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QUALITY ASSURANCE TECHNICAL SUPPORT LABORATORY "An ISO 9001:2015 Certified Program"

Instructions for QATS Reference Material: Inorganic ICV Solutions

ICV1-1014

<u>For ICP-MS analysis</u>, use a 50-fold dilution by pipetting 2 mL of the ICV1 concentrate into a 100 mL volumetric flask and dilute to volume with 1% (v/v) nitric acid.

ICV5-0415

For the cold vapor analysis of mercury by AA, use a 100-fold dilution by pipetting 1 mL of the ICV5 concentrate into a 100 mL volumetric flask and dilute to volume with 2% (v/v) nitric acid. The ICV5 concentrate is prepared in 0.05% (w/v) $K_2Cr_2O_7$ and 5% (v/v) nitric acid.

ICV6-0400

For the analysis of cyanide, use a 100-fold dilution by pipetting 1 mL of the ICV6 concentrate into a 100 mL volumetric flask and dilute to volume with Type II water. Distill this solution along with the samples before analysis. The cyanide concentrate is prepared from K₃Fe(CN)₆, Type II water, and 0.1 % sodium hydroxide, and will decompose rapidly if exposed to light.

NOTE: USE TYPE II WATER AND HIGH-PURITY ACIDS FOR ALL DILUTIONS.

(D) CERTIFIED CONCENTRATIONS OF QATS ICV1, ICV5, AND ICV6 SOLUTIONS

	ICV1-1014	
Element	Concentration (µg/L) (after 10-fold dilution)	Concentration (µg/L) (after 50-fold dilution)
Al	2500	500
Sb	1000	200
As	1000	200
Ва	520	100
Be	510	100
Cd	510	100
Ca	10000	2000
Cr	520	100
Со	520	100
Cu	510	100
Fe	10000	2000
Pb	1000	200
Mg	6000	1200
Mn	520	100
Ni	530	110
K	9900	2000
Se	1000	200
Ag	250	50
Na	10000	2000
TI	1000	210
V	500	100
Zn	1000	200

IC	CV5-0415	ICV6-0400		
Element Concentration (μg/L) (after 100-fold dilution)		Analyte	Concentration (µg/L) (after 100-fold dilution)	
Hg	4.0	CN ⁻	99	

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QATS Form 20-007F188R00, 04-19-2021

RMs ICV 1, 5, 6 SFAM.docx

Q3321-GENCHEM

Sulfuric Acid
BAKER INSTRA-ANALYZED® Reagent
For Trace Metal Analysis
Low Selenium





Material No.: 9673-33 Batch No.: 23D2462010

Manufactured Date: 2023-03-22

Retest Date: 2028-03-20 Revision No.: 0

Certificate of Analysis

Test	Specification	Result
ACS – Assay (H ₂ SO ₄)	95.0 - 98.0 %	96.1 %
Appearance	Passes Test	Passes Test
ACS - Color (APHA)	≤ 10	5
ACS – Residue after Ignition	≤ 3 ppm	< 1 ppm
ACS - Substances Reducing Permanganate (as SO2)	≤ 2 ppm	< 2 ppm
Ammonium (NH ₄)	≤ 1 ppm	1 ppm
Chloride (CI)	≤ 0.1 ppm	< 0.1 ppm
Nitrate (NO ₃)	≤ 0.2 ppm	< 0.1 ppm
Phosphate (PO ₄)	≤ 0.5 ppm	< 0.1 ppm
Trace Impurities – Aluminum (AI)	≤ 30.0 ppb	< 5.0 ppb
Arsenic and Antimony (as As)	≤ 4.0 ppb	< 2.0 ppb
Trace Impurities - Boron (B)	≤ 10.0 ppb	8.5 ppb
Trace Impurities – Cadmium (Cd)	≤ 2.0 ppb	< 0.3 ppb
Trace Impurities – Chromium (Cr)	≤ 6.0 ppb	< 0.4 ppb
Trace Impurities – Cobalt (Co)	≤ 0.5 ppb	< 0.3 ppb
Trace Impurities – Copper (Cu)	≤ 1.0 ppb	< 0.1 ppb
Frace Impurities – Gold (Au)	≤ 10.0 ppb	0.5 ppb
Heavy Metals (as Pb)	≤ 500.0 ppb	< 100.0 ppb
Frace Impurities – Iron (Fe)	≤ 50.0 ppb	1.3 ppb
Frace Impurities – Lead (Pb)	≤ 0.5 ppb	< 0.5 ppb
race Impurities – Magnesium (Mg)	≤ 7.0 ppb	0.8 ppb
race Impurities – Manganese (Mn)	≤ 1.0 ppb	< 0.4 ppb
race Impurities – Mercury (Hg)	≤ 0.5 ppb	< 0.1 ppb
race Impurities – Nickel (Ni)	≤ 2.0 ppb	0.3 ppb
race Impurities – Potassium (K)	≤ 500.0 ppb	< 2.0 ppb
race Impurities – Selenium (Se)	≤ 50.0 ppb	< 0.1 ppb
race Impurities – Silicon (Si)	≤ 100.0 ppb	31.5 ppb
race Impurities – Silver (Ag)	≤ 1.0 ppb	< 0.3 ppb

>>> Continued on page 2 >>>

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Sulfuric Acid BAKER INSTRA-ANALYZED® Reagent For Trace Metal Analysis Low Selenium





Material No.: 9673-33 Batch No.: 23D2462010

Test	Specification	D. I
	Specification	Result
Trace Impurities - Sodium (Na)	≤ 500.0 ppb	5.4 ppb
Trace Impurities – Strontium (Sr)	≤ 5.0 ppb	< 0.2 ppb
Trace Impurities – Tin (Sn)	≤ 5.0 ppb	< 0.8 ppb
Trace Impurities – Zinc (Zn)	≤ 5.0 ppb	0.4 ppb

For Laboratory, Research, or Manufacturing Use

Country of Origin: USA

Packaging Site: Phillipsburg Mfg Ctr & DC





M 6151

R-> 1/15/25

Material No.: 9530-33

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

Retest Date: 2027-06-14

Revision No.: 0

Certificate of Analysis

Test	Specification	Result
ACS - Assay (as HCI) (by acid-base titrn)	36.5 - 38.0 %	
ACS - Color (APHA)	≤ 10	37.9 %
ACS - Residue after Ignition	≤ 3 ppm	5
ACS - Specific Gravity at 60°/60°F	≤ 5 ppm 1.185 – 1.192	< 1 ppm
ACS – Bromide (Br)	≤ 0.005 %	1.191
ACS - Extractable Organic Substances		< 0.005 %
ACS - Free Chlorine (as Cl ₂)	≤ 5 ppm	< 1 ppm
Phosphate (PO ₄)	≤ 0.5 ppm	< 0.5 ppm
Sulfate (SO ₄)	≤ 0.05 ppm	< 0.03 ppm
Sulfite (SO ₃)	≤ 0.5 ppm	< 0.3 ppm
Ammonium (NH ₄)	≤ 0.8 ppm	0.3 ppm
Trace Impurities - Arsenic (As)	≤ 3 ppm	< 1 ppm
Trace Impurities – Aluminum (AI)	≤ 0.010 ppm	< 0.003 ppm
Arsenic and Antimony (as As)	≤ 10.0 ppb	1.3 ppb
Trace Impurities - Barium (Ba)	≤ 5.0 ppb	< 3.0 ppb
Trace Impurities - Beryllium (Be)	≤ 1.0 ppb	0.2 ppb
Trace Impurities - Bismuth (Bi)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities – Boron (B)	≤ 10.0 ppb	< 1.0 ppb
	≤ 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
Frace Impurities – Gallium (Ga)	≤ 1.0 ppb	< 0.2 ppb
Frace Impurities – Germanium (Ge)	≤ 3.0 ppb	< 2.0 ppb
Frace Impurities – Gold (Au)	≤ 4.0 ppb	0.6 ppb
Heavy Metals (as Pb)	≤ 100 ppb	< 50 ppb
Frace Impurities – Iron (Fe)	≤ 15 ppb	< 30 ppp 6 ppb

>>> Continued on page 2 >>>

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





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

Trace Impurities – Lead (Pb)	Test	Specification	Result
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 – Nickel (Ni) ≤ 1.0 ppb 0.8 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 Trace Impurities – Silicon (Si) ≤ 100.0 ppb 1.0 ppb Trace Impurities – Silicon (Si) ≤ 1.0 ppb 0.5 ppb Trace Impurities – Sodium (Na) ≤ 100.0 ppb 2.3 ppb Trace Impurities – Sodium (Na) ≤ 10.0 ppb 1.6 ppb Trace Impurities – Tantalum (Ta) ≤ 1.0 ppb 1.6 ppb Trace Impurities – Tantalum (Ti) ≤ 5.0 ppb 4.0 ppb Trace Impurities – Titanium (Ti) ≤ 5.0 ppb 1.5 ppb Trace Impurities – Titanium (Ti) ≤ 1.0 ppb 1.5 ppb Trace Impurities – Titanium (Ti) ≤ 5.0 ppb 0.2 ppb Trace Impurities – Titanium (Ti) ≤ 5.0 ppb 0.8 ppb	Trace Impurities – Lead (Pb)	≤ 1.0 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 - Nickel (Ni) ≤ 1.0 ppb 0.8 ppb Trace Impurities - Potassium (K) ≤ 9.0 ppb < 2.0 ppb Trace Impurities - Selenium (Se), For Information Only Trace Impurities - Selenium (Se), For Information Only 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 - Sodium (Na) ≤ 10.0 ppb 0.5 ppb Trace Impurities - Tantalum (Ta) ≤ 1.0 ppb 1.6 ppb Trace Impurities - Tantalum (Ti) ≤ 5.0 ppb 4.0 ppb Trace Impurities - Tin (Sn) ≤ 5.0 ppb 4.0 ppb Trace Impurities - Titanium (Ti) ≤ 1.0 ppb 1.5 ppb Trace Impurities - Titanium (Ti) ≤ 1.0 ppb 0.2 ppb Trace Impurities - Titanium (Ti) ≤ 1.0 ppb 0.2 ppb Trace Impurities - Titanium (Ti) ≤ 5.0 ppb 0.8 ppb	Trace Impurities – Lithium (Li)	≤ 1.0 ppb	• •
Trace Impurities - Manganese (Mn) ≤ 1.0 ppb < 0.4 ppb	Trace Impurities – Magnesium (Mg)	≤ 10.0 ppb	• •
Trace Impurities - Mercury (Hg) ≤ 0.5 ppb 0.1 ppb Trace Impurities - Molybdenum (Mo) ≤ 10.0 ppb < 3.0 ppb	Trace Impurities - Manganese (Mn)	≤ 1.0 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	Trace Impurities - Mercury (Hg)	≤ 0.5 ppb	
Trace Impurities - Nickel (Ni) ≤ 4.0 ppb < 0.3 ppb Trace Impurities - Niobium (Nb) ≤ 1.0 ppb	Trace Impurities – Molybdenum (Mo)	≤ 10.0 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 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 2.3 ppb Trace Impurities - Strontium (Sr) ≤ 1.0 ppb 4.0 ppb Trace Impurities - Tantalum (Ta) ≤ 1.0 ppb 1.6 ppb Trace Impurities - Thallium (Tl) ≤ 5.0 ppb 4.0 ppb Trace Impurities - Tin (Sn) 5.0 ppb 1.5 ppb Trace Impurities - Titanium (Ti) 5.0 ppb 5.0 ppb 6.2 ppb Trace Impurities - Titanium (Ti) 5.0 ppb 6.2 ppb Trace Impurities - Vanadium (V) 5.0 ppb 6.8 ppb Trace Impurities - Zirconium (Zr) 5.0 ppb 6.8 ppb	Trace Impurities - Nickel (Ni)	≤ 4.0 ppb	•
Trace Impurities - Potassium (K) ≤ 9.0 ppb < 2.0 ppb	Trace Impurities - Niobium (Nb)	≤ 1.0 ppb	
Trace Impurities – Selenium (Se), For Information Only Trace Impurities – Silicon (Si) ≤ 100.0 ppb < 10.0 ppb 7 race Impurities – Silver (Ag) Trace Impurities – Sodium (Na) Trace Impurities – Sodium (Na) 5 100.0 ppb 2.3 ppb 7 race Impurities – Strontium (Sr) 7 race Impurities – Tantalum (Ta) Trace Impurities – Thallium (Tl) 5 1.0 ppb 6 2.0 ppb 7 race Impurities – Tin (Sn) 7 race Impurities – Titanium (Ti) 7 race Impurities – Titanium (Ti) 7 race Impurities – Vanadium (V) 7 race Impurities – Zinc (Zn) 7 race Impurities – Zirconium (Zz) 7 race Impurities – Zirconium (Zz) 7 race Impurities – Zirconium (Zz)	Trace Impurities - Potassium (K)	≤ 9.0 ppb	
Trace Impurities - Silicon (Si) ≤ 100.0 ppb < 10.0 ppb	Trace Impurities – Selenium (Se), For Information Only		
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 - Silicon (Si)	≤ 100.0 ppb	
Trace Impurities - Sodium (Na) ≤ 100.0 ppb 2.3 ppb Trace Impurities - Strontium (Sr) ≤ 1.0 ppb < 0.2 ppb	Trace Impurities - Silver (Ag)	≤ 1.0 ppb	
Trace Impurities - Strontium (Sr) ≤ 1.0 ppb < 0.2 ppb	Trace Impurities – Sodium (Na)	≤ 100.0 ppb	
Trace Impurities - Tantalum (Ta) ≤ 1.0 ppb 1.6 ppb Trace Impurities - Thallium (Tl) ≤ 5.0 ppb < 2.0 ppb	Trace Impurities - Strontium (Sr)	≤ 1.0 ppb	
Trace Impurities – Thallium (TI) $\leq 5.0 \text{ ppb}$ $< 2.0 \text{ ppb}$ Trace Impurities – Tin (Sn) $\leq 5.0 \text{ ppb}$ 4.0 ppb Trace Impurities – Titanium (Ti) $\leq 1.0 \text{ ppb}$ 1.5 ppb Trace Impurities – Vanadium (V) $\leq 1.0 \text{ ppb}$ $< 0.2 \text{ ppb}$ Trace Impurities – Zinc (Zn) $\leq 5.0 \text{ ppb}$ 0.8 ppb	Trace Impurities – Tantalum (Ta)	≤ 1.0 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 - Thallium (TI)	≤ 5.0 ppb	
Trace Impurities - Titanium (Ti) ≤ 1.0 ppb 1.5 ppb Trace Impurities - Vanadium (V) ≤ 1.0 ppb < 0.2 ppb	Trace Impurities - Tin (Sn)	≤ 5.0 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)	Trace Impurities - Titanium (Ti)	≤ 1.0 ppb	
Trace Impurities – Zinc (Zn) ≤ 5.0 ppb Trace Impurities – Zirconium (Zr)	Trace Impurities - Vanadium (V)	≤ 1.0 ppb	
Trace Impurities - Zirconium (Zr)	Trace Impurities - Zinc (Zn)	≤ 5.0 ppb	• •
	Trace Impurities - Zirconium (Zr)		

>>> Continued on page 3 >>>

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





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

Test Specification Result

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

Country of Origin: USA

Packaging Site: Phillipsburg Mfg Ctr & DC



Sodium Phosphate, Monobasic, Monohydrate, Crystal BAKER ANALYZED® A.C.S. Reagent (sodium dihydrogen phosphate, monohydrate)

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

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

Revision No: 1

Certificate of Analysis

Meets ACS Reagent Chemical Requirements,

Test	Specification	Result
Assay (NaH2PO4 · H2O)	98.0 - 102.0 %	99.5
pH of 5% Solution at 25°C	4.1 - 4.5	4.3
Insoluble Matter	<= 0.01 %	< 0.01
Chloride (CI)	<= 5 ppm	< 5
ACS – Sulfate (SO 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



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12/14/2022

12/31/2025

Sodium Hydroxide (Pellets)

Material: 0583

Grade: ACS GRADE Batch Number: 23B1556310

Chemical Formula: NaOH Molecular Weight: 40

CAS #: 1310-73-2

Appearance: Storage: Room Temperature

Pellets

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

Manufacture Date:

Expiration Date:

Internal ID #: 710

Signature Additional Information

We certify that this batch conforms to the specifications listed.

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

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

Product meets analytical specifications of the grades listed.

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

Date Printed: 02/15/2023

Page 1 of 2

Q3321-GENCHEM **50 of 65**



12/14/2022

12/31/2025

Room Temperature

Manufacture Date:

Expiration Date:

Storage:

Sodium Hydroxide (Pellets)

Material: 0583

Grade: ACS GRADE Batch Number: 23B1556310

Chemical Formula: NaOH Molecular Weight: 40

CAS #: 1310-73-2

Appearance:

Pellets

Spec Set: 0583ACS

710

Internal ID #:

Signature Additional Information

We certify that this batch conforms to the specifications listed.

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

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

Product meets analytical specifications of the grades listed.

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

Date Printed: 02/15/2023

Page 2 of 2

Q3321-GENCHEM 51 of 65



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.

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Chem-Impex International, Inc.

Tel: (630) 766-2112 Fax: (630) 766-2218

E-mail: sales@chemimpex.com Web site: www.chemimpex.com

Shipping and Correspondence:935 Dillon Drive
825 Dillon Drive

Wood Dale, IL 60191 Wood Dale, IL 60191

Certificate of Analysis

Catalogue Number 01237

Lot Number 002126-2019-201

Product Magnesium chloride hexahydrate

Magnesium chloride•6H₂O

CAS Number 7791-18-6 Molecular Formula MgCl₂•6H₂O

Molecular Weight 203.3

Appearance White crystals

Solubility 167 g in 100 mL water

Melting Point ~ 115 °CHeavy Metals4.393 ppm

Anion Nitrate (NO_3) : < 0.001%

Phosphate (PO_4) : < 5 ppm Sulfate (SO_4) : < 0.002%

Cation Ammonium (NH₄) : < 0.002%

Barium (Ba) : 0.005% Calcium (Ca) : 0.01% Iron (Fe) : 4.5 ppm

Manganese (Mn): 0.624 ppm Potassium (K): 0.004% Sodium (Na): 0.000003% Strontium (Sr): 0.005%

Insoluble material0.0021%Assay by titration100.83%GradeACS reagentStorageStore at RT

Page 1 of 2

Q3321-GENCHEM 53 of 65

Catalog Number: 01237 Lot Number: 002126-2019-201

Remarks

See material safety data sheet for additional information

For laboratory use only

The foregoing is a copy of the Certificate of Analysis as provided by our supplier

Bala Kumar

Quality Control Manager

Q3321-GENCHEM 54 of 65



3050 Spruce Street, Saint Louis, MO 63103, USA

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

Outside USA: eurtechserv@sial.com

Certificate of Analysis

Barbituric acid - ReagentPlus®, 99%

Product Name:

Product Number: 185698 Batch Number: WXBF3271V Brand: SIAL

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

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



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.

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Version Number: 1

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

customerservice@riccachemical.com

Certificate of Analysis

Cyanide Standard, 1000 ppm CN

Lot Number: 1505H73 Product Number: 2543

Manufacture Date: MAY 08, 2025

Expiration Date: NOV 2025

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

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

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

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

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

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

Part Number	Size / Package Type	Shelf Life (Unopened Container)
2543-16	500 mL amber poly	6 months
2543-32	1 L amber poly	6 months
2543-4	120 mL amber poly	6 months

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

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

Q3321-GENCHEM 56 of 65

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.

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

Q3321-GENCHEM 57 of 65



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

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Q3321-GENCHEM

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ISO9001:2015 Registration #0306-01



PERCENT SOLID

Supervisor: Iwona
Analyst: jignesh

Date: 10/10/2025

OVENTEMP IN Celsius(°C): 107 OVENTEMP OUT Celsius(°C): 104

Time IN: 17:10 Time OUT: 08:40

In Date: 10/09/2025 Out Date: 10/10/2025

 Weight Check 1.0g: 1.00
 Weight Check 1.0g: 1.00

 Weight Check 10g: 10.00
 Weight Check 10g: 10.00

OvenID: M OVEN#1 BalanceID: M SC-4 Thermometer ID: % SOLID-OVEN

QC:LB137480

Lab ID	Client SampleID	Dish #	Dish Wt(g) (A)	Sample Wt(g)	Sample	Dish+Dry Sample Wt(g)(C)	% Solid	Comments
Q3300-01	OIL	1	1.00	1.00	2.00	2.00	100.0	oil sample
Q3310-01	SS-01-0-1	2	1.15	10.03	11.18	7.7	65.3	
Q3310-02	SS-01-1-2	3	1.12	10.62	11.74	8.81	72.4	
Q3310-03	SS-01-2-3	4	1.16	10.56	11.72	9.09	75.1	
Q3321-01	P001-DS-01	5	1.16	10.56	11.72	9.44	78.4	
Q3322-01	OR-02-100925	6	1.11	10.33	11.44	10.72	93.0	
Q3322-02	OR-02-100925-E2	7	1.12	11.11	12.23	11.55	93.9	

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

Q3321-GENCHEM 59 of 65

WORKLIST(Hardcopy Internal Chain)

Date: 10-09-2025 08:08:47 oshta w Department: Wet-Chemistry WorkList ID: 192359 %1-100925 Sample Sample

						2	Date : 10-03-20'	10-03-2023 00:08:47
Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date Method	Method
Q3300-01	OIL	Solid	Percent Solide	O La A Laco				
03310-01	000			Cool 4 deg C	PSEG03	D31	10/07/2025	10/07/2025 Chemtech -SO
	1-0-10-00	Solid	Percent Solids	Cool 4 deg C	LANG01	D34	10/07/2026	
Q3310-02	SS-01-1-2	Solid	Percent Solids	0 20 V 1000			9707//0/01	10/07/2025 Chemtech -SO
O3310-03	0000			Cool 4 deg C	LANG01	D31	10/07/2025	10/07/2025 Chemtech -SO
20-010-00	52-11-5-3	Solid	Percent Solids	Cool 4 dea C	I ANCOT	707		
Q3321-01	P001-DS-01	Solid	Donners Called)))	100	25	10/07/2025	10/07/2025 Chemtech -SO
		DIIDO	reicent solids	Cool 4 deg C	ROYF02	D41	10/08/2025	10/08/2025 Chemtech -SO
Q3322-01	OR-02-100925	Solid	Percent Solids	Cool A door	0 0 0			
03322-02	7 700004			0 000	PSEGUS	D31	10/09/2025	10/09/2025 Chemtech -SO
70-77000	OR-02-100925-EZ	Solid	Percent Solids	Cool 4 deg C	PSEG05	D31	10/00/2026	
							1010012023	OS- Delinier Czozico

Date/Time 10/09/25

14130

Raw Sample Received by:

Raw Sample Relinquished by:

Page 1 of 1

Raw Sample Received by:

Raw Sample Relinquished by:



SHIPPING DOCUMENTS

Page 1 of 2

USEPA

DateShipped: 10/8/2025

CarrierName: FedEx

Special Instructions:

AirbillNo: 8850 1194 6759

CHAIN OF CUSTODY RECORD

Case #: 918

Contact Name: Peter Lisichenko Contact Phone: 347-276-6251

No: 2-100825-0004-0122-01

Cooler#: 1

Lab: Alliance Technical Group, LLC

SAMPLES TRANSFERRED FROM

CHAIN OF CUSTODY #

Lab Phone: 805-526-7161

_ab#	Sample #	Location	Analyses	Matrix	Sample Date	Sample Time	Numb Cont	Container	Preservative	Lab QC
	P001-DS-01	P001	TAL VOCs	Soil	10/8/2025	14:15	3	5-g Encore sampler	4 C	
	P001-DS-01	P001	TAL SVOCs	Soil	10/8/2025	14:15	1	8 oz glass jar w/Teflon cap	4 C	
	P001-DS-01	P001	TAL PCBs	Soil	10/8/2025	14:15	1	8 oz glass jar w/Teflon cap	4 C	
	P001-DS-01	P001	TAL Pesticides	Soil	10/8/2025	14:15	1	8 oz glass cl jar w/Teflon cap	4 C	
	P001-DS-01	P001	TAL Metals+Hg&CN	Soil	10/8/2025	14:15	1	8 oz glass jar w/Teflon cap	4 C	
	P001-DS-01	P001	TCLP VOCs	Soil	10/8/2025	14:15	1	8 oz glass jar w/Teflon cap	4 C	
	P001-DS-01	P001	TCLP Metals+Hg	Soil	10/8/2025	14:15	1	8 oz glass jar w/Teflon cap	4 C	
	P001-DS-01	P001	TAL Pesticides	Soil	10/8/2025	14:15	1	8 oz glass jar w/Teflon cap	4 C	
	P001-DS-01	P001	TCLP SVOCs	Soil	10/8/2025	14:15	1	8 oz glass jar w/Teflon cap	4 C	
	P001-DS-01	P001	TCLP Herbicides	Soil	10/8/2025	14:15	1	8 oz glass jar w/Teflon cap	4 C	

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
ALL SAMPLES ALL ANALYSS	Polespor USERA	16/8/25 1606m	Ole	10/9/25	ZhGuntt 34

Page 2 of 2

USEPA

DateShipped: 10/8/2025 CarrierName: FedEx

Special Instructions:

AirbillNo: 8850 1194 6759

CHAIN OF CUSTODY RECORD

Case #: 918

Contact Name: Peter Lisichenko Contact Phone: 347-276-6251 No: 2-100825-0004-0122-01

Cooler #: 1

Lab: Alliance Technical Group, LLC

SAMPLES TRANSFERRED FROM

CHAIN OF CUSTODY #

Lab Phone: 805-526-7161

ab#	Sample #	Location	Analyses	Matrix	Sample Date	Sample Time	Numb Cont	Container		Lab QC
	P001-DS-01	P001	Percent Moisture	Soil	10/8/2025	14:15	1	4 oz glass jar	4 C	
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Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receip
AU MALYSIS	Pathon user	10/8/25	CR-	10/9/25	# Qun # 1 3.4
	, ,				



Laboratory Certification

Certified By	License No.
Connecticut	PH-0830
DOD ELAP (ANAB)	L2219
Maine	2024021
Maryland	296
•	
New Hampshire	255425
F	
New Jersey	20012
New York	11376
Pennsylvania	68-00548
į	
Soil Permit	525-24-234-08441
Texas	TX-C25-00189
.0.00	523 33 100
Virginia	460312

QA Control Code: A2070148

Q3321-GENCHEM **64 of 65**



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

Fax: 908 789 8922

LOGIN REPORT/SAMPLE TRANSFER

Order ID: Q3321

ROYF02

Order Date: 10/9/2025 10:30:00 AM

Project Mgr:

Client Name: Weston Solutions, Inc.

Project Name : -RFP.905 918

Report Type: Level 4

Client Contact: Smita Sumbaly

Invoice Contact: Smita Sumbaly

Receive DateTime: 10/9/2025-12:00:00-AM

EDD Type: EXCEL NOCLEANUP

Invoice Name: Weston Solutions, Inc.

Purchase Order:

10:00

Hard Copy Date:

Date Signoff:

LAB ID **CLIENT ID** MATRIX SAMPLE SAMPLE TEST **TEST GROUP METHOD** FAX DATE DUE DATE TIME DATES Q3321-01 P001-DS-01 Solid 10/08/2025 14:15 VOC-TCLVOA-10 10 Bus. Days 5 Bus Days 8260D

Relinguished By:

Date / Time:

Received By:

Date / Time:

10/09/2

Storage Area: VOA Refridgerator Room