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

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

LAB CHRONICLE

OrderID:	Q2303	**OrderDate:**	6/12/2025 12:09:00 PM
Client:	Portal Partners Tri-Venture	**Project:**	Amtrak Sawtooth Bridges 2025
Contact:	Joseph Krupansky	**Location:**	D41

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q2303-01	**B-165-SB01**	**SOIL**			**06/11/25 11:10**			**06/11/25**
			Hexavalent Chromium	7196A		06/13/25	06/13/25 12:04	
			Trivalent Chromium	6010D			06/16/25 15:49	
Q2303-02	**B-170-SB03**	**SOIL**			**06/11/25 11:15**			**06/11/25**
			Hexavalent Chromium	7196A		06/13/25	06/13/25 12:05	
			Trivalent Chromium	6010D			06/16/25 15:53	

Alliance
TECHNICAL GROUP

SAMPLE DATA

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

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	06/11/25 11:10
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	06/11/25
Client Sample ID:	B-165-SB01	SDG No.:	Q2303
Lab Sample ID:	Q2303-01	Matrix:	SOIL
		% Solid:	83.6

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units(Dry Weight)	Prep Date	Date Ana.	Ana Met.
Hexavalent Chromium	0.083	U	1	0.083	0.48	mg/Kg	06/13/25 08:45	06/13/25 12:04	7196A
Trivalent Chromium	14.9		1	0.60	0.60	mg/Kg		06/16/25 15:49	6010D

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

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

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	06/11/25 11:15
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	06/11/25
Client Sample ID:	B-170-SB03	SDG No.:	Q2303
Lab Sample ID:	Q2303-02	Matrix:	SOIL
		% Solid:	92.7

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units(Dry Weight)	Prep Date	Date Ana.	Ana Met.
Hexavalent Chromium	0.13	J	1	0.073	0.42	mg/Kg	06/13/25 08:45	06/13/25 12:05	7196A
Trivalent Chromium	14.3		1	0.54	0.54	mg/Kg		06/16/25 15:53	6010D

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

QC RESULT SUMMARY

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

Initial and Continuing Calibration Verification

Client: Portal Partners Tri-Venture **SDG No.:** Q2303

Project: Amtrak Sawtooth Bridges 2025 **RunNo.:** LB136147

Analyte	Units	Result	True Value	% Recovery	Acceptance Window (%R)	Analysis Date
Sample ID: ICV						
Hexavalent Chromium	mg/L	0.503	0.5	101	90-110	06/13/2025
Sample ID: CCV1						
Hexavalent Chromium	mg/L	0.488	0.5	98	90-110	06/13/2025
Sample ID: CCV2						
Hexavalent Chromium	mg/L	0.502	0.5	100	90-110	06/13/2025

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

Initial and Continuing Calibration Blank Summary

Client: Portal Partners Tri-Venture **SDG No.:** Q2303

Project: Amtrak Sawtooth Bridges 2025 **RunNo.:** LB136147

Analyte	Units	Result	Acceptance Limits	Conc Qual	MDL	RDL	Analysis Date
Sample ID: ICB							
Hexavalent Chromium	mg/L	< 0.0050	0.0050	U	0.0029	0.01	06/13/2025
Sample ID: CCB1							
Hexavalent Chromium	mg/L	< 0.0050	0.0050	U	0.0029	0.01	06/13/2025
Sample ID: CCB2							
Hexavalent Chromium	mg/L	< 0.0050	0.0050	U	0.0029	0.01	06/13/2025

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

Preparation Blank Summary

Client: Portal Partners Tri-Venture **SDG No.:** Q2303

Project: Amtrak Sawtooth Bridges 2025

Analyte	Units	Result	Acceptance Limits	Conc Qual	MDL	RDL	Analysis Date
Sample ID: PB168457BL							
Hexavalent Chromium	mg/Kg	< 0.2000	0.2000	U	0.07	0.4	06/13/2025

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

Matrix Spike Summary

Client: Portal Partners Tri-Venture
SDG No.: Q2303
Project: Amtrak Sawtooth Bridges 2025
Sample ID: Q2310-01
Client ID: TP-7MS
Percent Solids for Spike Sample: 88.7

Analyte	Units	Acceptance Limit %R	Spiked Result	Conc. Qualifier	Sample Result	Conc. Qualifier	Spike Added	Dilution Factor	% Rec	Qual	Analysis Date
Hexavalent Chromium	mg/Kg	75-125	1410		0.078	U	1450	40	97		06/13/2025

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

Matrix Spike Summary

Client: Portal Partners Tri-Venture
SDG No.: Q2303
Project: Amtrak Sawtooth Bridges 2025
Sample ID: Q2310-01
Client ID: TP-7MS
Percent Solids for Spike Sample: 88.7

Analyte	Units	Acceptance Limit %R	Spiked Result	Conc. Qualifier	Sample Result	Conc. Qualifier	Spike Added	Dilution Factor	% Rec	Qual	Analysis Date
Hexavalent Chromium	mg/Kg	85-115	42.3		0.078	U	45.1	2	94		06/13/2025

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

Matrix Spike Summary

Client: Portal Partners Tri-Venture
SDG No.: Q2303
Project: Amtrak Sawtooth Bridges 2025
Sample ID: Q2310-01
Client ID: TP-7MS
Percent Solids for Spike Sample: 88.7

Analyte	Units	Acceptance Limit %R	Spiked Result	Conc. Qualifier	Sample Result	Conc. Qualifier	Spike Added	Dilution Factor	% Rec	Qual	Analysis Date
Hexavalent Chromium	mg/Kg	75-125	39.9		0.078	U	45.1	2	88		06/13/2025

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

Duplicate Sample Summary

Client: Portal Partners Tri-Venture
SDG No.: Q2303
Project: Amtrak Sawtooth Bridges 2025
Sample ID: Q2310-01
Client ID: TP-7DUP
Percent Solids for Spike Sample: 88.7

Analyte	Units	Acceptance Limit	Sample Result	Conc. Qualifier	Duplicate Result	Conc. Qualifier	Dilution Factor	RPD/ AD	Qual	Analysis Date
Hexavalent Chromium	mg/Kg	+/-20	0.078	U	0.078	U	1	0		06/13/2025

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

Laboratory Control Sample Summary

Client: Portal Partners Tri-Venture **SDG No.:** Q2303

Project: Amtrak Sawtooth Bridges 2025 **Run No.:** LB136147

Analyte	Units	True Value	Result	Conc. Qualifier	% Recovery	Dilution Factor	Acceptance Limit %R	Analysis Date
Sample ID PB168457BS								
Hexavalent Chromium	mg/Kg	20	19.6		98	1	84-110	06/13/2025

RAW DATA

Reviewed By:jignesh
On:6/16/2025 11:18:50 AM
Inst Id :SPECTROPHOTOME

Analytical Summary Report

Analysis Method: ~~7196A~~

Parameter: ~~Hexavalent Chromium~~

Run Number: ~~LB136147~~

ANALYST: Iwona

SUPERVISOR REVIEW BY: jignesh

pH Meter ID: ph Meter-1

Reagent/Standard	Lot/Log #
hexavalent chromium color reagent	WP113516
5N sulfuric acid	WP112831
HNO3 Hex-Chrome, 5M	WP112830
Hexchrome Cleaning Solution	WP113087

Intercept: 0.0005 **Slope:** 0.7647 **Regression:** 0.999979

Seq	Lab ID	True Value (mg/l)	DF	Initial Vol (ml)	Final Vol (ml)	pH HN03	pH H2SO4	Absorb.at 540nm		Absorbance Difference	Result (mg/L)	%D	Anal Date	Anal Time
								Backgrnd	Color					
1	CAL1	0	1	100	100	7.14	2.04	0.000	0.000	0.000	-0.00		06/13/2025	11:50
2	CAL2	0.01	1	100	100	7.23	1.99	0.000	0.008	0.008	0.009	-10	06/13/2025	11:51
3	CAL3	0.025	1	100	100	7.09	1.85	0.000	0.021	0.021	0.026	4	06/13/2025	11:52
4	CAL4	0.05	1	100	100	7.41	2.44	0.000	0.039	0.039	0.050	0	06/13/2025	11:53
5	CAL5	0.1	1	100	100	7.25	2.15	0.000	0.078	0.078	0.101	1	06/13/2025	11:54
6	CAL6	0.5	1	100	100	7.36	2.33	0.000	0.379	0.379	0.494	-1.2	06/13/2025	11:55
7	CAL7	1	1	100	100	7.52	1.78	0.000	0.767	0.767	1.002	0.2	06/13/2025	11:56

Reviewed By:jignesh
On:6/16/2025 11:18:50 AM
Inst Id :SPECTROPHOTOME

Analytical Summary Report

Analysis Method: 7196A
ANALYST: Iwona
Parameter: Hexavalent Chromium
SUPERVISOR REVIEW BY: jignesh
Run Number: LB136147
pH Meter ID: ph Meter-1

Seq	Lab ID	True Value	DF	Initial Vol (ml/gm)	Final Vol (ml)	pH HN03	pH H2SO4	Absorb.at540nm		Absorbance Difference	Intermediate Result (mg/L)	Anal Date	Anal Time
								Backgrnd	Color				
1	ICV	0.5	1	100	100	7.11	2.32	0.000	0.385	0.385	0.503	06/13/2025	11:57
2	ICB		1	100	100	7.75	2.07	0.000	0.000	0.000	-0.001	06/13/2025	11:58
3	CCV1	0.5	1	100	100	7.28	1.86	0.000	0.374	0.374	0.488	06/13/2025	11:59
4	CCB1		1	100	100	7.44	2.17	0.000	0.000	0.000	-0.001	06/13/2025	12:00
5	RL Check	0.01	1	100	100	7.62	2.16	0.000	0.080	0.080	0.104	06/13/2025	12:01
6	PB168457BL		1	2.50	100	7.66	1.68	0.000	0.001	0.001	0.001	06/13/2025	12:02
7	PB168457BS	20	1	2.50	100	7.84	1.85	0.000	0.376	0.376	0.491	06/13/2025	12:03
8	Q2303-01		1	2.52	100	7.25	2.10	0.003	0.004	0.001	0.001	06/13/2025	12:04
9	Q2303-02		1	2.57	100	7.11	2.14	0.001	0.004	0.003	0.003	06/13/2025	12:05
10	Q2308-01		1	2.54	100	7.52	1.85	0.004	0.004	0.000	-0.001	06/13/2025	12:06
11	Q2310-01		1	2.52	100	7.85	2.33	0.002	0.002	0.000	-0.001	06/13/2025	12:07
12	Q2310-01DU		1	2.52	100	7.80	2.08	0.002	0.002	0.000	-0.001	06/13/2025	12:08
13	Q2310-01MS	40	2	2.51	100	7.44	2.17	0.002	0.342	0.340	0.444	06/13/2025	12:09
14	Q2310-01MS	1284	40	2.52	100	7.16	1.92	0.000	0.603	0.603	0.788	06/13/2025	12:10
15	Q2310-01MS	40	2	2.52	100	7.62	1.77	0.002	0.364	0.362	0.473	06/13/2025	12:11
16	CCV2	0.5	1	100	100	7.85	2.08	0.000	0.384	0.384	0.502	06/13/2025	12:12
17	CCB2		1	100	100	7.11	2.44	0.000	0.000	0.000	-0.001	06/13/2025	12:13

Alliance TECHNICAL GROUP

Soil/Sludge Hexavalent Chromium Preparation Sheet

PB168457

SOP ID : M3060A,7196A-Hex.Chromium-26

SDG No : N/A

Matrix : SOIL

Pippete ID : WC

Balance ID : WC SC-7

Hood ID : HOOD#3

Block ID : WC S-2, WC S-1

Weigh By : IZ

Start Digest Date: 06/13/2025 **Time :** 08:45 **Temp :** 90 °C

End Digest Date: 06/13/2025 **Time :** 09:50 **Temp :** 94 °C

Initial Boiler 06/13/25 10:10 92°C

06/13/25 11:10 95°C

Digestion tube ID : M6054

Filter paper ID : 400213

pH Meter ID : WC pH meter-1

Block Thermometer ID : WC-Block#1

Prep Technician Signature: IZ

Supervisor Signature:

Standared Name	MLS USED	STD REF. # FROM LOG
PRE-DIGESTION SPIKE	2.0ML	WP111315
INSOLUBLE SPIKE	0.02GM	W2202
POST-DIGESTION SPIKE	2.0ML	WP111315
LCSS	1.0ML	WP111316
PBS003	50.ML	W3112

Chemical Used	ML/SAMPLE USED	Lot Number
MAGNESIUM CHLORIDE	0.4GM	W3152
PHOSPHATE BUFFER	0.5ML	WP112903
HEX. DIGESTION SOLN.	50.0ML	WP113085
5M HNO3	5-7ML	WP112830
5N H2SO4	1-3ML	WP112831
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	Vol(ml)	Comment
CAL1	CAL1	2.5ML	W3112
CAL2	CAL2	0.2ML	WP113515
CAL3	CAL3	0.5ML	WP113515
CAL4	CAL4	1ML	WP113515
CAL5	CAL5	0.2ML	WP111315
CAL6	CAL6	1ML	WP111315
CAL7	CAL7	2.0ML	WP111315
ICV	ICV	1ML	WP111316
ICB	ICB	2.5ML	W3112
CCV	CCV	1ML	WP111315
CCB	CCB	2.5ML	W3112

Extraction Conformance/Non-Conformance Comments:

N/A

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

IZ 6/13/25

Alliance TECHNICAL GROUP

Soil/Sludge Hexavalent Chromium Preparation Sheet

PB168457

Lab Sample ID	Client Sample ID	Initial Weight (g)	Final Vol (ml)	pH	Sulfide	Oxidizing	Nitrate/ Nitrite	Comment	Prep Pos
PB168457BL	PBS457	2.50	100	N/A	N/A	N/A	N/A	N/A	N/A
PB168457BS	LCS457	2.50	100	N/A	N/A	N/A	N/A	N/A	N/A
Q2303-01	B-165-SB01	2.52	100	N/A	N/A	N/A	N/A	N/A	N/A
Q2303-02	B-170-SB03	2.57	100	N/A	N/A	N/A	N/A	N/A	N/A
Q2308-01	EO-02-06122025	2.54	100	N/A	N/A	N/A	N/A	N/A	N/A
Q2310-01	TP-7	2.52	100	N/A	N/A	N/A	N/A	N/A	N/A
Q2310-01DUP	TP-7DUP	2.52	100	N/A	N/A	N/A	N/A	N/A	N/A
Q2310-01MSPre	TP-7MSPRE	2.51	100	N/A	N/A	N/A	N/A	N/A	N/A
Q2310-01MS2Ins	TP-7MS2INS	2.52	100	N/A	N/A	N/A	N/A	N/A	N/A
Q2310-01MS3Post	TP-7MS3POST	2.52	100	N/A	N/A	N/A	N/A	N/A	N/A

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

Instrument ID: SPECTROPHOTOMETER-1

Daily Analysis Runlog For Sequence/QCBatch ID # LB136147

Review By	Iwona	Review On	6/13/2025 12:22:00 PM
Supervise By	jignesh	Supervise On	6/16/2025 11:18:50 AM
SubDirectory	LB136147	Test	Hexavalent Chromium

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	WP113516,WP112831,WP112830,WP113087

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	CAL1	CAL1	CAL	06/13/25 11:50		Iwona	OK
2	CAL2	CAL2	CAL	06/13/25 11:51		Iwona	OK
3	CAL3	CAL3	CAL	06/13/25 11:52		Iwona	OK
4	CAL4	CAL4	CAL	06/13/25 11:53		Iwona	OK
5	CAL5	CAL5	CAL	06/13/25 11:54		Iwona	OK
6	CAL6	CAL6	CAL	06/13/25 11:55		Iwona	OK
7	CAL7	CAL7	CAL	06/13/25 11:56		Iwona	OK
8	ICV	ICV	ICV	06/13/25 11:57		Iwona	OK
9	ICB	ICB	ICB	06/13/25 11:58		Iwona	OK
10	CCV1	CCV1	CCV	06/13/25 11:59		Iwona	OK
11	CCB1	CCB1	CCB	06/13/25 12:00		Iwona	OK
12	RL Check	RL Check	SAM	06/13/25 12:01		Iwona	OK
13	PB168457BL	PB168457BL	MB	06/13/25 12:02		Iwona	OK
14	PB168457BS	PB168457BS	LCS	06/13/25 12:03		Iwona	OK
15	Q2303-01	B-165-SB01	SAM	06/13/25 12:04		Iwona	OK
16	Q2303-02	B-170-SB03	SAM	06/13/25 12:05		Iwona	OK
17	Q2308-01	EO-02-06122025	SAM	06/13/25 12:06		Iwona	OK
18	Q2310-01	TP-7	SAM	06/13/25 12:07		Iwona	OK

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

Instrument ID: SPECTROPHOTOMETER-1

Daily Analysis Runlog For Sequence/QCBatch ID # LB136147

Review By	Iwona	Review On	6/13/2025 12:22:00 PM
Supervise By	jignesh	Supervise On	6/16/2025 11:18:50 AM
SubDirectory	LB136147	Test	Hexavalent Chromium

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	WP113516,WP112831,WP112830,WP113087

19	Q2310-01DUP	TP-7DUP	DUP	06/13/25 12:08		Iwona	OK
20	Q2310-01MSPre	TP-7MS	MS	06/13/25 12:09		Iwona	OK
21	Q2310-01MS2Ins	TP-7MS	MS	06/13/25 12:10		Iwona	OK
22	Q2310-01MS3Post	TP-7MS	MS	06/13/25 12:11		Iwona	OK
23	CCV2	CCV2	CCV	06/13/25 12:12		Iwona	OK
24	CCB2	CCB2	CCB	06/13/25 12:13		Iwona	OK

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

Prep Standard - Chemical Standard Summary

Order ID : Q2303

Test : Hexavalent Chromium,Percent Solids,Trivalent Chromium

Prepbatch ID : PB168457,

Sequence ID/Qc Batch ID: LB136147,LB136166,

Standard ID :
WP111315,WP111316,WP112830,WP112831,WP112903,WP113085,WP113087,WP113516,

Chemical ID :
E3940,M6041,M6151,M6158,W2202,W2651,W2652,W2979,W3112,W3113,W3152,W3163,W3168,W3206,

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

Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1993	HEXAVALENTCHROMIUM STOCK STD 1, 50PPM	WP111315	01/09/2025	07/09/2025	Rubina Mughal	WETCHEM_SCALE_5 (WCSC-5)	None	Iwona Zarych 01/09/2025

FROM 0.14140gram of W2651 + 1000.00000ml of W3112 = Final Quantity: 1000.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1994	HEXAVALENTCHROMIUM STOCK STD 2, 50PPM	WP111316	01/09/2025	07/09/2025	Rubina Mughal	WETCHEM_SCALE_5 (WCSC-5)	None	Iwona Zarych 01/09/2025

FROM 0.14140gram of W2652 + 1000.00000ml of W3112 = Final Quantity: 1000.000 ml

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

Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1836	HNO3 Hex-Chrome, 5M	WP112830	04/25/2025	10/25/2025	Rubina Mughal	None	None	Iwona Zarych 04/25/2025

FROM 320.00000ml of M6158 + 680.00000ml of W3112 = Final Quantity: 1000.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
126	5N sulfuric acid	WP112831	04/25/2025	10/25/2025	Rubina Mughal	None	None	Iwona Zarych 04/25/2025

FROM 140.00000ml of M6041 + 860.00000ml of W3112 = Final Quantity: 1.000 L

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

Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
190	HEX CHROME PHOSPHATE BUFFER	WP112903	05/01/2025	11/01/2025	Rubina Mughal	WETCHEM_SCALE_8 (WCSC-7)	None	Iwona Zarych 05/01/2025

FROM 0.84500L of W3112 + 68.04000gram of W3206 + 87.09000gram of W3168 = Final Quantity: 1.000 L

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
148	hexchrome digestion fluid	WP113085	05/15/2025	06/15/2025	Rubina Mughal	WETCHEM_SCALE_8 (WCSC-7)	None	Iwona Zarych 05/15/2025

FROM 120.00000gram of W3163 + 4.00000L of W3112 + 80.00000gram of W3113 = Final Quantity: 4000.000 ml

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

Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3354	Hexchrome Cleaning Solution	WP113087	05/15/2025	08/18/2025	Rubina Mughal	None	None	Iwona Zarych 05/15/2025

FROM 182.00000ml of M6151 + 727.00000ml of W3112 + 91.00000ml of M6158 = Final Quantity: 1000.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
114	hexavalent chromium color reagent	WP113516	06/13/2025	06/20/2025	Iwona Zarych	WETCHEM_SCALE_5 (WCSC-5)	None	Jignesh Parikh 06/13/2025

FROM 0.25000gram of W2979 + 50.00000ml of E3940 = Final Quantity: 50.000 ml

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

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9254-03 / Acetone, Ultra Resi (cs/4x4L)	24H1462005	12/11/2025	06/11/2025 / Rajesh	06/04/2025 / Rajesh	E3940

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	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 #
Seidler Chemical	BA-9598-34 / Nitric Acid, Instra-Analyzed (cs/4x2.5L)	24D1062002	03/25/2029	03/10/2025 / Eman	02/02/2025 / Sagar	M6158

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	AA14125-36 / LEAD (II) CHROMATE, ACS, 500G	U19B018	01/23/2027	01/23/2017 / apatel	01/23/2017 / apatel	W2202

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	AA13450-36 / Potassium Dichromate, 500g(NEW)	T15F019	01/24/2030	01/24/2020 / apatel	01/24/2020 / apatel	W2651

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.	P188-500 / Potassium Dichromate, 500g(new-2nd lot)	194664	01/24/2030	01/24/2020 / apatel	01/24/2020 / apatel	W2652

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	31390 / 1,5-Diphenylcarbazide	MKCR6636	12/09/2027	12/09/2022 / lwona	12/09/2022 / lwona	W2979

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

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

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	01237-10KG / Megnasium Chloride Hexahydrate ACS 10KG	002126-2019-201	11/25/2029	11/25/2024 / lwona	11/25/2024 / lwona	W3152

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	EM-SX0395-3 / SODIUM CARBONATE ANHYDR 2.5KG	24E3156178	09/30/2027	12/10/2024 / lwona	12/10/2024 / lwona	W3163

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.	J3252-1 / POTAS PHOSPHATE, DIBASIC PWD, ACS, 500G	24H0856239	04/19/2028	01/03/2025 / Iwona	01/03/2025 / Iwona	W3168

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	J3246-1 / POTAS PHOSPHATE, MONO, CRYS, ACS, 500G	MKCX1379	01/31/2029	04/29/2025 / Iwona	04/29/2025 / Iwona	W3206

Alfa Aesar

Certificate of analysis

Product No.	14125
Product:	Lead(II) chromate, ACS, 98%
Lot No.:	U19B018

Test	Limits	Results
Assay	98.0 % min	99.3 %
Soluble matter	0.15 % max	< 0.02 %
Carbon compounds	0.01 % max	< 0.01 %

Traceable to NIST? Yes

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

ThermoFisher SCIENTIFIC

Certificate of Analysis

Product No.: 13450

Product: Potassium dichromate, ACS, 99.0% min

Lot No.: T15F019

Test	Limits	Results
Appearance	Orange-red crystals	Orange-red crystals
Identification	To Pass	Passes
Purity	99.0 % min	99.67 %
Insoluble matter	0.005 % max	0.004 %
Loss on drying	0.05 % max	0.03 %
Chloride	0.001 % max	< 0.001 %
Sulfate	0.005 % max	< 0.005 %
Iron	0.001 % max	< 0.001 %
Calcium	0.003 % max	0.0012 %
Sodium	0.02 % max	0.0047 %

ThermoFisher SCIENTIFIC

Certificate of Analysis

1 Reagent Lane
Fair Lawn, NJ 07410
201.796.7100 tel
201.796.1329 fax

Thermo Fisher Scientific's Quality System has been found to conform to Quality Management System Standard ISO9001:2015 by SAI Global Certificate Number CERT – 0120632

This is to certify that units of the lot number below were tested and found to comply with the specifications of the grade listed. Certain data have been supplied by third parties. Thermo Fisher Scientific expressly disclaims all warranties, expressed or implied, including the implied warranties of merchantability and fitness for a particular purpose. Products are for research use or further manufacturing. Not for direct administration to humans or animals. It is the responsibility of the final formulator and end user to determine suitability based upon the intended use of the end product. Products are tested to meet the analytical requirements of the noted grade. The following information is the actual analytical results obtained.

Catalog Number	P188	Quality Test / Release Date	08/12/2019
Lot Number	194664		
Description	POTASSIUM DICHROMATE, A.C.S.		
Country of Origin	United States	Suggested Retest Date	Aug/2024
Chemical Origin	Inorganic-non animal		
BSE/TSE Comment	No animal products are used as starting raw material ingredients, or used in processing, including lubricants, processing aids, or any other material that might migrate to the finished product.		
Chemical Comment			

N/A			
Result Name	Units	Specifications	Test Value
APPEARANCE		REPORT	Fine, orange-red crystals
ASSAY	%	>= 99	99.2
CALCIUM	%	<= 0.003	<0.003
CHLORIDE	%	<= 0.001	<0.001
LOSS ON DRYING @ 105 C	%	<= 0.05	<0.05
SULFATE (SO4)	%	<= 0.005	<0.005
INSOLUBLE MATTER	%	<= 0.005	0.003
IRON (Fe)	%	<= 0.001	<0.001
SODIUM (Na)	%	<= 0.02	<0.02
IDENTIFICATION	PASS/FAIL	= PASS TEST	PASS TEST

Teresa Bailey-Wyche

Quality Assurance Specialist - Certificate of Analysis Fair Lawn

Note: The data listed is valid for all package sizes of this lot of this product, expressed as an extension of this catalog number listed above.
If there are any questions with this certificate, please call at (800) 227-6701.
*Based on suggested storage condition.

Acetone
BAKER RESI-ANALYZED® Reagent
For Organic Residue Analysis

avantor™ | J.T.Baker

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

Certificate of Analysis

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

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

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

Recd by RP on 6/11/25

E3940

JCroak
Jamie Croak
Director Quality Operations, Bioscience Production

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

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

M 6041-46
MS

avantor™ | J.T.Baker®

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_2SO_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 (Cl)	≤ 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 (Al)	≤ 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
Trace Impurities – Gold (Au)	≤ 10.0 ppb	0.5 ppb
Heavy Metals (as Pb)	≤ 500.0 ppb	< 100.0 ppb
Trace Impurities – Iron (Fe)	≤ 50.0 ppb	1.3 ppb
Trace Impurities – Lead (Pb)	≤ 0.5 ppb	< 0.5 ppb
Trace Impurities – Magnesium (Mg)	≤ 7.0 ppb	0.8 ppb
Trace Impurities – Manganese (Mn)	≤ 1.0 ppb	< 0.4 ppb
Trace Impurities – Mercury (Hg)	≤ 0.5 ppb	< 0.1 ppb
Trace Impurities – Nickel (Ni)	≤ 2.0 ppb	0.3 ppb
Trace Impurities – Potassium (K)	≤ 500.0 ppb	< 2.0 ppb
Trace Impurities – Selenium (Se)	≤ 50.0 ppb	< 0.1 ppb
Trace Impurities – Silicon (Si)	≤ 100.0 ppb	31.5 ppb
Trace Impurities – Silver (Ag)	≤ 1.0 ppb	< 0.3 ppb

>>> Continued on page 2 >>>

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

avantor™ | J.T.Baker®

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

Test	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

James T Ethier

Jamie Ethier
Vice President Global Quality

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

avantor™ | J.T.Baker®

M6151

R→ 1/15/25

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

Certificate of Analysis

Test	Specification	Result
ACS – Assay (as HCl) (by acid-base titrn)	36.5 – 38.0 %	37.9 %
ACS – Color (APHA)	≤ 10	5
ACS – Residue after Ignition	≤ 3 ppm	< 1 ppm
ACS – Specific Gravity at 60°/60°F	1.185 – 1.192	1.191
ACS – Bromide (Br)	≤ 0.005 %	< 0.005 %
ACS – Extractable Organic Substances	≤ 5 ppm	< 1 ppm
ACS – Free Chlorine (as Cl_2)	≤ 0.5 ppm	< 0.5 ppm
Phosphate (PO_4)	≤ 0.05 ppm	< 0.03 ppm
Sulfate (SO_4)	≤ 0.5 ppm	< 0.3 ppm
Sulfite (SO_3)	≤ 0.8 ppm	0.3 ppm
Ammonium (NH_4)	≤ 3 ppm	< 1 ppm
Trace Impurities – Arsenic (As)	≤ 0.010 ppm	< 0.003 ppm
Trace Impurities – Aluminum (Al)	≤ 10.0 ppb	1.3 ppb
Arsenic and Antimony (as As)	≤ 5.0 ppb	< 3.0 ppb
Trace Impurities – Barium (Ba)	≤ 1.0 ppb	0.2 ppb
Trace Impurities – Beryllium (Be)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities – Bismuth (Bi)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Boron (B)	≤ 20.0 ppb	< 5.0 ppb
Trace Impurities – Cadmium (Cd)	≤ 1.0 ppb	< 0.3 ppb
Trace Impurities – Calcium (Ca)	≤ 50.0 ppb	163.0 ppb
Trace Impurities – Chromium (Cr)	≤ 1.0 ppb	0.7 ppb
Trace Impurities – Cobalt (Co)	≤ 1.0 ppb	< 0.3 ppb
Trace Impurities – Copper (Cu)	≤ 1.0 ppb	< 0.1 ppb
Trace Impurities – Gallium (Ga)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities – Germanium (Ge)	≤ 3.0 ppb	< 2.0 ppb
Trace Impurities – Gold (Au)	≤ 4.0 ppb	0.6 ppb
Heavy Metals (as Pb)	≤ 100 ppb	< 50 ppb
Trace Impurities – Iron (Fe)	≤ 15 ppb	6 ppb

>>> Continued on page 2 >>>

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

avantor™ | J.T.Baker®

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

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

>>> Continued on page 3 >>>

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

avantor™ | J.T.Baker®

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

Test	Specification	Result

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

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

James T Ethier

Jamie Ethier
Vice President Global Quality

Nitric Acid 69%
CMOS

avantor™ | J.T.Baker®

R-02102/2025

M-6158

Material No.: 9606-03
Batch No.: 24D1062002
Manufactured Date: 2024-03-26
Retest Date: 2029-03-25
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
Assay (HNO_3)	69.0 - 70.0 %	69.7 %
Appearance	Passes Test	Passes Test
Color (APHA)	≤ 10	5
Residue after Ignition	≤ 2 ppm	1 ppm
Chloride (Cl)	≤ 0.08 ppm	< 0.03 ppm
Phosphate (PO_4)	≤ 0.10 ppm	< 0.03 ppm
Sulfate (SO_4)	≤ 0.2 ppm	< 0.2 ppm
Trace Impurities - Aluminum (Al)	≤ 40.0 ppb	< 1.0 ppb
Arsenic and Antimony (as As)	≤ 5.0 ppb	< 2.0 ppb
Trace Impurities - Barium (Ba)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Beryllium (Be)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Bismuth (Bi)	≤ 20.0 ppb	< 10.0 ppb
Trace Impurities - Boron (B)	≤ 10.0 ppb	< 5.0 ppb
Trace Impurities - Cadmium (Cd)	≤ 50 ppb	< 1 ppb
Trace Impurities - Calcium (Ca)	≤ 50.0 ppb	2.3 ppb
Trace Impurities - Chromium (Cr)	≤ 30.0 ppb	< 1.0 ppb
Trace Impurities - Cobalt (Co)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Copper (Cu)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Gallium (Ga)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Germanium (Ge)	≤ 20 ppb	< 10 ppb
Trace Impurities - Gold (Au)	≤ 20 ppb	< 5 ppb
Heavy Metals (as Pb)	≤ 100 ppb	100 ppb
Trace Impurities - Iron (Fe)	≤ 40.0 ppb	< 1.0 ppb
Trace Impurities - Lead (Pb)	≤ 20.0 ppb	< 10.0 ppb
Trace Impurities - Lithium (Li)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Magnesium (Mg)	≤ 20 ppb	< 1 ppb
Trace Impurities - Manganese (Mn)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Nickel (Ni)	≤ 20.0 ppb	< 5.0 ppb

>>> Continued on page 2 >>>

Nitric Acid 69%
CMOS

avantor™ | J.T.Baker®

Material No.: 9606-03
Batch No.: 24D1062002

Test	Specification	Result
Trace Impurities - Niobium (Nb)	≤ 50.0 ppb	< 1.0 ppb
Trace Impurities - Potassium (K)	≤ 50 ppb	16 ppb
Trace Impurities - Silicon (Si)	≤ 50 ppb	< 10 ppb
Trace Impurities - Silver (Ag)	≤ 20.0 ppb	< 1.0 ppb
Trace Impurities - Sodium (Na)	≤ 150.0 ppb	< 5.0 ppb
Trace Impurities - Strontium (Sr)	≤ 30.0 ppb	< 1.0 ppb
Trace Impurities - Tantalum (Ta)	≤ 10.0 ppb	< 5.0 ppb
Trace Impurities - Thallium (Tl)	≤ 10.0 ppb	< 5.0 ppb
Trace Impurities - Tin (Sn)	≤ 20.0 ppb	< 10.0 ppb
Trace Impurities - Titanium (Ti)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Vanadium (V)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Zinc (Zn)	≤ 20.0 ppb	< 1.0 ppb
Trace Impurities - Zirconium (Zr)	≤ 10.0 ppb	< 1.0 ppb
Particle Count - 0.5 µm and greater	≤ 60 par/ml	10 par/ml
Particle Count - 1.0 µm and greater	≤ 10 par/ml	3 par/ml

>>> Continued on page 3 >>>

Nitric Acid 69%
CMOS

avantor™ | J.T.Baker®

Material No.: 9606-03
Batch No.: 24D1062002

Test	Specification	Result

For Microelectronic Use

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

Jamie Croak
Director Quality Operations, Bioscience Production

Sigma-Aldrich.

W 2979

Rec: 12/08/22

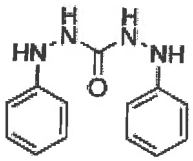
exp. 12/08/27

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:
1,5-Diphenylcarbazide - ACS reagent

Product Number:	**259225**
Batch Number:	**MKCR6636**
Brand:	SIAL
CAS Number:	140-22-7
MDL Number:	MFCD00003013
Formula:	C13H14N4O
Formula Weight:	242.28 g/mol
Quality Release Date:	02 JUN 2022



Test	Specification	Result
Appearance (Color) Off-White to Pink, Light Purple or Tan	Conforms to Requirements	Pink
Appearance (Form)	Powder or Chunks	Powder
Melting Point	173.0 - 176.0 °C	173.0 °C
Infrared Spectrum	Conforms to Structure	Conforms
Residue on ignition (Ash) 15 minutes, 800 Degrees Celsius	≤ 0.05 %	0.01 %
Solubility	Pass	Pass
Sensitivity Test	Pass	Pass
Meets ACS Requirements	Current ACS Specification	Conforms

Larry Coers, Director
Quality Control
Milwaukee, WI US

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.

W3152 Received on 11/25/24 by IZ

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
Wood Dale, IL 60191
Manufacturing site:
825 Dillon Drive
Wood Dale, IL 60191

Certificate of Analysis

Catalogue Number	01237
Lot Number	002126-2019-201
Product	**Magnesium chloride hexahydrate**
	Magnesium chloride•$6H_2O$
CAS Number	7791-18-6
Molecular Formula	$MgCl_2$•$6H_2O$
Molecular Weight	203.3

Appearance	White crystals
Solubility	167 g in 100 mL water
Melting Point	~ 115 °C
Heavy Metals	4.393 ppm
Anion	Nitrate (NO_3) : < 0.001% Phosphate (PO_4) : < 5 ppm Sulfate (SO_4) : < 0.002%
Cation	Ammonium (NH_4) : < 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 material	0.0021%
Assay by titration	100.83%
Grade	ACS reagent
Storage	Store at RT

Certificate of Analysis

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

W3163 Rec. on 12/10/24 by IZ

Certificate of Analysis

Material	BDH9284-2.5KG
Material Description	BDH SODIUM CARB ANHYD ACS 2.5KG
Grade	U S P REAGENT (ACS GRADE)
Batch	24E3156178
Reassay Date	09/30/2027
CAS Number	497-19-8
Molecular Formula	Na2CO3
Molecular Mass	105.99
Date of Manufacture	09/01/2023
Storage	Room Temperature

Material is hygroscopic. Protect from Moisture.
Additional Product Description:

Characteristics	Specifications	Measured Values
Appearance	Fine white granular powder	Fine white granular powder
Calcium	<= 0.03 %	0.003 %
Chloride	<= 0.001 %	0.0003 %
Heavy Metals (as Pb)	<= 0.0005 %	0.0001 %
Insolubles	<= 0.01 %	0.001 %
Iron	<= 0.0005 %	0.0001 %
Loss on Heating	<= 1.0 %	0.03 %
Magnesium	<= 0.005 %	0.001 %
Phosphate	<= 0.001 %	0.001 %
Potassium	<= 0.005 %	0.003 %
Purity	>= 99.5 %	100.0 %
Silica	<= 0.005 %	0.001 %
Sulfur Compounds	<= 0.003 %	0.002 %

Extra Description: Meets Reagent Specifications for testing USP/NF monographs

Internal ID #: 710

Signature

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

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

Material	BDH9266-500G
Material Description	BDH POTASS PHOSPHAT DBSC 500GM
Grade	ACS GRADE
Batch	24H0856239
Reassay Date	04/19/2028
CAS Number	7758-11-4
Molecular Formula	K2HPO4
Molecular Mass	174.18
Date of Manufacture	04/19/2024
Storage	Room Temperature

Characteristics	Specifications	Measured Values
Appearance	Fine white crystalline powder	Fine white crystalline powder
Chloride	<= 0.003 %	0.002 %
Heavy Metals (as Pb)	<= 0.0005 %	<0.0005 %
Insolubles	<= 0.01 %	<0.01 %
Iron	<= 0.001 %	<0.001 %
Loss on Drying	<= 1.0 %	<0.5 %
Nitrogen Compounds	<= 0.001 %	<0.001 %
pH (5%, Water) @25C	8.5 - 9.6	8.8
Purity	>= 98.0 %	99.1 %
Sodium	<= 0.05 %	<0.05 %
Sulfate	<= 0.005 %	<0.002 %

CUSTOMER PART # BDH9266-500G

Internal ID #: 793

Signature

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

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.

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:
Potassium phosphate monobasic - ACS reagent, ≥99.0%

KH_2PO_4

Product Number:	**P0662**
Batch Number:	**MKCX1379**
Brand:	SIGALD
CAS Number:	7778-77-0
MDL Number:	MFCD00011401
Formula:	H2KO4P
Formula Weight:	136.09 g/mol
Quality Release Date:	27 JAN 2025
Recommended Retest Date:	JAN 2029

Test	Specification	Result
Appearance (Color)	White	White
Appearance (Form)	Powder or Crystals	Crystals
Assay	≥ 99.0 %	99.9 %
Insoluble Matter	≤ 0.01 %	< 0.01 %
Loss on Drying At 105ºC	≤ 0.2 %	< 0.1 %
pH (c = 5%, 25 deg C)	4.1 - 4.5	4.5
Chloride Content	≤ 0.001 %	< 0.001 %
Sulfate (SO4)	≤ 0.003 %	< 0.003 %
Heavy Metals by ICP	≤ 0.001 %	< 0.001 %
Iron (Fe)	≤ 0.002 %	< 0.001 %
Sodium (Na)	≤ 0.005 %	< 0.001 %
Recommended Retest Period 4 Years	----------	----------

Larry Coers, Director
Quality Control
Milwaukee, WI US

PERCENT SOLID

Supervisor: Iwona
Analyst: jignesh
Date: 6/13/2025

OVENTEMP IN Celsius(°C): 108
Time IN: 17:15
In Date: 06/12/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
OvenID: M OVEN#1

OVENTEMP OUT Celsius(°C): 103
Time OUT: 08:22
Out Date: 06/13/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: % SOLID- OVEN

QC: LB136126

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
Q2287-01	CONCRETE-SLAB	1	1.00	1.00	2.00	2.00	100.0	CONCRETE sample
Q2296-01	WC-1	2	1.18	10.56	11.74	9.74	81.1	
Q2296-02	WC-1-EPH	3	1.18	10.23	11.41	9.55	81.8	
Q2296-03	WC-1-VOC	4	1.19	10.57	11.76	9.63	79.8	
Q2296-05	WC-2	5	1.19	10.58	11.77	10.52	88.2	
Q2296-06	WC-2-EPH	6	1.19	10.30	11.49	10.5	90.4	
Q2296-07	WC-2-VOC	7	1.19	10.21	11.4	10.62	92.4	
Q2296-09	WC-3	8	1.15	10.78	11.93	10.33	85.2	
Q2296-10	WC-3-EPH	9	1.19	10.60	11.79	10.1	84.1	
Q2296-11	WC-3-VOC	10	1.18	10.81	11.99	10.36	84.9	
Q2296-13	WC-4	11	1.15	10.77	11.92	9.95	81.7	
Q2296-14	WC-4-EPH	12	1.13	10.48	11.61	9.88	83.5	
Q2296-15	WC-4-VOC	13	1.14	10.72	11.86	9.71	79.9	
Q2296-17	WC-5	14	1.17	10.49	11.66	10.63	90.2	
Q2296-18	WC-5-EPH	15	1.17	10.50	11.67	10.32	87.1	
Q2296-19	WC-5-VOC	16	1.15	10.83	11.98	10.97	90.7	
Q2296-21	WC-6	19	1.13	10.37	11.5	10.2	87.5	
Q2296-22	WC-6-EPH	17	1.14	10.44	11.58	10.65	91.1	
Q2296-23	WC-6-VOC	18	1.17	10.82	11.99	10.36	84.9	
Q2297-01	TP-3	20	1.15	10.96	12.11	10.2	82.6	
Q2297-02	TP-3-EPH	21	1.14	10.85	11.99	11.04	91.2	
Q2297-03	TP-3-VOC	22	1.12	10.16	11.28	10.3	90.4	
Q2298-01	AU-05-061125	23	1.15	11.63	12.78	11.7	90.7	
Q2298-02	AU-05-061125	24	1.15	11.63	12.78	11.7	90.7	
Q2301-02	WC-URBAN-FILL-C	25	1.16	10.37	11.53	9.77	83.0	
Q2303-01	B-165-SB01	26	1.14	10.74	11.88	10.12	83.6	
Q2303-02	B-170-SB03	27	1.13	10.37	11.5	10.74	92.7	
Q2304-01	RBR200057-1	28	1.00	1.00	2.00	2.00	100.0	wipe sample

PERCENT SOLID

Supervisor: Iwona
Analyst: jignesh
Date: 6/13/2025

OVENTEMP IN Celsius(°C): 108
Time IN: 17:15
In Date: 06/12/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
OvenID: M OVEN#1

OVENTEMP OUT Celsius(°C): 103
Time OUT: 08:22
Out Date: 06/13/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: % SOLID- OVEN

QC: LB136126

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
Q2304-02	RBR200057-2	29	1.00	1.00	2.00	2.00	100.0	wipe sample
Q2304-03	VNJ239-3	30	1.00	1.00	2.00	2.00	100.0	wipe sample
Q2304-04	VNJ239-4	31	1.00	1.00	2.00	2.00	100.0	wipe sample
Q2304-05	VNJ239-5	32	1.00	1.00	2.00	2.00	100.0	wipe sample
Q2305-01	TR-04-06122025	33	1.18	10.17	11.35	11.17	98.2	
Q2305-02	TR-04-06122025-E2	34	1.13	10.69	11.82	11.24	94.6	
Q2307-01	LINDEN-SAA	35	1.14	10.54	11.68	8.87	73.3	
Q2307-02	LINDEN-SAA	36	1.13	10.70	11.83	8.87	72.3	
Q2308-01	EO-02-06122025	37	1.12	10.24	11.36	10.38	90.4	
Q2308-02	EO-02-06122025-E2	38	1.19	10.75	11.94	10.98	91.1	
Q2310-01	TP-7	39	1.18	10.42	11.6	10.42	88.7	
Q2310-02	TP-7-EPH	40	1.15	11.29	12.44	11.08	88.0	
Q2310-03	TP-7-VOC	41	1.12	10.91	12.03	10.99	90.5	

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

WORKLIST(Hardcopy Internal Chain)

B 136126

WorkList Name : %1-061225 **WorkList ID :** 190126 **Department :** Wet-Chemistry **Date :** 06-12-2025 08:16:58

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q2287-01	CONCRETE-SLAB	Solid	Percent Solids	Cool 4 deg C	PSEG03	D41	06/11/2025	Chemtech -SO
Q2296-01	WC-1	Solid	Percent Solids	Cool 4 deg C	PSEG03	N22	06/11/2025	Chemtech -SO
Q2296-02	WC-1-EPH	Solid	Percent Solids	Cool 4 deg C	PSEG03	N22	06/11/2025	Chemtech -SO
Q2296-03	WC-1-VOC	Solid	Percent Solids	Cool 4 deg C	PSEG03	N22	06/11/2025	Chemtech -SO
Q2296-05	WC-2	Solid	Percent Solids	Cool 4 deg C	PSEG03	N22	06/11/2025	Chemtech -SO
Q2296-06	WC-2-EPH	Solid	Percent Solids	Cool 4 deg C	PSEG03	N22	06/11/2025	Chemtech -SO
Q2296-07	WC-2-VOC	Solid	Percent Solids	Cool 4 deg C	PSEG03	N22	06/11/2025	Chemtech -SO
Q2296-09	WC-3	Solid	Percent Solids	Cool 4 deg C	PSEG03	N22	06/11/2025	Chemtech -SO
Q2296-10	WC-3-EPH	Solid	Percent Solids	Cool 4 deg C	PSEG03	N22	06/11/2025	Chemtech -SO
Q2296-11	WC-3-VOC	Solid	Percent Solids	Cool 4 deg C	PSEG03	N22	06/11/2025	Chemtech -SO
Q2296-13	WC-4	Solid	Percent Solids	Cool 4 deg C	PSEG03	N22	06/11/2025	Chemtech -SO
Q2296-14	WC-4-EPH	Solid	Percent Solids	Cool 4 deg C	PSEG03	N22	06/11/2025	Chemtech -SO
Q2296-15	WC-4-VOC	Solid	Percent Solids	Cool 4 deg C	PSEG03	N22	06/11/2025	Chemtech -SO
Q2296-17	WC-5	Solid	Percent Solids	Cool 4 deg C	PSEG03	N22	06/11/2025	Chemtech -SO
Q2296-18	WC-5-EPH	Solid	Percent Solids	Cool 4 deg C	PSEG03	N22	06/11/2025	Chemtech -SO
Q2296-19	WC-5-VOC	Solid	Percent Solids	Cool 4 deg C	PSEG03	N22	06/11/2025	Chemtech -SO
Q2296-21	WC-6	Solid	Percent Solids	Cool 4 deg C	PSEG03	N22	06/11/2025	Chemtech -SO
Q2296-22	WC-6-EPH	Solid	Percent Solids	Cool 4 deg C	PSEG03	N22	06/11/2025	Chemtech -SO
Q2296-23	WC-6-VOC	Solid	Percent Solids	Cool 4 deg C	PSEG03	N22	06/11/2025	Chemtech -SO
Q2297-01	TP-3	Solid	Percent Solids	Cool 4 deg C	PSEG03	N11	06/11/2025	Chemtech -SO
Q2297-02	TP-3-EPH	Solid	Percent Solids	Cool 4 deg C	PSEG03	N11	06/11/2025	Chemtech -SO

Date/Time 06.12.25 15:20

Raw Sample Received by: SB WDC

Raw Sample Relinquished by: CP SM

Date/Time 06.12.25 17:30

Raw Sample Received by: CP SM

Raw Sample Relinquished by: SB WDC

WORKLIST(Hardcopy Internal Chain)

136126

WorkList Name : %1-061225 **WorkList ID :** 190126 **Department :** Wet-Chemistry **Date :** 06-12-2025 08:16:58

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q2297-03	TP-3-VOC	Solid	Percent Solids	Cool 4 deg C	PSEG03	N11	06/11/2025	Chemtech -SO
Q2298-01	AU-05-061125	Solid	Percent Solids	Cool 4 deg C	PSEG05	D41	06/11/2025	Chemtech -SO
Q2298-02	AU-05-061125	Solid	Percent Solids	Cool 4 deg C	PSEG05	D41	06/11/2025	Chemtech -SO
Q2301-02	WC-URBAN-FILL-C	Solid	Percent Solids	Cool 4 deg C	ENTA05	D41	06/11/2025	Chemtech -SO
Q2303-01	B-165-SB01	Solid	Percent Solids	Cool 4 deg C	PORT06	D41	06/11/2025	Chemtech -SO
Q2303-02	B-170-SB03	Solid	Percent Solids	Cool 4 deg C	PORT06	D41	06/11/2025	Chemtech -SO
Q2304-01	RBR200057-1	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	06/12/2025	Chemtech -SO
Q2304-02	RBR200057-2	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	06/12/2025	Chemtech -SO
Q2304-03	VNJ239-3	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	06/12/2025	Chemtech -SO
Q2304-04	VNJ239-4	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	06/12/2025	Chemtech -SO
Q2304-05	VNJ239-5	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	06/12/2025	Chemtech -SO
Q2305-01	TR-04-06122025	Solid	Percent Solids	Cool 4 deg C	PSEG05	D41	06/12/2025	Chemtech -SO
Q2305-02	TR-04-06122025-E2	Solid	Percent Solids	Cool 4 deg C	PSEG05	D41	06/12/2025	Chemtech -SO
Q2307-01	LINDEN-SAA	Solid	Percent Solids	Cool 4 deg C	PSEG03	D51	06/12/2025	Chemtech -SO
Q2307-02	LINDEN-SAA	Solid	Percent Solids	Cool 4 deg C	PSEG03	D51	06/12/2025	Chemtech -SO
Q2308-01	EO-02-06122025	Solid	Percent Solids	Cool 4 deg C	PSEG05	D51	06/12/2025	Chemtech -SO
Q2308-02	EO-02-06122025-E2	Solid	Percent Solids	Cool 4 deg C	PSEG05	D51	06/12/2025	Chemtech -SO
Q2310-01	TP-7	Solid	Percent Solids	Cool 4 deg C	PSEG03	D41	06/12/2025	Chemtech -SO
Q2310-02	TP-7-EPH	Solid	Percent Solids	Cool 4 deg C	PSEG03	D41	06/12/2025	Chemtech -SO
Q2310-03	TP-7-VOC	Solid	Percent Solids	Cool 4 deg C	PSEG03	D41	06/12/2025	Chemtech -SO

Date/Time 06.12.25 1520

Raw Sample Received by:

Raw Sample Relinquished by:

Date/Time 06.12.25 17:30

Raw Sample Received by:

Raw Sample Relinquished by:

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. Q2303
COC Number 2046552

CLIENT INFORMATION

REPORT TO BE SENT TO:
COMPANY: Gannett Fleming
ADDRESS: 1010 Adams Ave
CITY Audobon STATE: PA ZIP: 19405
ATTENTION: Joe Krupansky
PHONE: 610-301-8342 FAX:

CLIENT PROJECT INFORMATION

PROJECT NAME: Amtrak Replacement of SB
PROJECT NO.: 9500000818 LOCATION: Kearny, NJ
PROJECT MANAGER: Joe Krupansky
e-mail: QAQC@BEMSYS.com
PHONE: 610-301-8342 FAX:

CLIENT BILLING INFORMATION

BILL TO: Alliance PO#:
ADDRESS: 284 Sheffield St
CITY Mountainside STATE: NJ ZIP: 07092
ATTENTION: Samaula Beasly PHONE: 908-788-3148

DATA TURNAROUND INFORMATION

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

DATA DELIVERABLE INFORMATION

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

ANALYSIS

1: PCBs
2: TAL Metals
3: Cr(VI) Cr(III)
4:
5:
6:
7:
8:
9:

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.	B-165-SB01	S		X	6/11/25	11:10	1	X	X	X							
2.	B-170-SB03	S		X	6/11/25	11:15	1	X	X	X							
3.																	
4.																	
5.																	
6.																	
7.																	
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. Jessy Martinez	6/11/25 13:07	1.
2.		2.
3.		3.

Conditions of bottles or coolers at receipt: ☐ COMPLIANT ☐ NON COMPLIANT ☐ COOLER TEMP 2.7 °C
Comments: B-165-SB01 & B-170-SB03 have limited volume

Page 1 of 1

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