Alliance TECHNICAL GROUP

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

DATA REPORTING QUALIFIERS- INORGANIC

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

J	Indicates the reported value was obtained from a reading that was less than the Contract Required Detection Limit (CRDL), but greater than or equal to the Instrument Detection Limit (IDL).
U	Indicates the analyte was analyzed for, but not detected.
ND	Indicates the analyte was analyzed for, but not detected
E	Indicates the reported value is estimated because of the presence of interference
M	Indicates Duplicate injection precision not met.
N	Indicates the spiked sample recovery is not within control limits.
S	Indicates the reported value was determined by the Method of Standard Addition (MSA).
*	Indicates that the duplicate analysis is not within control limits.
+	Indicates the correlation coefficient for the MSA is less than 0.995.
D	Indicates the reported value is from a secondary analysis with a dilution factor. The original analysis exceeded the calibration range.
M	Method qualifiers **"P"** for ICP instrument **"PM"** for ICP when Microwave Digestion is used **"CV"** for Manual Cold Vapor AA **"AV"** for automated Cold Vapor AA **"CA"** for MIDI-Distillation Spectrophotometric **"AS"** for Semi –Automated Spectrophotometric **"C"** for Manual Spectrophotometric **"T"** for Titrimetric **"NR"** for analyte not required to be analyzed
OR	Indicates the analyte's concentration exceeds the calibrated range of the instrument for that specific analysis.
Q	Indicates the LCS did not meet the control limits requirements
H	Sample Analysis Out Of Hold Time

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LAB CHRONICLE

OrderID:	Q3094	**OrderDate:**	9/12/2025 12:36:05 PM
Client:	Scientific Design	**Project:**	Carrier Post-Treatment
Contact:	Emily Chen	**Location:**	D31

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q3094-01	**5670-18-000F**	**WATER**			**08/27/25 00:00**			**09/12/25**
			TOC	9060A			09/16/25 11:11	
Q3094-01DL	**5670-18-000FDL**	**WATER**			**08/27/25 00:00**			**09/12/25**
			TOC	9060A			09/16/25 16:00	
Q3094-02	**5674-08-001W**	**WATER**			**09/09/25 00:00**			**09/12/25**
			TOC	9060A			09/16/25 12:38	
Q3094-02DL	**5674-08-001WDL**	**WATER**			**09/09/25 00:00**			**09/12/25**
			TOC	9060A			09/16/25 16:32	
Q3094-02DL2	**5674-08-001WDL2**	**WATER**			**09/09/25 00:00**			**09/12/25**
			TOC	9060A			09/17/25 12:50	
Q3094-03	**5674-08-001WP**	**WATER**			**09/10/25 00:00**			**09/12/25**
			TOC	9060A			09/16/25 13:33	
Q3094-04	**5674-11-001C**	**WATER**			**09/11/25 12:00**			**09/12/25**
			BOD5	SM5210 B			09/12/25 18:30	

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LAB CHRONICLE

			TOC	9060A		09/16/25 14:05	
Q3094-04DL	**5674-11-001CDL**	**WATER**			**09/11/25 00:00**		**09/12/25**
			TOC	9060A		09/17/25 12:23	
Q3094-04DL 2	**5674-11-001CDL2**	**WATER**			**09/11/25 00:00**		**09/12/25**
			TOC	9060A			

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SAMPLE DATA

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Report of Analysis

Client:	Scientific Design	Date Collected:	08/27/25 00:00
Project:	Carrier Post-Treatment	Date Received:	09/12/25
Client Sample ID:	5670-18-000F	SDG No.:	Q3094
Lab Sample ID:	Q3094-01	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
TOC	545	OR	1	0.40	1.00	mg/L		09/16/25 11:11	9060A

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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Report of Analysis

Client:	Scientific Design	Date Collected:	08/27/25 00:00
Project:	Carrier Post-Treatment	Date Received:	09/12/25
Client Sample ID:	5670-18-000FDL	SDG No.:	Q3094
Lab Sample ID:	Q3094-01DL	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
TOC	807	D	100	40.0	100	mg/L		09/16/25 16:00	9060A

Comments:

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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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Report of Analysis

Client:	Scientific Design	Date Collected:	09/09/25 00:00
Project:	Carrier Post-Treatment	Date Received:	09/12/25
Client Sample ID:	5674-08-001W	SDG No.:	Q3094
Lab Sample ID:	Q3094-02	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
TOC	2850	OR	10	4.00	10.0	mg/L		09/16/25 12:38	9060A

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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Report of Analysis

Client:	Scientific Design	Date Collected:	09/09/25 00:00
Project:	Carrier Post-Treatment	Date Received:	09/12/25
Client Sample ID:	5674-08-001WDL	SDG No.:	Q3094
Lab Sample ID:	Q3094-02DL	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
TOC	3600	OR	100	40.0	100	mg/L		09/16/25 16:32	9060A

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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Report of Analysis

Client:	Scientific Design	Date Collected:	09/09/25 00:00
Project:	Carrier Post-Treatment	Date Received:	09/12/25
Client Sample ID:	5674-08-001WDL2	SDG No.:	Q3094
Lab Sample ID:	Q3094-02DL2	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
TOC	3530	D	500	200	500	mg/L		09/17/25 12:50	9060A

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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Report of Analysis

Client:	Scientific Design	Date Collected:	09/10/25 00:00
Project:	Carrier Post-Treatment	Date Received:	09/12/25
Client Sample ID:	5674-08-001WP	SDG No.:	Q3094
Lab Sample ID:	Q3094-03	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
TOC	1500	D	100	40.0	100	mg/L		09/16/25 13:33	9060A

Comments:

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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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Report of Analysis

Client:	Scientific Design	Date Collected:	09/11/25 12:00
Project:	Carrier Post-Treatment	Date Received:	09/12/25
Client Sample ID:	5674-11-001C	SDG No.:	Q3094
Lab Sample ID:	Q3094-04	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
BOD5	0.20	U	1	0.20	2.00	mg/L		09/12/25 18:30	SM 5210 B-16
TOC	3530	OR	100	40.0	100	mg/L		09/16/25 14:05	9060A

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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Report of Analysis

Client:	Scientific Design	Date Collected:	09/11/25 00:00
Project:	Carrier Post-Treatment	Date Received:	09/12/25
Client Sample ID:	5674-11-001CDL	SDG No.:	Q3094
Lab Sample ID:	Q3094-04DL	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
TOC	3610	D	500	200	500	mg/L		09/17/25 12:23	9060A

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
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E = Indicates the reported value is estimated because of the presence of interference.
OR = Over Range
N =Spiked sample recovery not within control limits

QC RESULT SUMMARY

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Initial and Continuing Calibration Verification

Client: Scientific Design **SDG No.:** Q3094

Project: Carrier Post-Treatment **RunNo.:** LB137188

Analyte		Units	Result	True Value	% Recovery	Acceptance Window (%R)	Analysis Date
Sample ID:	ICV1						
TOC		mg/L	10.2	10	102	90-110	07/03/2025
Sample ID:	CCV1						
TOC		mg/L	10.7	10	107	90-110	09/16/2025
Sample ID:	CCV2						
TOC		mg/L	10.5	10	105	90-110	09/16/2025
Sample ID:	CCV3						
TOC		mg/L	10.7	10	107	90-110	09/17/2025
Sample ID:	CCV4						
TOC		mg/L	10.5	10	105	90-110	09/17/2025

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Initial and Continuing Calibration Verification

Client:	Scientific Design	**SDG No.:**	Q3094
Project:	Carrier Post-Treatment	**RunNo.:**	LB137188

Analyte	Units	Result	True Value	% Recovery	Acceptance Window (%R)	Analysis Date

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Initial and Continuing Calibration Blank Summary

Client:	Scientific Design	**SDG No.:**	Q3094
Project:	Carrier Post-Treatment	**RunNo.:**	LB137188

Analyte		Units	Result	Acceptance Limits	Conc Qual	MDL	RDL	Analysis Date
Sample ID:	ICB1							
TOC		mg/L	< 0.5000	0.5000	U	0.40	1	07/03/2025
Sample ID:	CCB1							
TOC		mg/L	< 0.5000	0.5000	U	0.40	1	09/16/2025
Sample ID:	CCB2							
TOC		mg/L	0.46	0.5000	J	0.40	1	09/16/2025
Sample ID:	CCB3							
TOC		mg/L	< 0.5000	0.5000	U	0.40	1	09/17/2025
Sample ID:	CCB4							
TOC		mg/L	< 0.5000	0.5000	U	0.40	1	09/17/2025

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Initial and Continuing Calibration Blank Summary

Client:	Scientific Design	**SDG No.:**	Q3094
Project:	Carrier Post-Treatment	**RunNo.:**	LB137188

Analyte	Units	Result	Acceptance Limits	Conc Qual	MDL	RDL	Analysis Date

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Preparation Blank Summary

Client: Scientific Design **SDG No.:** Q3094

Project: Carrier Post-Treatment

Analyte	Units	Result	Acceptance Limits	Conc Qual	MDL	RDL	Analysis Date
Sample ID: LB137180BL							
BOD5	mg/L	< 0.2000	0.2000	U	0.20	2.0	09/12/2025
Sample ID: LB137188BLW							
TOC	mg/L	< 0.5000	0.5000	U	0.4	1	09/16/2025
Sample ID: LB137188BLW2							
TOC	mg/L	< 0.5000	0.5000	U	0.4	1	09/17/2025

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Matrix Spike Summary

Client: Scientific Design
SDG No.: Q3094
Project: Carrier Post-Treatment
Sample ID: Q3094-04
Client ID: 5674-11-001CMS
Percent Solids for Spike Sample: 0

Analyte	Units	Acceptance Limit %R	Spiked Result	Conc. Qualifier	Sample Result	Conc. Qualifier	Spike Added	Dilution Factor	% Rec	Qual	Analysis Date
TOC	mg/L	75-125	3560	OR	3530	OR	10	100	300	*	09/16/2025

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Matrix Spike Summary

Client: Scientific Design
SDG No.: Q3094
Project: Carrier Post-Treatment
Sample ID: Q3094-04
Client ID: 5674-11-001CMSD
Percent Solids for Spike Sample: 0

Analyte	Units	Acceptance Limit %R	Spiked Result	Conc. Qualifier	Sample Result	Conc. Qualifier	Spike Added	Dilution Factor	% Rec	Qual	Analysis Date
TOC	mg/L	75-125	3590	OR	3530	OR	10	100	600	*	09/16/2025

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Duplicate Sample Summary

Client: Scientific Design
SDG No.: Q3094
Project: Carrier Post-Treatment
Sample ID: Q3094-04
Client ID: 5674-11-001CMSD
Percent Solids for Spike Sample: 0

Analyte	Units	Acceptance Limit	Sample Result	Conc. Qualifier	Duplicate Result	Conc. Qualifier	Dilution Factor	RPD/ AD	Qual	Analysis Date
TOC	mg/L	+/-20	3560	OR	3590	OR	100	1		09/16/2025

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Duplicate Sample Summary

Client: Scientific Design
SDG No.: Q3094
Project: Carrier Post-Treatment
Sample ID: Q3096-01
Client ID: DRAIN-WATER-TANK-1DUP
Percent Solids for Spike Sample: 0

Analyte	Units	Acceptance Limit	Sample Result	Conc. Qualifier	Duplicate Result	Conc. Qualifier	Dilution Factor	RPD/ AD	Qual	Analysis Date
BOD5	mg/L	+/-20	6500		6360		1	2.22		09/12/2025

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Laboratory Control Sample Summary

Client:	Scientific Design	**SDG No.:**	Q3094
Project:	Carrier Post-Treatment	**Run No.:**	LB137180

Analyte	Units	True Value	Result	Conc. Qualifier	% Recovery	Dilution Factor	Acceptance Limit %R	Analysis Date
Sample ID **LB137180BS**								
BOD5	**mg/L**	**198**	**181**		**91**	**1**	**84.6-115.4**	**09/12/2025**

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Laboratory Control Sample Summary

Client: Scientific Design **SDG No.:** Q3094

Project: Carrier Post-Treatment **Run No.:** LB137188

Analyte	Units	True Value	Result	Conc. Qualifier	% Recovery	Dilution Factor	Acceptance Limit %R	Analysis Date
Sample ID LB137188BSW								
TOC	mg/L	10	10.1		101	1	90-110	09/16/2025

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Laboratory Control Sample Summary

Client: Scientific Design **SDG No.:** Q3094

Project: Carrier Post-Treatment **Run No.:** LB137188

Analyte	Units	True Value	Result	Conc. Qualifier	% Recovery	Dilution Factor	Acceptance Limit %R	Analysis Date
Sample ID LB137188BSW2								
TOC	mg/L	10	10.3		103	1	90-110	09/17/2025

RAW DATA

Reviewed By:Iwona
On:9/17/2025 4:18:07 PM
Inst Id :DO METER
LB :LB137180

BOD5 LOG

ANALYST: rubi

SUPERVISOR: Iwona

QC BATCH ID: LB137180

Analysis Date: 09/12/2025

BOD Water: WP114750

MANGANOUS SULFATE SOLUTION: W3103

Starch: W3149

Alkaline Iodide Azide: W3109

Sulfuric acid, 1N: WP112832

Sodium Thiosulfate, 0.025N: W3105

POLYSEED: WP114752

NaOH, 1N: WP113878

GGA: WP114751

IncubatorID: INCUBATOR #3

Chlorine Strips: W3155

GuageID: 0511064

pH Strips: W3215

Zero DO: WP114418

Lab SampleID	Client ID	Bottle No.	VOL. ML	Initial Reading(ML)	Final Reading(ML)	Difference	Average
WINKLER 1	WINKLER 1	1	300	0.0	9.8	9.8	9.8
WINKLER 2	WINKLER 2	2	300	9.9	19.7	9.8	9.8

Meter Calibration1: 9.14 Zero DO Reading1: 0.16 mg/L (<=0.2 Criteria)

Barometric Pressure1: 765 mmHg DO Meter BOD fluid reading for winkler comparison: 9.84

After Incubation

Meter Calibration2: 7.84 Zero DO Reading2: 0.15 mg/L (<=0.2 Criteria)

Barometric Pressure2: 760 mmHg

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QC BATCH ID: LB137180

INCUBATOR TEMP IN(C): 20.1

INCUBATOR TEMP OUT(C): 20.0

TIME IN: 18:30

TIME OUT: 14:00

DATE IN: 09/12/2025

DATE OUT: 09/17/2025

Lab SampleID	Bottle No.	Check CL	Initial PH	Final PH	Temp °C	Sam Vol. (mL)	D.O.1 Initial	D.O.2 Final	Depletion	BOD Result (mg/L)	Avg Result (mg/L)	Comment
LB137180BL	1	No	6.69	N/A	20.90	300	9.83	9.81	0.02	0.02	0.02	
POLYSEED	1					10	9.70	6.23	3.47	0.69	0.7	
POLYSEED	2					15	9.64	4.03	5.61	0.75		
POLYSEED	3					20	9.57	2.83	6.74	0.67		
GGA	1					6	9.64	5.41	4.23	176.5	180.83	
GGA	2					6	9.62	5.28	4.34	182		
GGA	3					6	9.62	5.24	4.38	184		
Q3081-01	1	No	6.85	N/A	20.10	5	9.72	8.89	-	0	2962.5	
Q3081-01	2					10	9.68	8.52	-	0		
Q3081-01	3					20	9.59	7.08	2.51	2715		
Q3081-01	4					50	9.28	3.23	6.05	3210		
Q3081-01	5					100	8.95	0.43	-	0		
Q3093-01	1	No	5.01	7.01	20.90	5	9.65	1.07	8.58	472.8	472.8	pH Adjuste
Q3093-01	2					20	9.40	0.15	-	0		
Q3093-01	3					50	9.00	0.08	-	0		
Q3093-01	4					150	7.65	0.07	-	0		
Q3094-04	1	No	4.10	7.11	20.70	5	9.65	8.87	-	0		pH Adjuste
Q3094-04	2					20	9.60	8.57	-	0		
Q3094-04	3					50	9.55	8.02	-	0		
Q3094-04	4					150	9.52	7.94	-	0		
Q3096-01	1	No	5.95	6.94	20.50	5	9.70	8.79	-	0	6502.5	pH Adjuste
Q3096-01	2					10	9.61	7.03	2.58	5640		
Q3096-01	3					20	9.55	3.94	5.61	7365		
Q3096-01	4					50	9.38	0.59	-	0		
Q3096-01	5					100	8.99	0.28	-	0		
Q3096-01DUP	1	No	5.95	6.94	20.50	5	9.71	8.68	-	0	6360	pH Adjuste
Q3096-01DUP	2					10	9.60	7.09	2.51	5430		
Q3096-01DUP	3					20	9.55	3.99	5.56	7290		
Q3096-01DUP	4					50	9.36	0.68	-	0		
Q3096-01DUP	5					100	8.97	0.20	-	0		
Q3098-04	1	No	9.21	7.27	20.80	5	9.59	7.23	2.36	996	863.13	pH Adjuste
Q3098-04	2					10	9.54	6.20	3.34	792		
Q3098-04	3					20	9.50	2.75	6.75	907.5		
Q3098-04	4					30	9.41	1.14	8.27	757		

NOTE: 2ml POLYSEED added to GGA and all the Samples, but not in Blank.

NOTE (For, CBOD5): 0.16 g Nitrification Inhibitor added to GGA and all the Samples, but not in Blank.

WORKLIST(Hardcopy Internal Chain)

LB137180

WorkList Name : bod5-09-12 **WorkList ID :** 191850 **Department :** Wet-Chemistry **Date :** 09-12-2025 13:26:04

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q3093-01	MH-9-12-25	Water	BOD5	Cool 4 deg C	EURO03	D31	09/12/2025	SM5210 B
Q3081-01	DRAIN-WATER-TANK-1	Water	BOD5	Cool 4 deg C	MAJO01	D11	09/11/2025	SM5210 B
Q3096-01	DRAIN-WATER-TANK-1	Water	BOD5	Cool 4 deg C	MAJO01	D31	09/12/2025	SM5210 B

Date/Time 09/12/2025 16:10
Raw Sample Received by: RM (WC)
Raw Sample Relinquished by: JP (WC)

Date/Time 09/12/2025 18:40
Raw Sample Received by: JP (WC)
Raw Sample Relinquished by: RM (WC)

WORKLIST(Hardcopy Internal Chain)

LD137180

WorkList Name : bod5-09-12- **WorkList ID :** 191851 **Department :** Wet-Chemistry **Date :** 09-12-2025 15:47:52

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q3094-04	5674-11-001C	Water	BOD5	Cool 4 deg C	SCIE01	D31	09/11/2025	SM5210 B
Q3098-04	EFF-WW	Water	BOD5	Cool 4 deg C	ARDM01	D31	09/12/2025	SM5210 B

Date/Time 09/12/2025 17.45
Raw Sample Received by: RM(WC)
Raw Sample Relinquished by: PC(WC)

Date/Time 09/12/2025 18.40
Raw Sample Received by: PC(WC)
Raw Sample Relinquished by: RM(WC)

Reviewed By:Iwona
On:9/18/2025 2:38:43 PM
Inst Id :Appolo-9000
LB :LB137188

Sample Results Report Print Date/Time: 2025/09/18 9:55:38

Sample ID	Result	Std. Dev.	RSD	Mode	ALT
CCV1	10.7160	0.1111	1.04	TOC	
CCB1	0.2056	0.0389	18.93	TOC	
LB137188BLW	0.2064	0.1184	57.35	TOC	
LB137188BSW.....	10.0806...	0.0800..	0.79...	TOC	..
Q3094-01	544.9264	15.5555	2.85	TOC	
Q3094-02X10	285.3052	8.0731	2.83	TOC	
Q3094-03X100.....	15.0106...	0.1514..	1.01...	TOC	..
Q3094-04X100	35.2894	0.5144	1.46	TOC	
Q3094-04MSX100	35.5696	1.6218	4.56	TOC	
Q3094-04MSDX100.....	35.9319...	0.2172..	0.60...	TOC	..
Q3094-01DLX100	8.0708	0.2057	2.55	TOC	
Q3094-02DLX100	36.0337	0.1669	0.46	TOC	
CCV2.....	10.5405...	0.1960..	1.86...	TOC	..
CCB2	0.4613	0.1337	28.98	TOC	
CCV3	10.6742	0.2922	2.74	TOC	
CCB3.....	0.2928...	0.1331..	45.46...	TOC	..
LB137188BLW2	0.2737	0.0466	17.03	TOC	
LB137188BSW2	10.3365	0.2770	2.68	TOC	
Q3094-04DL2X500.....	7.2203...	0.1021..	1.41...	TOC	..
Q3094-02DL2X500	7.0662	0.2173	3.08	TOC	
CCV4	10.5225	0.0811	0.77	TOC	
CCB4.....	0.2793...	0.0363..	12.98...	TOC	..

Reviewed By:Iwona
On:9/18/2025 2:38:43 PM
Inst Id :Appolo-9000
LB :LB137188

Sample Results Report Print Date/Time: 2025/09/18 9:55:38

Method ID	Sample Type	Vial	Timestamp	Message
TOC 0 - 20 ppmC	Sample	11	2025/09/16 09:19	
TOC 0 - 20 ppmC	Sample	12	2025/09/16 09:42	Low Sample Detected
TOC 0 - 20 ppmC	Sample	13	2025/09/16 10:06	Low Sample Detected
TOC 0 - 20 ppmC	Sample	14	2025/09/16 10:36	
TOC 0 - 20 ppmC	Sample	15	2025/09/16 11:11	
TOC 0 - 20 ppmC	Sample	16	2025/09/16 12:38	
TOC 0 - 20 ppmC	Sample	17	2025/09/16 13:33	
TOC 0 - 20 ppmC	Sample	18	2025/09/16 14:05	
TOC 0 - 20 ppmC	Sample	19	2025/09/16 14:36	
TOC 0 - 20 ppmC	Sample	19	2025/09/16 15:08	
TOC 0 - 20 ppmC	Sample	20	2025/09/16 16:00	
TOC 0 - 20 ppmC	Sample	21	2025/09/16 16:32	
TOC 0 - 20 ppmC	Sample	11	2025/09/16 17:03	
TOC 0 - 20 ppmC	Sample	12	2025/09/16 17:25	
TOC 0 - 20 ppmC	Sample	11	2025/09/17 10:40	
TOC 0 - 20 ppmC	Sample	12	2025/09/17 11:02	
TOC 0 - 20 ppmC	Sample	13	2025/09/17 11:25	Low Sample Detected
TOC 0 - 20 ppmC	Sample	14	2025/09/17 11:56	
TOC 0 - 20 ppmC	Sample	15	2025/09/17 12:23	
TOC 0 - 20 ppmC	Sample	16	2025/09/17 12:50	
TOC 0 - 20 ppmC	Sample	11	2025/09/17 13:21	
TOC 0 - 20 ppmC	Sample	12	2025/09/17 13:44	Low Sample Detected

Detailed Analysis Report Print Date/Time: 2025/09/18 9:56:23

Sample ID: CCV1 Mode: TOC
Method: TOC 0 - 20 ppmC Filename: 09160825
Cal. Curve: TOC WATER 0-20PPM Timestamp: 2025/09/16 09:19
Operator ID: RM IZ Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	10.5682	5.2841	299169	-1.162	-0.962	238
2	10.7144	5.3572	303308	-1.177	-0.977	232
3	10.8356	5.4178	306739	-1.210	-1.011	232
4	10.7456	5.3728	304192	-1.230	-1.035	230

<<<Statistics>>> Mean: 10.7160 Std Dev: 0.1111 RSD: 1.04

Sample ID: CCB1 Mode: TOC
Method: TOC 0 - 20 ppmC Filename: 09160825
Cal. Curve: TOC WATER 0-20PPM Timestamp: 2025/09/16 09:42
Operator ID: RM IZ Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	0.2393	0.1196	6774	-1.387	-1.187	98
2	0.2337	0.1168	6614	-1.373	-1.360	120
3	0.1934	0.0967	5474	-1.410	-1.408	120
4	0.1559	0.0779	4412	-1.420	-1.411	120

Last Message: Low Sample Detected
<<<Statistics>>> Mean: 0.2056 Std Dev: 0.0389 RSD: 18.93

Sample ID: LB137188BLW Mode: TOC
Method: TOC 0 - 20 ppmC Filename: 09160825
Cal. Curve: TOC WATER 0-20PPM Timestamp: 2025/09/16 10:06
Operator ID: RM IZ Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	0.0621	0.0311	1759	-1.508	-1.486	120
2	0.2777	0.1388	7860	-1.533	-1.466	120
3	0.1608	0.0804	4551	-1.531	-1.510	120
4	0.3249	0.1624	9197	-1.571	-1.499	120

Last Message: Low Sample Detected
<<<Statistics>>> Mean: 0.2064 Std Dev: 0.1184 RSD: 57.35

Sample ID: LB137188BSW Mode: TOC
Method: TOC 0 - 20 ppmC Filename: 09160825
Cal. Curve: TOC WATER 0-20PPM Timestamp: 2025/09/16 10:36
Operator ID: RM IZ Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	10.0017	5.0008	283132	-1.588	-1.390	226
2	10.0790	5.0395	285323	-1.582	-1.385	227
3	10.1905	5.0953	288478	-1.582	-1.384	223
4	10.0510	5.0255	284529	-1.595	-1.398	222

<<<Statistics>>> Mean: 10.0806 Std Dev: 0.0800 RSD: 0.79

Sample ID: Q3094-01 Mode: TOC
Method: TOC 0 - 20 ppmC Filename: 09160825
Cal. Curve: TOC WATER 0-20PPM Timestamp: 2025/09/16 11:11
Operator ID: RM IZ Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	522.0615	261.0308	14778772	3.674	3.873	285
2	550.1074	275.0537	15572709	1.555	3.803	291
3	556.9237	278.4618	15765667	1.482	3.665	291
4	550.6129	275.3065	15587019	1.703	3.583	291

<<<Statistics>>> Mean: 544.9264 Std Dev: 15.5555 RSD: 2.85

Sample ID: Q3094-02X10 Mode: TOC
Method: TOC 0 - 20 ppmC Filename: 09160825
Cal. Curve: TOC WATER 0-20PPM Timestamp: 2025/09/16 12:38
Operator ID: RM IZ Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	273.1973	136.5986	7733801	0.332	0.529	279
2	289.4740	144.7370	8194572	-0.489	0.350	291
3	289.1509	144.5755	8185425	-0.512	0.471	291
4	289.3985	144.6993	8192435	-0.415	0.546	291

<<<Statistics>>> Mean: 285.3052 Std Dev: 8.0731 RSD: 2.83

Sample ID: Q3094-03X100 Mode: TOC
Method: TOC 0 - 20 ppmC Filename: 09160825
Cal. Curve: TOC WATER 0-20PPM Timestamp: 2025/09/16 13:33
Operator ID: RM IZ Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	15.1514	7.5757	428913	-1.647	-1.449	210
2	14.7961	7.3981	418855	-1.624	-1.425	199
3	15.0362	7.5181	425651	-1.656	-1.457	195
4	15.0586	7.5293	426287	-1.639	-1.440	194

<<<Statistics>>> Mean: 15.0106 Std Dev: 0.1514 RSD: 1.01

Sample ID: Q3094-04X100 Mode: TOC
Method: TOC 0 - 20 ppmC Filename: 09160825
Cal. Curve: TOC WATER 0-20PPM Timestamp: 2025/09/16 14:05
Operator ID: RM IZ Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	34.5285	17.2643	977450	-1.664	-1.466	236
2	35.4667	17.7333	1004007	-1.631	-1.431	235
3	35.5003	17.7501	1004958	-1.594	-1.394	234
4	35.6620	17.8310	1009537	-1.589	-1.389	233

<<<Statistics>>> Mean: 35.2894 Std Dev: 0.5144 RSD: 1.46

Sample ID: Q3094-04MSX100 Mode: TOC

Method: TOC 0 - 20 ppmC Filename: 09160825
Cal. Curve: TOC WATER 0-20PPM Timestamp: 2025/09/16 14:36
Operator ID: RM IZ Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	33.2123	16.6061	940189	-1.632	-1.432	230
2	36.7917	18.3958	1041516	-1.623	-1.424	243
3	36.4505	18.2252	1031857	-1.555	-1.357	236
4	35.8241	17.9121	1014127	-1.548	-1.348	232

<<<Statistics>>> Mean: 35.5696 Std Dev: 1.6218 RSD: 4.56

Sample ID: Q3094-04MSDX100 Mode: TOC
Method: TOC 0 - 20 ppmC Filename: 09160825
Cal. Curve: TOC WATER 0-20PPM Timestamp: 2025/09/16 15:08
Operator ID: RM IZ Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	35.7432	17.8716	1011837	-1.593	-1.393	243
2	35.9199	17.9599	1016837	-1.575	-1.377	238
3	36.2391	18.1195	1025873	-1.555	-1.357	241
4	35.8252	17.9126	1014159	-1.542	-1.342	239

<<<Statistics>>> Mean: 35.9319 Std Dev: 0.2172 RSD: 0.60

Sample ID: Q3094-01DLX100 Mode: TOC
Method: TOC 0 - 20 ppmC Filename: 09160825
Cal. Curve: TOC WATER 0-20PPM Timestamp: 2025/09/16 16:00
Operator ID: RM IZ Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	8.2785	4.1393	234352	-1.715	-1.517	190
2	7.8273	3.9136	221579	-1.652	-1.452	184
3	7.9794	3.9897	225886	-1.678	-1.478	185
4	8.1981	4.0990	232075	-1.680	-1.480	188

<<<Statistics>>> Mean: 8.0708 Std Dev: 0.2057 RSD: 2.55

Sample ID: Q3094-02DLX100 Mode: TOC
Method: TOC 0 - 20 ppmC Filename: 09160825
Cal. Curve: TOC WATER 0-20PPM Timestamp: 2025/09/16 16:32
Operator ID: RM IZ Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	36.1539	18.0770	1023463	-1.647	-1.449	240
2	35.9488	17.9744	1017656	-1.606	-1.407	243
3	35.8411	17.9206	1014608	-1.585	-1.386	238
4	36.1911	18.0956	1024517	-1.585	-1.385	248

<<<Statistics>>> Mean: 36.0337 Std Dev: 0.1669 RSD: 0.46

Sample ID: CCV2 Mode: TOC
Method: TOC 0 - 20 ppmC Filename: 09160825
Cal. Curve: TOC WATER 0-20PPM Timestamp: 2025/09/16 17:03
Operator ID: RM IZ Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	10.7896	5.3948	305437	-1.677	-1.479	228
2	10.3217	5.1609	292193	-1.710	-1.511	225
3	10.5746	5.2873	299350	-1.719	-1.520	230
4	10.4759	5.2380	296558	-1.690	-1.490	233

<<<Statistics>>> Mean: 10.5405 Std Dev: 0.1960 RSD: 1.86

Sample ID: CCB2 Mode: TOC
Method: TOC 0 - 20 ppmC Filename: 09160825
Cal. Curve: TOC WATER 0-20PPM Timestamp: 2025/09/16 17:25
Operator ID: RM IZ Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	0.5751	0.2875	16279	-1.724	-1.527	109
2	0.4250	0.2125	12030	-1.663	-1.464	101
3	0.2878	0.1439	8147	-1.664	-1.465	99
4	0.5574	0.2787	15780	-1.710	-1.511	105

<<<Statistics>>> Mean: 0.4613 Std Dev: 0.1337 RSD: 28.98

Sample ID: CCV3 Mode: TOC
Method: TOC 0 - 20 ppmC Filename: 09171010
Cal. Curve: TOC WATER 0-20PPM Timestamp: 2025/09/17 10:40
Operator ID: RM IZ Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	11.0796	5.5398	313648	-2.156	-1.956	235
2	10.4849	5.2425	296812	-2.115	-1.916	226
3	10.6937	5.3469	302723	-2.112	-1.912	227
4	10.4384	5.2192	295495	-2.087	-1.889	215

<<<Statistics>>> Mean: 10.6742 Std Dev: 0.2922 RSD: 2.74

Sample ID: CCB3 Mode: TOC
Method: TOC 0 - 20 ppmC Filename: 09171010
Cal. Curve: TOC WATER 0-20PPM Timestamp: 2025/09/17 11:02
Operator ID: RM IZ Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	0.4924	0.2462	13939	-2.132	-1.936	103
2	0.2264	0.1132	6408	-2.043	-1.845	97
3	0.2253	0.1127	6378	-2.040	-1.841	95
4	0.2270	0.1135	6426	-2.052	-1.855	96

<<<Statistics>>> Mean: 0.2928 Std Dev: 0.1331 RSD: 45.46

Sample ID: LB137188BLW2 Mode: TOC
Method: TOC 0 - 20 ppmC Filename: 09171010
Cal. Curve: TOC WATER 0-20PPM Timestamp: 2025/09/17 11:25
Operator ID: RM IZ Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	0.2944	0.1472	8335	-2.145	-2.108	120
2	0.3047	0.1523	8625	-2.122	-2.097	120

3	0.2915	0.1457	8251	-2.126	-2.105	120
4	0.2043	0.1021	5783	-2.118	-2.110	120

Last Message: Low Sample Detected
<<<Statistics>>> Mean: 0.2737 Std Dev: 0.0466 RSD: 17.03

Sample ID: LB137188BSW2 Mode: TOC
Method: TOC 0 - 20 ppmC Filename: 09171010
Cal. Curve: TOC WATER 0-20PPM Timestamp: 2025/09/17 11:56
Operator ID: RM IZ Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	10.4912	5.2456	296990	-2.128	-1.929	222
2	10.0037	5.0018	283189	-2.080	-1.880	222
3	10.2261	5.1130	289485	-2.070	-1.871	216
4	10.6252	5.3126	300782	-2.108	-1.909	225

<<<Statistics>>> Mean: 10.3365 Std Dev: 0.2770 RSD: 2.68

Sample ID: Q3094-04DL2X500 Mode: TOC
Method: TOC 0 - 20 ppmC Filename: 09171010
Cal. Curve: TOC WATER 0-20PPM Timestamp: 2025/09/17 12:23
Operator ID: RM IZ Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	7.0851	3.5425	200568	-2.141	-1.942	174
2	7.2290	3.6145	204641	-2.109	-1.910	177
3	7.2340	3.6170	204784	-2.091	-1.891	176
4	7.3330	3.6665	207588	-2.093	-1.895	176

<<<Statistics>>> Mean: 7.2203 Std Dev: 0.1021 RSD: 1.41

Sample ID: Q3094-02DL2X500 Mode: TOC
Method: TOC 0 - 20 ppmC Filename: 09171010
Cal. Curve: TOC WATER 0-20PPM Timestamp: 2025/09/17 12:50
Operator ID: RM IZ Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	7.3718	3.6859	208685	-2.141	-1.942	183
2	6.8585	3.4292	194153	-2.020	-1.820	169
3	7.0304	3.5152	199019	-2.018	-1.818	171
4	7.0039	3.5020	198271	-2.010	-1.811	176

<<<Statistics>>> Mean: 7.0662 Std Dev: 0.2173 RSD: 3.08

Sample ID: CCV4 Mode: TOC
Method: TOC 0 - 20 ppmC Filename: 09171010
Cal. Curve: TOC WATER 0-20PPM Timestamp: 2025/09/17 13:21
Operator ID: RM IZ Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Bas eline	Ending Baseline	Integration Time
1	10.4721	5.2361	296450	-2.085	-1.886	228
2	10.6039	5.3019	300179	-2.094	-1.894	229
3	10.4359	5.2179	295423	-2.073	-1.875	229
4	10.5780	5.2890	299447	-2.048	-1.849	225

<<<Statistics>>> Mean: 10.5225 Std Dev: 0.0811 RSD: 0.77

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Sample ID: CCB4 Mode: TOC
Method: TOC 0 - 20 ppmC Filename: 09171010
Cal. Curve: TOC WATER 0-20PPM Timestamp: 2025/09/17 13:44
Operator ID: RM IZ Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	0.3309	0.1654	9366	-2.074	-1.875	100
2	0.2518	0.1259	7127	-2.028	-1.831	98
3	0.2564	0.1282	7257	-2.029	-1.831	97
4	0.2783	0.1392	7879	-2.022	-1.995	120

Last Message: Low Sample Detected

<<<Statistics>>> Mean: 0.2793 Std Dev: 0.0363 RSD: 12.98

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Reviewed By:Iwona
On:9/18/2025 2:38:43 PM
Inst Id :Appolo-9000
LB :LB137188

Sample Results Report Print Date/Time: 2025/07/07 11:05:31

Sample ID	Result	Std. Dev.	RSD	Mode	ALT
0.0PPM	7450	1575	21.13	TOC	
0.5PPM	21128	2451	11.60	TOC	
1.0PPM	32596	1146	3.52	TOC	
2.0PPM.....	60764...	3547..	5.84...	TOC	..
5.0PPM	150029	3222	2.15	TOC	
10.0PPM	292550	2033	0.70	TOC	
20.0PPM.....	571087...	6551..	1.15...	TOC	..
ICV1	10.2358	0.1815	1.77	TOC	
ICB1	0.3370	0.0688	20.42	TOC	
IC-20.....	0.2230...	0.0201..	9.02...	TOC	..
IC-R	0.1938	0.0312	16.09	TOC	

Reviewed By:Iwona
On:9/18/2025 2:38:43 PM
Inst Id :Appolo-9000
LB :LB137188

Sample Results Report Print Date/Time: 2025/07/07 11:05:31

Method ID	Sample Type	Vial	Timestamp	Message
TOC 0 - 20 ppmC	TOC Standard	15	2025/07/03 13:19	Low Sample Detected
TOC 0 - 20 ppmC	TOC Standard	2	2025/07/03 13:42	
TOC 0 - 20 ppmC	TOC Standard	3	2025/07/03 14:06	
TOC 0 - 20 ppmC	...TOC Standard ..	4..	2025/07/03 14:30 ..	
TOC 0 - 20 ppmC	TOC Standard	5	2025/07/03 14:55	
TOC 0 - 20 ppmC	TOC Standard	6	2025/07/03 15:21	
TOC 0 - 20 ppmC	...TOC Standard ..	7..	2025/07/03 15:47 ..	
TOC 0 - 20 ppmC	Sample	11	2025/07/03 16:12	
TOC 0 - 20 ppmC	Sample	12	2025/07/03 16:36	Low Sample Detected
TOC 0 - 20 ppmC	...Sample ..	13..	2025/07/03 17:00 ..	..Low Sample Detected
TOC 0 - 20 ppmC	Sample	12	2025/07/03 17:23	Low Sample Detected

Detailed Analysis Report Print Date/Time: 2025/07/07 11:05:59

Sample ID: 0.0PPM Mode: TOC
Method: TOC 0 - 20 ppmC Filename: 07031233
Cal. Curve: TOC WATER 0-20PPM Timestamp: 2025/07/03 13:19
Operator ID: RM IZ Sample Type: TOC Standard

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1			5735	-1.922	-1.869	120
2			6492	-1.892	-1.869	120
3			8764	-1.907	-1.859	120
4			8811	-1.910	-1.881	120

Last Message: Low Sample Detected
<<<Statistics>>> Mean: 7450 Std Dev: 1575 RSD: 21.13

Sample ID: 0.5PPM Mode: TOC
Method: TOC 0 - 20 ppmC Filename: 07031233
Cal. Curve: TOC WATER 0-20PPM Timestamp: 2025/07/03 13:42
Operator ID: RM IZ Sample Type: TOC Standard

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1			17882	-1.950	-1.752	112
2			22928	-1.968	-1.769	117
3			23117	-1.939	-1.740	118
4			20584	-1.939	-1.740	119

<<<Statistics>>> Mean: 21128 Std Dev: 2451 RSD: 11.60

Sample ID: 1.0PPM Mode: TOC
Method: TOC 0 - 20 ppmC Filename: 07031233
Cal. Curve: TOC WATER 0-20PPM Timestamp: 2025/07/03 14:06
Operator ID: RM IZ Sample Type: TOC Standard

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1			31117	-1.886	-1.686	119
2			32274	-1.887	-1.690	124
3			33377	-1.882	-1.682	125
4			33616	-1.869	-1.670	123

<<<Statistics>>> Mean: 32596 Std Dev: 1146 RSD: 3.52

Sample ID: 2.0PPM Mode: TOC
Method: TOC 0 - 20 ppmC Filename: 07031233
Cal. Curve: TOC WATER 0-20PPM Timestamp: 2025/07/03 14:30
Operator ID: RM IZ Sample Type: TOC Standard

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1			62668	-1.847	-1.650	128
2			62029	-1.828	-1.629	125
3			55472	-1.828	-1.630	126
4			62887	-1.882	-1.683	129

<<<Statistics>>> Mean: 60764 Std Dev: 3547 RSD: 5.84

Sample ID: 5.0PPM Mode: TOC
Method: TOC 0 - 20 ppmC Filename: 07031233
Cal. Curve: TOC WATER 0-20PPM Timestamp: 2025/07/03 14:55
Operator ID: RM IZ Sample Type: TOC Standard

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1			150663	-1.857	-1.657	139
2			150525	-1.803	-1.606	138
3			153328	-1.846	-1.647	137
4			145600	-1.797	-1.599	138

<<<Statistics>>> Mean: 150029 Std Dev: 3222 RSD: 2.15

Sample ID: 10.0PPM Mode: TOC
Method: TOC 0 - 20 ppmC Filename: 07031233
Cal. Curve: TOC WATER 0-20PPM Timestamp: 2025/07/03 15:21
Operator ID: RM IZ Sample Type: TOC Standard

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1			295070	-1.804	-1.604	151
2			293173	-1.802	-1.603	148
3			291585	-1.767	-1.568	145
4			290374	-1.756	-1.560	147

<<<Statistics>>> Mean: 292550 Std Dev: 2033 RSD: 0.70

Sample ID: 20.0PPM Mode: TOC
Method: TOC 0 - 20 ppmC Filename: 07031233
Cal. Curve: TOC WATER 0-20PPM Timestamp: 2025/07/03 15:47
Operator ID: RM IZ Sample Type: TOC Standard

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1			573738	-1.739	-1.539	156
2			578298	-1.720	-1.524	159
3			569405	-1.779	-1.579	153
4			562908	-1.743	-1.544	169

<<<Statistics>>> Mean: 571087 Std Dev: 6551 RSD: 1.15

Sample ID: ICV1 Mode: TOC
Method: TOC 0 - 20 ppmC Filename: 07031233
Cal. Curve: TOC WATER 0-20PPM Timestamp: 2025/07/03 16:12
Operator ID: RM IZ Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	10.4799	5.2399	296670	-1.724	-1.525	152
2	10.2011	5.1005	288777	-1.669	-1.470	146
3	10.0413	5.0206	284254	-1.659	-1.459	140
4	10.2208	5.1104	289335	-1.705	-1.506	149

<<<Statistics>>> Mean: 10.2358 Std Dev: 0.1815 RSD: 1.77

Sample ID: ICB1 Mode: TOC
Method: TOC 0 - 20 ppmC Filename: 07031233
Cal. Curve: TOC WATER 0-20PPM Timestamp: 2025/07/03 16:36
Operator ID: RM IZ Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	0.3070	0.1535	8691	-1.724	-1.565	120
2	0.2558	0.1279	7241	-1.706	-1.670	120
3	0.4089	0.2045	11576	-1.753	-1.705	120
4	0.3763	0.1881	10652	-1.756	-1.682	120

Last Message: Low Sample Detected
<<<Statistics>>> Mean: 0.3370 Std Dev: 0.0688 RSD: 20.42

Sample ID: IC-20 Mode: TOC
Method: TOC 0 - 20 ppmC Filename: 07031233
Cal. Curve: TOC WATER 0-20PPM Timestamp: 2025/07/03 17:00
Operator ID: RM IZ Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	0.2423	0.1212	6860	-1.759	-1.722	120
2	0.2321	0.1160	6570	-1.744	-1.711	120
3	0.2220	0.1110	6284	-1.760	-1.708	120
4	0.1955	0.0977	5534	-1.774	-1.751	120

Last Message: Low Sample Detected
<<<Statistics>>> Mean: 0.2230 Std Dev: 0.0201 RSD: 9.02

Sample ID: IC-R Mode: TOC
Method:
TOC 0 - 20 ppmC Filename: 07031233
Cal. Curve: TOC WATER 0-20PPM Timestamp: 2025/07/03 17:23
Operator ID: RM IZ Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	0.1793	0.0896	5076	-1.751	-1.719	120
2	0.2345	0.1173	6639	-1.769	-1.766	120
3	0.1996	0.0998	5651	-1.782	-1.755	120
4	0.1619	0.0809	4582	-1.779	-1.765	120

Last Message: Low Sample Detected
<<<Statistics>>> Mean: 0.1938 Std Dev: 0.0312 RSD: 16.09

Calibration Report Print Date/Time: 2025/07/03 15:47:50

Cal. Curve ID: TOC WATER 0-20PPM
Created: 2025/07/03 15:47
Calibration Factor (m): 5.662e+04
Y Intercept (b): 6533
r-squared: 0.99990

Re

Standard ID	Y Raw Data	X Expected ug C	Measured ug C	Message	Date & Time
0.0PPM	7451	0.000	0.016	—	2025/07/03 13:19
0.5PPM	21128	0.250	0.258	3.2	2025/07/03 13:42
1.0PPM	32596	0.500	0.460	-8.0	2025/07/03 14:06
2.0PPM	60764	1.000	0.958	-4.2	2025/07/03 14:30
5.0PPM	150029	2.500	2.535	1.4	2025/07/03 14:55
10.0PPM	292551	5.000	5.052	1.0	2025/07/03 15:21
20.0PPM	571087	10.000	9.971	-0.3	2025/07/03 15:47

12
07/03/25

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Instrument ID: DO METER

Daily Analysis Runlog For Sequence/QCBatch ID # LB137180

Review By	rubina	Review On	9/17/2025 4:17:55 PM
Supervise By	Iwona	Supervise On	9/17/2025 4:18:07 PM
SubDirectory	LB137180	Test	BOD5

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	WP114750,W3149,WP112832,W3103,W3109,W3105,WP114752,WP114751,WP113878

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	LB137180BL	LB137180BL	MB	09/12/25 18:30		rubina	OK
2	LB137180BS	LB137180BS	LCS	09/12/25 18:30		rubina	OK
3	Q3081-01	DRAIN-WATER-TANK	SAM	09/12/25 18:30		rubina	OK
4	Q3093-01	MH-9-12-25	SAM	09/12/25 18:30		rubina	OK
5	Q3094-04	5674-11-001C	SAM	09/12/25 18:30		rubina	OK
6	Q3096-01	DRAIN-WATER-TANK	SAM	09/12/25 18:30		rubina	OK
7	Q3096-01DUP	DRAIN-WATER-TANK	DUP	09/12/25 18:30		rubina	OK
8	Q3098-04	EFF-WW	SAM	09/12/25 18:30		rubina	OK

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Instrument ID: TOC

Daily Analysis Runlog For Sequence/QCBatch ID # LB137188

Review By	rubina	Review On	9/18/2025 2:35:32 PM
Supervise By	Iwona	Supervise On	9/18/2025 2:38:43 PM
SubDirectory	LB137188	Test	TOC

STD. NAME	STD REF.#
ICAL Standard	WP113812,WP113813,WP113814,WP113815,WP113816,WP113817,WP113818
ICV Standard	WP113819
CCV Standard	WP114794
ICSA Standard	N/A
CRI Standard	N/A
LCS Standard	WP114795
Chk Standard	WP113820,WP113821,WP112446

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	0.0PPM	0.0PPM	CAL1	07/03/25 13:19		RM IZ	OK
2	0.5PPM	0.5PPM	CAL2	07/03/25 13:42		RM IZ	OK
3	1.0PPM	1.0PPM	CAL3	07/03/25 14:06		RM IZ	OK
4	2.0PPM	2.0PPM	CAL4	07/03/25 14:30		RM IZ	OK
5	5.0PPM	5.0PPM	CAL5	07/03/25 14:55		RM IZ	OK
6	10.0PPM	10.0PPM	CAL6	07/03/25 15:21		RM IZ	OK
7	20.0PPM	20.0PPM	CAL7	07/03/25 15:47		RM IZ	OK
8	ICV1	ICV1	ICV	07/03/25 16:12		RM IZ	OK
9	ICB1	ICB1	ICB	07/03/25 16:36		RM IZ	OK
10	IC-20	IC-20	SAM	07/03/25 17:00		RM IZ	OK
11	IC-R	IC-R	SAM	07/03/25 17:23		RM IZ	OK
12	CCV1	CCV1	CCV	09/16/25 09:19		RM IZ	OK
13	CCB1	CCB1	CCB	09/16/25 09:42		RM IZ	OK
14	LB137188BLW	LB137188BLW	MB	09/16/25 10:06		RM IZ	OK
15	LB137188BSW	LB137188BSW	LCS	09/16/25 10:36		RM IZ	OK
16	Q3094-01	5670-18-000F	SAM	09/16/25 11:11	High	RM IZ	Dilution
17	Q3094-02	5674-08-001W	SAM	09/16/25 12:38	High	RM IZ	Dilution
18	Q3094-03	5674-08-001WP	SAM	09/16/25 13:33	High	RM IZ	Dilution

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Instrument ID: TOC

Daily Analysis Runlog For Sequence/QCBatch ID # LB137188

Review By	rubina	Review On	9/18/2025 2:35:32 PM
Supervise By	Iwona	Supervise On	9/18/2025 2:38:43 PM
SubDirectory	LB137188	Test	TOC

STD. NAME	STD REF.#
ICAL Standard	WP113812,WP113813,WP113814,WP113815,WP113816,WP113817,WP113818
ICV Standard	WP113819
CCV Standard	WP114794
ICSA Standard	N/A
CRI Standard	N/A
LCS Standard	WP114795
Chk Standard	WP113820,WP113821,WP112446

19	Q3094-04	5674-11-001C	SAM	09/16/25 14:05	High	RM IZ	Dilution
20	Q3094-04MS	5674-11-001CMS	MS	09/16/25 14:36		RM IZ	OK
21	Q3094-04MSD	5674-11-001CMSD	MSD	09/16/25 15:08		RM IZ	OK
22	Q3094-01DL	5670-18-000FDL	SAM	09/16/25 16:00	Report 100X	RM IZ	Confirms
23	Q3094-02DL	5674-08-001WDL	SAM	09/16/25 16:32	Report 100X,Still high	RM IZ	Dilution
24	CCV2	CCV2	CCV	09/16/25 17:03		RM IZ	OK
25	CCB2	CCB2	CCB	09/16/25 17:25		RM IZ	OK
26	CCV3	CCV3	CCV	09/17/25 10:40		RM IZ	OK
27	CCB3	CCB3	CCB	09/17/25 11:02		RM IZ	OK
28	LB137188BLW2	LB137188BLW2	MB	09/17/25 11:25		RM IZ	OK
29	LB137188BSW2	LB137188BSW2	LCS	09/17/25 11:56		RM IZ	OK
30	Q3094-04DL	5674-11-001CDL	SAM	09/17/25 12:23	Report 500X	RM IZ	Confirms
31	Q3094-02DL2	5674-08-001WDL2	SAM	09/17/25 12:50	Report 500X	RM IZ	Confirms
32	CCV4	CCV4	CCV	09/17/25 13:21		RM IZ	OK
33	CCB4	CCB4	CCB	09/17/25 13:44		RM IZ	OK

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Prep Standard - Chemical Standard Summary

Order ID : Q3094

Test : BOD5,TOC

Prepbatch ID :

Sequence ID/Qc Batch ID: LB137180,LB137188,

Standard ID :
WP111436,WP111449,WP111450,WP111451,WP111452,WP112446,WP112832,WP113500,WP113780,WP113810,WP113811,WP113812,WP113813,WP113814,WP113815,WP113816,WP113817,WP113818,WP113819,WP113820,WP113821,WP113878,WP114035,WP114750,WP114751,WP114752,WP114792,WP114793,WP114794,WP114795,

Chemical ID :
M5501,M6041,W1992,W2647,W2653,W2654,W2800,W2860,W3016,W3017,W3020,W3022,W3058,W3103,W3105,W3109,W3112,W3113,W3149,W3167,W3169,W3212,W3219,W3233,

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Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
2050	TOC STOCK STD, 4000PPM	WP111436	01/15/2025	07/15/2025	Niha Farheen Shaik	WETCHEM_SCALE_5 (WCSC-5)	WETCHEM_PIPETTE_3 (WC)	Iwona Zarych 01/16/2025

FROM 5.00000ml of W2860 + 8.51200gram of W3169 + 990.00000ml of W3112 = Final Quantity: 1000.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
4003	Solution A	WP111449	01/15/2025	07/15/2025	Niha Farheen Shaik	WETCHEM_SCALE_5 (WCSC-5)	None	Iwona Zarych 01/16/2025

FROM 1000.00000ml of W3112 + 2.56500gram of W3167 = Final Quantity: 1000.000 ml

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Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
4004	Solution B	WP111450	01/15/2025	07/15/2025	Niha Farheen Shaik	WETCHEM_SCALE_5 (WCSC-5)	None	Iwona Zarych 01/16/2025

FROM 0.24800gram of W3020 + 0.28100gram of M5501 + 0.28300gram of W2800 + 0.59400gram of W1992 + 1000.00000ml of W3112 + 2.05000gram of W3017 = Final Quantity: 1000.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
4005	Solution C	WP111451	01/15/2025	07/15/2025	Niha Farheen Shaik	WETCHEM_SCALE_5 (WCSC-5)	None	Iwona Zarych 01/16/2025

FROM 0.70500gram of W3016 + 1000.00000ml of W3112 + 2.80600gram of W2647 = Final Quantity: 1000.000 ml

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Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
4006	Solution D	WP111452	01/15/2025	07/15/2025	Niha Farheen Shaik	WETCHEM_SCALE_5 (WCSC-5)	None	Iwona Zarych 01/16/2025

FROM 1.86200gram of W3022 + 1000.00000ml of W3112 = Final Quantity: 1000.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
613	Phosphoric acid reagent	WP112446	03/25/2025	09/25/2025	Niha Farheen Shaik	None	None	Iwona Zarych 03/26/2025

FROM 150.00000ml of W3112 + 50.00000ml of W2860 = Final Quantity: 200.000 ml

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Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1841	Sulfuric Acid, 1N	WP112832	04/25/2025	10/25/2025	Rubina Mughal	None	WETCHEM_PIPETTE_3 (WC)	Iwona Zarych 04/25/2025

FROM 2.80000ml of M6041 + 97.20000ml of W3112 = Final Quantity: 100.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3886	Inorganic carbon stock solution, 1000ppm	WP113500	06/10/2025	12/10/2025	Iwona Zarych	None	Glass Pipette-A	Jignesh Parikh 06/13/2025

FROM 3.49700gram of W2647 + 4.41220gram of W3058 + 993.00000ml of W3112 = Final Quantity: 1000.000 ml

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Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
2051	TOC STOCK STD-SS, 4000PPM	WP113780	07/01/2025	01/01/2026	Iwona Zarych	WETCHEM_SCALE_5 (WCSC-5)	WETCHEM_PIPETTE_3 (WC)	Jignesh Parikh 07/02/2025

FROM 2.50000ml of W2860 + 4.25600gram of W3219 + 495.00000ml of W3112 = Final Quantity: 500.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3888	TOC Water Intermediate std-200ppm	WP113810	07/03/2025	07/10/2025	Iwona Zarych	None	Glass Pipette-A	Jignesh Parikh 07/09/2025

FROM 95.00000ml of W3112 + 5.00000ml of WP111436 = Final Quantity: 100.000 ml

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Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3889	TOC Water Intermediate std SS-200ppm	WP113811	07/03/2025	07/10/2025	Iwona Zarych	None	Glass Pipette-A	Jignesh Parikh 07/09/2025

FROM 95.00000ml of W3112 + 5.00000ml of WP113780 = Final Quantity: 100.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
304	TOC CAL 0.00ppm	WP113812	07/03/2025	07/10/2025	Iwona Zarych	None	None	Jignesh Parikh 07/09/2025

FROM 100.00000ml of W3112 = Final Quantity: 100.000 ml

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Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
305	TOC CAL 0.5ppm	WP113813	07/03/2025	07/10/2025	Iwona Zarych	None	WETCHEM_PIPETTE_3 (WC)	Jignesh Parikh 07/09/2025

FROM 99.75000ml of W3112 + 0.25000ml of WP113810 = Final Quantity: 100.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
306	TOC CAL 1.0PPM	WP113814	07/03/2025	07/10/2025	Iwona Zarych	None	WETCHEM_PIPETTE_3 (WC)	Jignesh Parikh 07/09/2025

FROM 99.50000ml of W3112 + 0.50000ml of WP113810 = Final Quantity: 100.000 ml

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Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
307	TOC CAL 2.0PPM	WP113815	07/03/2025	07/10/2025	Iwona Zarych	None	WETCHEM_PIPETTE_3 (WC)	Jignesh Parikh 07/09/2025

FROM 99.00000ml of W3112 + 1.00000ml of WP113810 = Final Quantity: 100.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
308	TOC CAL 5.0PPM	WP113816	07/03/2025	07/10/2025	Iwona Zarych	None	WETCHEM_PIPETTE_3 (WC)	Jignesh Parikh 07/09/2025

FROM 97.50000ml of W3112 + 2.50000ml of WP113810 = Final Quantity: 100.000 ml

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Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3331	TOC CAL-CCV std, 10PPM	WP113817	07/03/2025	07/10/2025	Iwona Zarych	None	Glass Pipette-A	Jignesh Parikh 07/09/2025

FROM 190.00000ml of W3112 + 10.00000ml of WP113810 = Final Quantity: 200.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
310	TOC CAL 20.0PPM	WP113818	07/03/2025	07/10/2025	Iwona Zarych	None	Glass Pipette-A	Jignesh Parikh 07/09/2025

FROM 90.00000ml of W3112 + 10.00000ml of WP113810 = Final Quantity: 100.000 ml

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Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1650	TOC ICV/LCS STD. 10PPM	WP113819	07/03/2025	07/10/2025	Iwona Zarych	None	Glass Pipette-A	Jignesh Parikh 07/09/2025

FROM 190.00000ml of W3112 + 10.00000ml of WP113811 = Final Quantity: 200.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3887	Inorganic carbon solution, 20ppm	WP113820	07/03/2025	07/10/2025	Iwona Zarych	None	WETCHEM_PIPETTE_3 (WC)	Jignesh Parikh 07/09/2025

FROM 49.00000ml of W3112 + 1.00000ml of WP113500 = Final Quantity: 50.000 ml

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Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
4007	IC-removal check solution	WP113821	07/03/2025	07/10/2025	Iwona Zarych	None	WETCHEM_PIPETTE_3 (WC)	Jignesh Parikh 07/09/2025

FROM 0.04000ml of M6041 + 10.00000ml of WP111449 + 10.00000ml of WP111450 + 10.00000ml of WP111451 + 10.00000ml of WP111452 = Final Quantity: 40.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1571	Sodium hydroxide, 1N	WP113878	07/09/2025	12/31/2025	Iwona Zarych	WETCHEM_SCALE_7 (WCSC-6)	None	Jignesh Parikh 07/09/2025

FROM 4.00000gram of W3113 + 96.00000ml of W3112 = Final Quantity: 100.000 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
2050	TOC STOCK STD, 4000PPM	WP114035	07/22/2025	01/22/2026	Iwona Zarych	WETCHEM_SCALE_5 (WCSC-5)	Glass Pipette-A	Jignesh Parikh 07/22/2025

FROM 5.00000ml of W2860 + 8.51200gram of W3169 + 990.00000ml of W3112 = Final Quantity: 1000.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
127	BOD Dilution fluid	WP114750	09/12/2025	09/13/2025	Rubina Mughal	None	None	Jignesh Parikh 09/12/2025

FROM 18.00000L of W3112 + 3.00000PILLOW of W3233 = Final Quantity: 18.000 L

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Fax : 908 789 8922

Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
129	Glutamic acid-glucose mix for BOD	WP114751	09/12/2025	09/13/2025	Rubina Mughal	None	WETCHEM_PIPETTE_3 (WC)	Jignesh Parikh 09/12/2025

FROM 0.15000gram of W2653 + 0.15000gram of W2654 + 1000.00000ml of W3112 = Final Quantity: 1000.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
128	polyseed seed control	WP114752	09/12/2025	09/13/2025	Rubina Mughal	None	None	Jignesh Parikh 09/12/2025

FROM 1.00000PILLOW of W3212 + 300.00000ml of WP114750 = Final Quantity: 300.000 ml

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Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3888	TOC Water Intermediate std-200ppm	WP114792	09/16/2025	09/23/2025	Iwona Zarych	None	Glass Pipette-A	Jignesh Parikh 09/18/2025

FROM 95.00000ml of W3112 + 5.00000ml of WP114035 = Final Quantity: 100.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3889	TOC Water Intermediate std SS-200ppm	WP114793	09/16/2025	09/23/2025	Iwona Zarych	None	Glass Pipette-A	Jignesh Parikh 09/18/2025

FROM 95.00000ml of W3112 + 5.00000ml of WP113780 = Final Quantity: 100.000 ml

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Fax : 908 789 8922

Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3331	TOC CAL-CCV std, 10PPM	WP114794	09/16/2025	09/23/2025	Iwona Zarych	None	Glass Pipette-A	Jignesh Parikh 09/18/2025

FROM 190.00000ml of W3112 + 10.00000ml of WP114792 = Final Quantity: 200.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1650	TOC ICV/LCS STD. 10PPM	WP114795	09/16/2025	09/23/2025	Iwona Zarych	None	Glass Pipette-A	Jignesh Parikh 09/18/2025

FROM 190.00000ml of W3112 + 10.00000ml of WP114793 = Final Quantity: 200.000 ml

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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-3624-05 / Sodium Chloride, Crystal (cs/4x2.5kg)	0000281938	07/06/2026	07/24/2023 / mohan	04/14/2023 / mohan	M5501

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 #
PCI Scientific Supply, Inc.	J0660-1 / AMMONIUM CHLORIDE, ACS, 500G	WL13B	04/08/2025	04/08/2015 / apatel	04/08/2015 / apatel	W1992

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	J3506-5 / SODIUM BICARBONATE, PWD, ACS, 2.5KG	0000240594	06/03/2026	02/24/2020 / AMANDEEP	01/20/2020 / apatel	W2647

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	AC156212500 / GLUTAMIC ACID BIOCHEM REG, 250G	A0405990	01/24/2030	01/24/2020 / apatel	01/24/2020 / apatel	W2653

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	D16-500 / DEXTROSE ANHYDROUS ACS REAGENT, 500G(New)	186122A	01/24/2030	01/24/2020 / apatel	01/24/2020 / apatel	W2654

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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.	J3040-1 / POTASSIUM CHLORIDE, CRYS, ACS, 500G	198947	09/30/2025	03/08/2021 / apatel	03/08/2021 / apatel	W2800

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	J0260-3 / Phosphoric Acid, 2.5 L	0000278313	01/31/2026	07/12/2021 / apatel	07/12/2021 / apatel	W2860

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
SIGMA ALDRICH	S9390-100G / Sodium phosphate dibasic heptahydrate	SLCP6576	11/30/2025	04/03/2023 / lwona	04/03/2023 / lwona	W3016

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
SIGMA ALDRICH	C7902-500G / Calcium chloride dihydrate - 500G	SLCP4280	08/31/2025	04/03/2023 / lwona	04/03/2023 / lwona	W3017

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Thermo Fisher Scientific	012364.36 / Calcium nitrate tetrahydrate, ACS, 99.0-103.0%	MKCS4612	09/30/2025	04/03/2023 / lwona	04/03/2023 / lwona	W3020

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
SIGMA ALDRICH	S4392-250G / Sodium metasilicate nonahydrate	SLCM8472	03/31/2025	04/05/2023 / lwona	04/05/2023 / lwona	W3022

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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.	EM-SX0395-3 / SODIUM CARBONATE ANHYDR 2.5KG	2023012653	10/19/2028	09/03/2024 / jignesh	10/19/2023 / Iwona	W3058

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	4620-32 / MANGANOUS SULFATE SOLUTION-364	2403J02	03/31/2026	04/22/2024 / Iwona	04/22/2024 / Iwona	W3103

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

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	AL04100-4 / Alkaline Iodide Azide, 1 L	1405D67	04/30/2026	05/23/2024 / Iwona	05/23/2024 / Iwona	W3109

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

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

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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.	AL70850-8 / Starch Solution, 4L	4408P62	08/31/2026	10/16/2024 / Iwona	10/16/2024 / Iwona	W3149

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	J2500-1 / MAGNESIUM SULFATE 7-HYDRATE CRYSTALS 500G	24J2856877	05/29/2027	01/03/2025 / Iwona	01/03/2025 / Iwona	W3167

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	P243-500 / Potassium Hydrogen Phthalate, 500 gms	24H0956262	04/28/2026	01/03/2025 / Iwona	01/03/2025 / Iwona	W3169

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	136742-80 / POLYSEED	132409	09/30/2026	05/21/2025 / Iwona	05/21/2025 / Iwona	W3212

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	P243-500 / Potassium Hydrogen Phthalate, 500 gms	2025040493	06/30/2030	06/26/2025 / Iwona	06/26/2025 / Iwona	W3219

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
HACH	1486266 / BOD Nutrient Buffer Pillows, 6 mL concentrate to make 6 L, 50/pk	A5105	05/31/2030	08/14/2025 / rubina	07/21/2025 / Iwona	W3233

Certificate of Analysis

Date of Release: ***12/18/2013***

Product: ***Ammonium Chloride GR ACS*** ***Catalog No.:*** ***AX1270 all size codes***

Grade: ***Meets ACS Specifications*** ***CAS #:*** ***12125-02-9***

Country of Origin: ***India*** ***FW:*** ***53.49***

Lot No.: ***WL13B*** ClH_4N

	Requirement			
Characteristic	**Minimum**	**Maximum**	**Results**	**UOM**
Assay (argentometric)	99.5		99.9	%
Calcium (Ca)		0.001	0.0001	%
Form	White crystals		White crystals	
Heavy metals (as Pb)		5	5	ppm
Identification	To pass test		Passes	
Insoluble matter		0.005	0.002	%
Iron (Fe)		2	2	ppm
Loss on drying (105 C)		0.5	0.21	%
Magnesium (Mg)		5	0.6	ppm
pH of a 5% solution at 25 C	4.5	5.5	4.76	
Phosphate (PO4)		2	2	ppm
Residue after ignition		0.01	0.002	%
Sulfate (SO4)		0.002	0.002	%

Joe Schoellkopff

Quality Control Manager

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

EMD Millipore Corporation
290 Concord Road
Billerica, MA 01821

Sodium Bicarbonate, Powder
BAKER ANALYZED® A.C.S. Reagent

(sodium hydrogen carbonate)

Material No.: 3506-05
Batch No.: 0000240594
Manufactured Date: 2019/06/05
Retest Date: 2026/06/03
Revision No: 1

Certificate of Analysis

Meets ACS Reagent Chemical Requirements,

Test	Specification	Result
Assay ($NaHCO_3$) (dried basis)	99.7 - 100.3 %	100.1
Insoluble Matter	<= 0.015 %	< 0.002
Chloride (Cl)	<= 0.003 %	0.003
Phosphate (PO_4)	<= 0.001 %	0.001
Sulfur Compounds (as SO_4)	<= 0.003 %	0.003
Calcium (Ca)	<= 0.02 %	0.02
Trace Impurities - Iron (Fe)	<= 0.001 %	0.001
Magnesium (Mg)	<= 0.005 %	0.005
Potassium (K)	<= 0.005 %	0.005
Ammonium (NH_4)	<= 5 ppm	5
Trace Impurities - ACS - Heavy Metals (as Pb)	<= 5 ppm	5

For Laboratory, Research or Manufacturing Use
Meets Reagent Specifications for testing USP/NF monographs

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

Jamie Ethier
Vice President Global Quality

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

Phosphoric Acid
BAKER ANALYZED® A.C.S. Reagent

(orthophosphoric acid)

Material No.: 0260-03
Batch No.: 0000278313
Manufactured Date: 2021/02/01
Retest Date: 2026/01/31
Revision No: 2

Certificate of Analysis

Meets ACS Reagent Chemical Requirements,

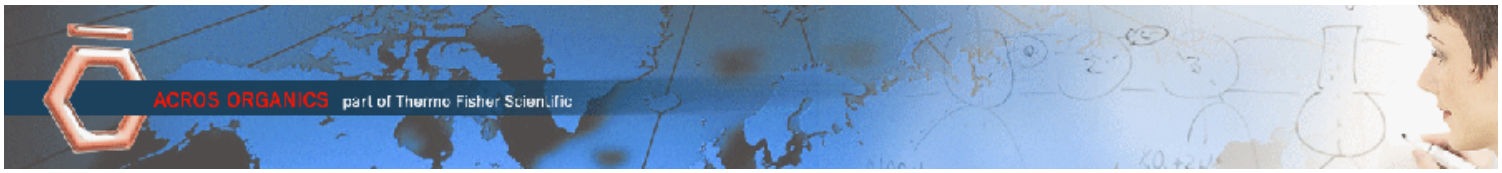
Test	Specification	Result
Assay (H_3PO_4) (by acidimetry)	85.0 - 87.0 %	85.8
Calcium (Ca)	<= 0.002 %	< 0.001
Color (APHA)	<= 10	5
Insoluble Matter	<= 0.001 %	< 0.001
ACS - Magnesium (Mg)	<= 0.002 %	<0.002
Sulfate (SO_4)	<= 12 ppm	< 4
Volatile Acids (as CH_3COOH)	<= 0.001 %	0.001
Reducing Substances	Passes Test	PT
Chloride (Cl)	<= 3 ppm	< 1
Nitrate (NO_3)	<= 5 ppm	< 2
Trace Impurities - Antimony (Sb)	<= 20.000 ppm	0.007
Trace Impurities - Arsenic (As)	<= 0.500 ppm	< 0.001
Trace Impurities - Iron (Fe)	<= 10.000 ppm	< 1.000
Heavy Metals (as Pb)	<= 8 ppm	< 3
Trace Impurities - Manganese (Mn)	<= 0.500 ppm	0.005
Trace Impurities - Potassium (K)	<= 40.000 ppm	< 0.001
Trace Impurities - Sodium (Na)	<= 200.000 ppm	0.082

For Laboratory, Research or Manufacturing Use
Exceeds A.C.S. Specifications
Meets Reagent Specifications for testing USP/NF monographs

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

Jamie Ethier
Vice President Global Quality

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



ACROS ORGANICS

Version	0
Molecular weight	147.13
Molecular formula	C5 H9 N O4
CAS No	56-86-0
Linear formula	HO2CCH2CH2CH(NH2)CO2H
Flash point (°C)	

Certificate of Analysis

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. Acros Organics 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 human or animals. It is the responsiblity of the purchaser, formulator or those performing further manufacturing 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	15621	**Quality Test / Release Date**	13 March 2019
Lot Number	A0405990	**Suggested Retest Date**	March 2022

Description	L(+)-Glutamic acid,99%
Country of Origin	CHINA
Declaration of Origin	plant

Origin Comment	The product is made by fermentation of sugar molasses

Result Name	Specifications	Test Value
Appearance (Color)	White	White
Appearance (Form)	Powder	Powder
Infrared spectrum	Conforms	Conforms
Titration with NaOH	98.5 to 100.5 % (On dried substance)	99.32 % (On dried substance)
Loss on drying	=<0.5 % (105°C, 3 hrs)	0.002 % (105°C, 3 hrs)
Heavy metals (as Pb)	=<10 ppm	=<10 ppm
Sulfated ash	=<0.1 %	0.08 %
Other amino acids	not detectable	not detectable
Specific optical rotation	+30.5° to +32.5° (20°C, 589 nm) (on dried substance)	+32° (20°C, 589 nm) (on dried substance)
Specific optical rotation	(c=10, 2N HCl)	(c=10, 2N HCl)
Chloride (Cl)	=<200 ppm	=<200 ppm
Iron (Fe)	=<30 ppm	=<10 ppm
Sulfate (SO4)	=<300 ppm	=<200 ppm
Ammonium (NH4)	=<200 ppm	=<200 ppm
Arsenic oxide (As2O3)	=<1 ppm	=<1 ppm

L. Van den Broek, QA Manager Issued: 24 January 2020

Acros Organics
ENA23, zone 1, nr 1350, Janssen Pharmaceuticalaan 3a, B-2440 Geel, Belgium
Tel +32 14/57.52.11 - Fax +32 14/59.34.34 Internet: http://www.acros.com
1 Reagent Lane, Fair Lawn, NJ 07410,USA Fax 201-796-1329

Sigma-Aldrich.

W3016
Rec 04/03/23 12

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

Certificate of Analysis

Product Name:
Sodium phosphate dibasic heptahydrate - ACS reagent, 98.0-102.0%

$Na_2HPO_4 \cdot 7H_2O$

Product Number:	**S9390**
Batch Number:	**SLCP6576**
Brand:	SIGALD
CAS Number:	7782-85-6
MDL Number:	MFCD00149180
Formula:	HNa2O4P · 7H2O
Formula Weight:	268.07 g/mol
Quality Release Date:	02 NOV 2022
Recommended Retest Date:	NOV 2025

Test	Specification	Result
Appearance (Color)	White	White
Appearance (Form)	Powder	Powder
Assay	98.0 - 102.0 %	99.8 %
Insoluble Matter	≤ 0.005 %	0.003 %
Chloride (Cl) < or = 0.001%	Pass	Pass
Sulfate < or = 0.005%	Pass	Pass
Iron (Fe) < or = 0.001%	Pass	Pass
Heavy Metals by ICP	< = 0.001%	< 0.001%
pH of 5% solution at 25 deg C	8.7 - 9.3	9.2
Note ACS Tests	_____	_____

Brian Dulle, Supervisor
Quality Assurance
St. Louis, Missouri US

Sigma-Aldrich

W3017
Rec 4/3/23 12

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

Certificate of Analysis

Product Name:

Calcium chloride dihydrate - BioReagent, suitable for cell culture, suitable for insect cell culture, suitable for plant cell culture, ≥99.0%

$CaCl_2 \cdot 2H_2O$

Product Number:	**C7902**
Batch Number:	**SLCP4280**
Brand:	SIGMA
CAS Number:	10035-04-8
MDL Number:	MFCD00149613
Formula:	CaCl2 · 2H2O
Formula Weight:	147.01 g/mol
Quality Release Date:	14 NOV 2022
Recommended Retest Date:	AUG 2025

Test	Specification	Result
Appearance (Color)	White	White
Appearance (Form)	Powder	Powder
Solubility (Color)	Colorless	Colorless
Solubility (Turbidity) 294 mg/mL, H2O	Clear	Clear
Titration with EDTA	99.0 - 105.0 %	103.3 %
Cell Culture Test	Pass	Pass
Insect Cell Test	Pass	Pass
Plant Cell Culture Test	Pass	Pass

Brian Dulle, Supervisor
Quality Assurance
St. Louis, Missouri US

Sigma-Aldrich.

W 3020
Rec. 4/3/23
12

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

Certificate of Analysis

Product Name:
Calcium nitrate tetrahydrate - ACS reagent, 99%

$Ca(NO_3)_2 \cdot 4H_2O$

Product Number:	**237124**
Batch Number:	**MKCS4612**
Brand:	SIGALD
CAS Number:	13477-34-4
MDL Number:	MFCD00149604
Formula:	CaN2O6 · 4H2O
Formula Weight:	236.15 g/mol
Quality Release Date:	27 FEB 2023
Recommended Retest Date:	SEP 2025

Test	Specification	Result
Appearance (Color)	White	White
Appearance (Form) Granular Powder or Crystals or Flakes	Conforms to Requirements	Crystals
Complexometric EDTA	99.0 - 103.0 %	99.6 %
X-Ray Diffraction	Conforms to Structure	Conforms
pH c = 5%, Water, 25 Deg C	5.0 - 7.0	5.4
Insoluble Matter c = 10%, Water	≤ 0.005 %	< 0.001 %
Chloride Content	≤ 0.005 %	< 0.005 %
Nitrite (NO2)	≤ 0.001 %	< 0.001 %
Sulfate (SO4)	≤ 0.002 %	< 0.002 %
Barium	≤ 0.005 %	< 0.001 %
Heavy Metals by ICP-OES	≤ 5.0 ppm	< 1.0 ppm
Iron (Fe)	≤ 5.0 ppm	< 1.0 ppm
Magnesium (Mg)	≤ 0.05 %	< 0.01 %
Potassium (K)	≤ 0.005 %	< 0.001 %
Sodium (Na)	≤ 0.01 %	< 0.01 %
Strontium (Sr)	≤ 0.05 %	< 0.01 %
Meets ACS Requirements	Current ACS Specification	Conforms

W3020

Sigma-Aldrich.

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 Number: 237124
Batch Number: MKCS4612

Test	Specification	Result
Recommended Retest Period 3 Years	_____	_____

Larry Coers, Director
Quality Control
Milwaukee, WI US

Sigma-Aldrich.

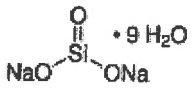
W 3022
Rec. 4/5/23 12

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

Certificate of Analysis

Product Name:
Sodium metasilicate nonahydrate - ≥98%

Product Number:	**S4392**
Batch Number:	**SLCM8472**
Brand:	ALDRICH
CAS Number:	13517-24-3
MDL Number:	MFCD00149175
Formula:	Na2O3Si · 9H2O
Formula Weight:	284.20 g/mol
Quality Release Date:	14 MAR 2022
Recommended Retest Date:	MAR 2025



Test	Specification	Result
Appearance (Color)	White	White
Appearance (Form)	Powder	Powder
Solubility (Color)	Colorless	Colorless
Solubility (Turbidity) 50 mg/ml, H2O	Clear	Clear
Titration with HCl	≥ 98 %	100 %

Brian Dulle, Supervisor
Quality Assurance
St. Louis, Missouri US

Certificate Of Analysis

W 3058

Rec. 10/19/23 12

Date of Release: 1/27/2023

Name: **Sodium Carbonate, Anhydrous**
Powder, ACS
Item No: **SX0395 All Sizes**
Lot / Batch No: **2023012653**
Country of Origin: **India**

Item	Specifications	Analysis
Assay (calculated on dried substance)	99.5% min.	100.2%
Calcium (Ca)	0.03% max.	0.004%
Chloride (Cl)	0.001% max.	<0.001%
Color	White	Passes Test
Form	Powder	Passes Test
Heavy metals (by ICP-OES)	5 ppm max.	<5 ppm
Insoluble Matter	0.01% max.	0.003%
Iron (Fe)	5 ppm max.	<5 ppm
Loss on heating at 285C	1.0% max.	0.1%
Magnesium (Mg)	0.005% max.	0.0008%
Phosphate (PO4)	0.001% max.	<0.001%
Potassium (K)	0.005% max.	0.003%
Silica (SiO2)	0.005% max.	<0.005%
Sulfur compounds (as SO4)	0.003% max.	<0.003%

Joe Schoellkopff

Quality Control Manager

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

EMD Millipore is a division of Merck KGaA, Darmstadt, Germany

EMD Millipore Corporation
400 Summit Drive
Burlington, MA 01803
U.S.A.

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	P217	Quality Test / Release Date	09/03/2020
Lot Number	198947		
Description	POTASSIUM CHLORIDE, A.C.S.		
Country of Origin	United States	Suggested Retest Date	Sep/2025
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.		

N/A			
Result Name	Units	Specifications	Test Value
APPEARANCE		REPORT	White crystals
ASSAY	%	Inclusive Between 99.0 - 100.5	99.7
BARIUM (Ba)	PASS/FAIL	= P.T. (ABOUT 0.001%)	P.T. (ABOUT 0.001%)
BROMIDE	%	<= 0.01	<0.01
CALCIUM	%	<= 0.002	<0.002
CHLORATE & NITRATE	%	<= 0.003	<0.001
HEAVY METALS (as Pb)	ppm	<= 5	<5
IDENTIFICATION	PASS/FAIL	= PASS TEST	PASS TEST
INSOLUBLE MATTER	%	<= 0.005	<0.005
IODIDE	%	<= 0.002	<0.002
IRON (Fe)	ppm	<= 2	<1
MAGNESIUM	%	<= 0.001	<0.0005
PH 5% SOLUTION @ 25 DEG C		Inclusive Between 5.4 - 8.6	6.0
PHOSPHATE (PO4)	ppm	<= 5	<5
SODIUM (Na)	%	<= 0.005	<0.005
SULFATE (SO4)	%	<= 0.001	<0.001

Julian Burton

Julian Burton - Quality Control Manager – 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.

ThermoFisher SCIENTIFIC

Certificate of Analysis

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

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Catalog Number	D16	Quality Test / Release Date	03/19/2019
Lot Number	186122A		
Description	DEXTROSE, ANHYDROUS, A.C.S.		
Country of Origin	United States	Suggested Retest Date	Mar/2022
Chemical Origin	Organic - Plant		
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	White, granular powder
TITRATABLE ACID	MEQ/G	<= 0.002	<0.002
STARCH		= PASS TEST	pass test
SPECIFIC ROTATION @ 25 C	DEGREES (+ OR -)	Inclusive Between +52.5 - +53.0	53.0
SULFATE & SULFITE	%	<= 0.005	<0.005
IRON (Fe)	ppm	<= 5	<5
CHLORIDE	%	<= 0.01	<0.01
IGNITION RESIDUE	%	<= 0.02	<0.02
IDENTIFICATION	PASS/FAIL	= PASS TEST	pass test
HEAVY METALS (as Pb)	ppm	<= 5	<5
LOSS ON DRYING @ 105 C	%	<= 0.2	<0.2
INSOLUBLE MATTER	%	<= 0.005	0.002

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.

Sodium Chloride, Crystal
BAKER ANALYZED® A.C.S. Reagent

M5497 - M5758
Rcvd on 4/14/23
MB

avantor™ | J.T.Baker®

Material No.: 3624-01
Batch No.: 0000281938
Manufactured Date: 2021-06-07
Retest Date: 2026-06-07
Revision No.: 2

Certificate of Analysis

Test	Specification	Result
Assay (NaCl) (by Ag titrn)	≥ 99.0 %	100.0 %
pH of 5% Solution at 25°C	5.0 - 9.0	6.3
Insoluble Matter	≤ 0.005 %	0.003 %
Iodide (I)	≤ 0.002 %	< 0.002 %
Bromide (Br)	≤ 0.01 %	< 0.01 %
Chlorate and Nitrate (as NO_3)	≤ 0.003 %	< 0.001 %
ACS - Phosphate (PO_4)	≤ 5 ppm	< 5 ppm
Sulfate (SO_4)	≤ 0.004 %	< 0.004 %
Barium (Ba)	Passes Test	Passes Test
ACS - Heavy Metals (as Pb)	≤ 5 ppm	< 5 ppm
Iron (Fe)	≤ 2 ppm	< 1 ppm
Calcium (Ca)	≤ 0.002 %	< 0.001 %
Magnesium (Mg)	≤ 0.001 %	< 0.001 %
Potassium (K)	≤ 0.005 %	0.001 %

For Laboratory,Research,or Manufacturing Use
Meets Reagent Specifications for testing USP/NF monographs
Country of Origin: USA
Packaging Site: Paris Mfg Ctr & DC

Jamie Ethier
Vice President Global Quality

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

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

RICCA CHEMICAL COMPANY®
W3103 Received on 4/22/24 by IZ

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

Certificate of Analysis

Manganous Sulfate Solution, 364 g/L

Lot Number: 2403J02 **Product Number:** 4620

Manufacture Date: MAR 15, 2024
Expiration Date: MAR 2026

Name	CAS#	Grade
Water	7732-18-5	ACS/ASTM/USP/EP
Manganous Sulfate Monohydrate	10034-96-5	Reagent
Sulfuric Acid	7664-93-9	ACS

Test	Specification	Result
Appearance	Pink liquid	Passed
Assay (by Refractive Index)	360-368 g/L	367 g/L

Specification	Reference
Manganous Sulfate Solution	ASTM (D 888 A)
Manganous Sulfate Solution	ASTM (D 888 A)
Manganous Sulfate Solution	APHA (4500-O E)
Manganous Sulfate Solution	APHA (4500-O F)
Manganous Sulfate Solution	APHA (4500-O D)
Manganous Sulfate Solution	APHA (4500-O E)
Manganous Sulfate Solution	APHA (4500-O F)
Manganous Sulfate Solution	APHA (4500-O D)
Manganous Sulfate Solution	APHA (4500-O C)
Manganous Sulfate Solution	APHA (4500-O C)
Manganous Sulfate Solution	EPA (360.2)
Manganous Sulfate Solution	EPA (360.2)

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)
4620-32	1 L natural poly	24 months

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

Jose Pena (03/15/2024)

Operations Manager

This document is designed to comply with ISO Guide 31 "Reference Materials -- Contents of Certificates and Labels."

RICCA CHEMICAL COMPANY®

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

W3105 Received on 4/22/24 by IZ

Certificate of Analysis

Sodium Thiosulfate, 0.0250 Normal (N/40)

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

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

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

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

Test	Specification	Result	NIST SRM#
Appearance	Colorless liquid	Passed	
Assay (vs. Potassium Iodate/Starch)	0.02499-0.02501 N at 20°C	0.02501 N at 20°C	136

Specification	Reference
Standard Sodium Thiosulfate Solution, 0.0250 N	APHA (4500-S2- F)
Standard Sodium Thiosulfate Titrant	APHA (4500-O D)
Standard Sodium Thiosulfate Titrant	APHA (4500-O E)
Standard Sodium Thiosulfate Titrant	APHA (4500-O F)
Standard Sodium Thiosulfate Titrant, 0.025 N	APHA (4500-Cl B)
Standard Sodium Thiosulfate Titrant	APHA (4500-O C)
Standard Sodium Thiosulfate Titrant, 0.025 M	APHA (5530 C)
Standard Sodium Thiosulfate Solution (0.025 N)	EPA (SW-846) (9031)
Standard Sodium Thiosulfate solution (0.025 N)	EPA (SW-846) (9034)

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

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

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

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

RICCA CHEMICAL COMPANY®

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

Certificate of Analysis

Alkaline-Iodide-Azide, Pomeroy Formulation for Dissolved Oxygen (DO) Analysis

Lot Number: 1405D67 **Product Number:** 535

Manufacture Date: APR 05, 2024
Expiration Date: APR 2026

This solution is intended for use with samples with high Dissolved Oxygen content (above 15 mg/L) and for samples with high concentrations of organic material.

Name	CAS#	Grade
Water	7732-18-5	ACS/ASTM/USP/EP
Sodium Iodide	7681-82-5	ACS
Sodium Hydroxide	1310-73-2	ACS
Sodium Azide	26628-22-8	Reagent

Test	Specification	Result
Appearance	Colorless liquid	Passed
Free Iodine	To Pass Test	Passed

Specification	Reference
Alkaline Iodide-Sodium Azide Solution II	ASTM (D 888 A)

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)
535-32	1 L natural poly	24 months

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

Heidi J Green (04/05/2024)
Operations Manager

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.

RICCA CHEMICAL COMPANY®

W3149 Received on 10/16/24 by IZ

1490 Lammers Pike
Batesville, IN 47006
http://www.riccachemical.com
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customerservice@riccachemical.com

Certificate of Analysis

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

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

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

This product is Mercury-free.

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

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

Specification	Reference
Starch Solution	APHA (4500-S2- F)
Starch Indicator Solution	APHA (4500-Cl B)
Starch Indicator	APHA (4500-SO32- B)
Starch indicator solution	APHA (2350 B)
Starch indicator solution	APHA (2350 E)
Starch Solution	APHA (510 B)
Starch Solution	APHA (5530 C)
Starch Indicator	APHA (4500-Cl C)
Starch Indicator	EPA (345.1)

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

Part Number	Size / Package Type	Shelf Life (Unopened Container)
8000-1	4 L natural poly	24 months
8000-16	500 mL natural poly	24 months
8000-32	1 L natural poly	24 months

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

Paul Brandon (08/28/2024)
Production Manager

Certificate of Analysis

Magnesium Sulfate Heptahydrate

Material: 0662

Grade: ACS GRADE

Batch Number: 24J2856877

Chemical Formula: MgSO4.7H2O
Molecular Weight: 246.48
CAS #: 10034-99-8
Appearance:

White powder

Manufacture Date: 05/29/2023
Reassay Date: 05/29/2027

Storage: Room Temperature

TEST	SPECIFICATION	ANALYSIS	DISPOSITION
Ammonium	<= 0.002 %	<0.001 %	PASS
Calcium	<= 0.02 %	<0.0005 %	PASS
Chloride	<= 0.0005 %	0.0001 %	PASS
Heavy Metals (as Pb)	<= 0.0005 %	<0.0001 %	PASS
Insolubles	<= 0.005 %	<0.0002 %	PASS
Iron	<= 0.0005 %	<0.00001 %	PASS
Manganese	<= 0.0005 %	<0.0001 %	PASS
Nitrate	<= 0.002 %	<0.001 %	PASS
pH (5%, Water) @25C	5.0 - 8.2	6.3	PASS
Potassium	<= 0.005 %	<0.001 %	PASS
Purity	98.0 - 102.0 %	100.1 %	PASS
Sodium	<= 0.005 %	<0.001 %	PASS
Strontium	<= 0.005 %	<0.00001 %	PASS

Internal ID #: 793

Signature

We certify that this batch conforms to the specifications listed.

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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

Magnesium Sulfate Heptahydrate

Material: **0662**

Grade: **ACS GRADE**

Batch Number: **24J2856877**

Chemical Formula:	MgSO4.7H2O	Manufacture Date:	05/29/2023
Molecular Weight:	246.48	Reassay Date:	05/29/2027
CAS #:	10034-99-8		
Appearance:		Storage:	Room Temperature

White powder

Spec Set: 0662ACS

Internal ID #: 793

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

Material	BDH9260-500G
Material Description	BDH POTASS HYDRGN PHTHLTE 500G
Grade	ACS GRADE
Batch	24H0956262
Reassay Date	04/28/2026
CAS Number	877-24-7
Molecular Formula	HOOCC6H4COOK
Molecular Mass	204.22
Date of Manufacture	04/29/2023
Storage	Room Temperature

Characteristics	Specifications	Measured Values
Appearance	White crystals.	White crystals.
Assay (dried basis)	99.95 - 100.05 %	99.98 %
Chlorine Compounds	<= 0.003 %	<0.003 %
Heavy Metals (as Pb)	<= 5 ppm	<5 ppm
Insoluble Matter	<= 0.005 %	0.003 %
Iron	<= 5 ppm	<5 ppm
pH (0.05M, Water) @25C	4.00 - 4.02	4.00
Sodium	<= 0.005 %	<0.005 %
Sulfur Compounds	<= 0.002 %	<0.002 %

Internal ID #: 322

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.

N3212 Received on 5/21/25 by 12

POLYSEED®

CERTIFICATE OF ANALYSIS

PO BOX 130549 Spring, TX 77393
Phone: (281) 298-9410 Fax: (281) 298-9411

FINISHED PRODUCT, LOT NUMBER, MFG. /EXP DATE:
PolySeed® • Part No. P-110 • Lot 132409 • Mfg. Date: 09/2024 • Exp. Date: 09/2026

FORMULATION:
The formulation for this product contains a range of naturally occurring microorganisms, which are known to be non-pathogenic to man or animals.

VIABLE COUNT, FINAL TEST RESULT:
The product has been fully tested in accordance with Finished Product Specifications and contains a minimum viable count of 4.00×10^9 cfu/g.

GLUCOSE/GLUTAMIC-ACID RESULTS:
Tested results within acceptable range 198 +/- 30.5 mg/L (167.5 - 228.5 mg/L). GGA Lot# 43100020 – Average Test Result: 202.1

See www.polyseed.com for details.

SEED CONTROL FACTOR:
Tested results within acceptable range 0.6 – 1.0 see www.polyseed.com for details

SALMONELLA TEST RESULT:
The product has been shown to be Salmonella negative using procedures recommended in the Microbiology Laboratory Guidebook, published by the USDA Food Safety and Inspection Service.

The purpose of this document is to ensure that the Finished Product conforms to the above specification.

Signature: _____ **Date**: 09/13/2024

Quality Control Department

POLYSEED.Ref.1.19 Revised Jan 24

InterLab®
International Laboratory Supply

ISO 9002
DNV
DNV Certification, Inc.
REGISTERED FIRM

Certificate Of Analysis

Date of Release: 4/8/2025

Name: **Potassium Hydrogen Phthalate**
ACS

Item No: **PX1476 All Sizes**
Lot / Batch No: **2025040493**
Country of Origin: **USA**

Item	Specifications	Analysis
Assay (Dried Basis)	99.95-100.05%	99.98%
Chlorine compounds (as Cl)	0.003% max.	<0.003%
Color	White	Passes Test
Form	Crystals	Passes Test
Heavy metals (by ICP-OES)	5 ppm max.	<5 ppm
Insoluble Matter	0.005% max.	<0.005%
Iron (Fe)	5 ppm max.	<5 ppm
pH of a 0.05m solution @ 25.0C	4.00-4.02	4.00
Sodium (Na)	0.005% max.	<0.005%
Sulfur compounds (as S)	0.002% max.	<0.002%

Joe Schoellkopff

Quality Control Manager

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

EMD Millipore is a division of Merck KGaA, Darmstadt, Germany

EMD Millipore Corporation
400 Summit Drive
Burlington, MA 01803
U.S.A.

P.O. Box 389
Loveland, CO 80539
(970) 669-3050

An ISO 9001 Certified Company

Certificate of Analysis

This is a Component of 1486266 / LOT A5105

PRODUCT: BOD Nutrient Buffer Pillows

PRODUCT NUMBER: 1486227

LOT NUMBER: A5105

MANUFACTURE DATE: 05/13/2025

DATE OF ANALYSIS: 05/27/2025

TEST	SPECIFICATIONS	RESULTS
Ammonia Concentration of a diluted pillow	0.57 to 0.79 ppm	0.570
Calcium Concentration of a diluted pillow	0.93 to 1.29 ppm	0.980
Iron Concentration of a diluted pillow	0.27 to 0.36 ppm	0.283
Magnesium Concentration of a diluted pillow	0.35 to 0.48 ppm	0.360
Phosphorus Concentration of a diluted pillow	7.6 to 10.3 ppm	8.11
pH in a 6 L of DI water	7.1 to 7.6 ph	7.31
Five Day Change in Dissolved Oxygen Concentration	-0.2 to 0.2 ppm	0.03
Sterility	To Pass	Passed

The expiration date is May 2030

Certified by: Scott Als

Analytical Services Chemist

SHIPPING DOCUMENTS

Alliance TECHNICAL GROUP

284 Sheffield Street, Mountainside, NJ 07092
(908) 789-8900 Fax: (908) 788-9222
www.chemtech.net

CHAIN OF CUSTODY RECORD

Alliance Project Number: Q3094

COC Number:

CLIENT INFORMATION

COMPANY: Scientific Design
ADDRESS:
CITY: STATE: ZIP:
ATTENTION: Emily Chan
PHONE: FAX:

PROJECT INFORMATION

PROJECT NAME: Carrier Post-Treatment
PROJECT #: LOCATION:
PROJECT MANAGER: Emily Chan
E-MAIL:
PHONE: FAX:

BILLING INFORMATION

BILL TO: PO#
ADDRESS:
CITY: STATE: ZIP:
ATTENTION: PHONE:

DATA TURNAROUND INFORMATION

FAX:_____ DAYS*
HARD COPY:_____DAYS*
EDD_____DAYS*
* TO BE APPROVED BY ALLIANCE
STANDARD TURNAROUND TIME IS 10 BUSINESS DAYS

DATA DELIVERABLE INFORMATION

- ☐ RESEULTS ONLY
- ☐ RESULTS + QC
- ☐ New Jersey REDUCED
- ☐ New Jersey CLP
- ☐ EDD Format_____
- ☐ USEPA CLP
- ☐ New York State ASP "B"
- ☐ New York State ASP "A"
- ☐ Other_____

ANALYSIS

	TOC	BOD							
	1	2	3	4	5	6	7	8	9

Alliance SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE		SAMPLE COLLECTION		# of Bottles	PRESERVATIVES									COMMENTS
			COMP	GRAB	DATE	TIME		1	2	3	4	5	6	7	8	9	<-- Specify Preservatives A-HCl B-HNO3 C-H2SO4 D-NaOH E-ICE F-Other
1.	5670-18-000F	Water			8/27/25	N/A	1	x									
2.	5674-08-001W	Water			9/9/25	N/A	1	x									
3.	5674-08-001WP	Water			9/10/25	N/A	1	x									
4.	5674-11-001C	Water			9/11/25	N/A	2	x	x								
5.																	
6.																	
7.																	
8.																	
9.																	
10.																	

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

RELINQUISHED BY SAMPLER	DATE/TIME	RECEIVED BY
1.	9/12/25	1. 17:26
RELINQUISHED BY 2.	DATE/TIME	RECEIVED BY 2.
RELINQUISHED BY 3.	DATE/TIME	RECEIVED FOR LAB BY 3.

Conditions of bottles or coolers at receipt: ☐ Compliant ☐ Non Compliant ☐ Cooler Temp 3.0
MeOH extraction requires an additional 4oz. Jar for percent solid ☐ Ice in Cooler?: Y
Comments:

Page_____of_____

SHIPPED VIA: CLIENT: ☐ Hand Delivered ☐ Overnight
ALLIANCE: ☐ Picked Up ☐ Overnight

Shipment Complete ☐ YES ☐ NO

WHITE - ALLIANCE COPYFOR RETURN TO CLIENT **YELLOW** - ALLIANCE COPY **PINK** - SAMPLER COPY

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

Laboratory Certification

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