

## Cover Page

**Order ID :** Q1822

**Project ID :** 540 Degraw St, Brooklyn, NY - E9309

**Client :** ENTACT

**Lab Sample Number**

Q1822-01

**Client Sample Number**

TW-WTS-06

I certify that the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the laboratory manager or his designee, as verified by the following signature.

Signature : \_\_\_\_\_

Date: 4/19/2025

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012

## DATA REPORTING QUALIFIERS- INORGANIC

For reporting results, the following “ Results Qualifiers” are used:

<b>J</b>	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).
<b>U</b>	Indicates the analyte was analyzed for, but not detected.
<b>ND</b>	Indicates the analyte was analyzed for, but not detected
<b>E</b>	Indicates the reported value is estimated because of the presence of interference
<b>M</b>	Indicates Duplicate injection precision not met.
<b>N</b>	Indicates the spiked sample recovery is not within control limits.
<b>S</b>	Indicates the reported value was determined by the Method of Standard Addition (MSA).
<b>*</b>	Indicates that the duplicate analysis is not within control limits.
<b>+</b>	Indicates the correlation coefficient for the MSA is less than 0.995.
<b>D</b>	Indicates the reported value is from a secondary analysis with a dilution factor. The original analysis exceeded the calibration range.
<b>M</b>	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
<b>OR</b>	Indicates the analyte’s concentration exceeds the calibrated range of the instrument for that specific analysis.
<b>Q</b>	Indicates the LCS did not meet the control limits requirements
<b>H</b>	Sample Analysis Out Of Hold Time

## APPENDIX A

### QA REVIEW GENERAL DOCUMENTATION

Project #: Q1822

Completed

For thorough review, the report must have the following:

#### GENERAL:

Are all original paperwork present (chain of custody, record of communication,airbill, sample management lab chronicle, login page)

✓

Check chain-of-custody for proper relinquish/return of samples

✓

Is the chain of custody signed and complete

✓

Check internal chain-of-custody for proper relinquish/return of samples /sample extracts

✓

Collect information for each project id from server. Were all requirements followed

✓

#### COVER PAGE:

Do numbers of samples correspond to the number of samples in the Chain of Custody on login page

✓

Do lab numbers and client Ids on cover page agree with the Chain of Custody

✓

#### CHAIN OF CUSTODY:

Do requested analyses on Chain of Custody agree with form I results

✓

Do requested analyses on Chain of Custody agree with the log-in page

✓

Were the correct method log-in for analysis according to the Analytical Request and Chain of Custody

✓

Were the samples received within hold time

✓

Were any problems found with the samples at arrival recorded in the Sample Management Laboratory Chronicle

✓

#### ANALYTICAL:

Was method requirement followed?

✓

Was client requirement followed?

✓

Does the case narrative summarize all QC failure?

✓

All runlogs and manual integration are reviewed for requirements

✓

All manual calculations and /or hand notations verified

✓

QA Review Signature: PRATIK PATEL

Date: 04/19/2025

## LAB CHRONICLE

<b>OrderID:</b>	Q1822	<b>OrderDate:</b>	4/16/2025 1:17:00 PM
<b>Client:</b>	ENTACT	<b>Project:</b>	540 Degraw St, Brooklyn, NY - E9309
<b>Contact:</b>	Jarod Stanfield	<b>Location:</b>	L21,VOA Ref. #3 Water

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q1822-01	TW-WTS-06	WATER			04/15/25 15:30			04/16/25
			BOD5	SM5210 B			04/16/25 16:00	
			Flash Point	1010B			04/17/25 14:50	
			TSS	SM2540 D			04/17/25 10:00	



# SAMPLE DATA

## Report of Analysis

Client:	ENTACT	Date Collected:	04/15/25 15:30
Project:	540 Degraw St, Brooklyn, NY - E9309	Date Received:	04/16/25
Client Sample ID:	TW-WTS-06	SDG No.:	Q1822
Lab Sample ID:	Q1822-01	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
BOD5	47.9		1	0.20	2.00	mg/L		04/16/25 16:00	SM 5210 B-16
Flash Point	>212		1	0	0	o F		04/17/25 14:50	1010B
TSS	99.9		1	1.00	4.00	mg/L		04/17/25 10:00	SM 2540 D-15

Comments: Other method reference for flash point : Pensky-Martens Closed Cup Flash Point ASTM D 93 - IP 34

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

D = Dilution

Q = indicates LCS control criteria did not meet requirements

H = Sample Analysis Out Of Hold Time

J = Estimated Value

B = Analyte Found in Associated Method Blank

\* = indicates the duplicate analysis is not within control limits.

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

OR = Over Range

N =Spiked sample recovery not within control limits



# QC RESULT SUMMARY



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

### Initial and Continuing Calibration Verification

**Client:** ENTACT

**SDG No.:** Q1822

**Project:** 540 Degraw St, Brooklyn, NY - E9309

**RunNo.:** LB135473

Analyte	Units	Result	True Value	% Recovery	Acceptance Window (%R)	Analysis Date
Sample ID: <b>ICV</b> Flash Point	o F	82.1	81	101	78-84	04/17/2025



## Preparation Blank Summary

**Client:** ENTACT

**SDG No.:** Q1822

**Project:** 540 Degraw St, Brooklyn, NY - E9309

Analyte	Units	Result	Acceptance Limits	Conc Qual	MDL	RDL	Analysis Date
Sample ID: <b>LB135459BL</b> BOD5	mg/L	< 0.2000	0.2000	U	0.20	2.0	04/16/2025
Sample ID: <b>LB135467BL</b> TSS	mg/L	1	2.0000	J	1	4	04/17/2025

### Duplicate Sample Summary

<b>Client:</b>	ENTACT	<b>SDG No.:</b>	Q1822
<b>Project:</b>	540 Degraw St, Brooklyn, NY - E9309	<b>Sample ID:</b>	Q1814-01
<b>Client ID:</b>	A3729DUP	<b>Percent Solids for Spike Sample:</b>	0

Analyte	Units	Acceptance Limit	Sample Result	Conc. Qualifier	Duplicate Result	Conc. Qualifier	Dilution Factor	RPD/ AD	Qual	Analysis Date
Flash Point	o F	+/-2	>212.0		>212.0		1	0		04/17/2025

## Duplicate Sample Summary

<b>Client:</b> ENTACT <b>Project:</b> 540 Degraw St, Brooklyn, NY - E9309 <b>Client ID:</b> COMPDUP	<b>SDG No.:</b> Q1822 <b>Sample ID:</b> Q1820-02 <b>Percent Solids for Spike Sample:</b> 0
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Analyte	Units	Acceptance Limit	Sample Result	Conc. Qualifier	Duplicate Result	Conc. Qualifier	Dilution Factor	RPD/AD	Qual	Analysis Date
BOD5	mg/L	+/-20	965		939		1	2.73		04/16/2025
TSS	mg/L	+/-5	538		526		1	2.26		04/17/2025

### Laboratory Control Sample Summary

**Client:** ENTACT

**SDG No.:** Q1822

**Project:** 540 Degraw St, Brooklyn, NY - E9309

**Run No.:** LB135459

Analyte	Units	True Value	Result	Conc. Qualifier	% Recovery	Dilution Factor	Acceptance Limit %R	Analysis Date
Sample ID	LB135459BS							
BOD5	mg/L	198	174		88	1	84.6-115.4	04/16/2025

### Laboratory Control Sample Summary

**Client:** ENTACT

**SDG No.:** Q1822

**Project:** 540 Degraw St, Brooklyn, NY - E9309

**Run No.:** LB135467

Analyte	Units	True Value	Result	Conc. Qualifier	% Recovery	Dilution Factor	Acceptance Limit %R	Analysis Date
Sample ID	LB135467BS							
TSS	mg/L	550	532		97	1	90-110	04/17/2025



# RAW DATA

# BOD5 LOG

ANALYST: rubin  
Inst Id :DO METER  
LB :LB135459

Reviewed By:Iwona  
On:4/21/2025 2:14:48  
PM

SUPERVISOR: Iwona

QC BATCH ID: LB135459

Analysis Date: 04/16/2025

BOD Water: WP112719

MANGANOUS SULFATE SOLUTION: W3103

Starch: W3149

Alkaline Iodide Azide: W3109

Sulfuric acid, 1N: WP110386

Sodium Thiosulfate, 0.025N: W3105

POLYSEED: WP112721

NaOH, 1N: WP111323

GGA: WP112720

IncubatorID: INCUBATOR #3

Chlorine Strips: W3155

GuageID: 0511062

pH Strips: W3140

Zero DO: WP112724

Lab SampleID	Client ID	Bottle No.	VOL. ML	Initial Reading (ML)	Final Reading (ML)	Difference	Average
WINKLER 1	WINKLER 1	1	300	0.0	9.4	9.4	9.4
WINKLER 2	WINKLER 2	2	300	9.7	19.1	9.4	9.4

Meter Calibration1: 9.26 Zero DO Reading1: 0.15 mg/L (<=0.2 Criteria)

Barometric Pressure1: 755 mmHg DO Meter BOD fluid reading for winkler comparison: 9.49

## After Incubation

Meter Calibration2: 8.37 Zero DO Reading2: 0.15 mg/L (<=0.2 Criteria)

Barometric Pressure2: 771 mmHg

QC BATCH ID: LB135459

INCUBATOR TEMP IN(C): 20.1

INCUBATOR TEMP OUT(C): 20.3

TIME IN: 16:00

TIME OUT: 12:45

DATE IN: 04/16/2025

DATE OUT: 04/21/2025

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
LB135459BL	1	No	6.60	N/A	20.80	300	9.49	9.47	0.02	0.02	0.02	
POLYSEED	1					10	9.38	6.12	3.26	0.65	0.64	
POLYSEED	2					15	9.34	4.45	4.89	0.65		
POLYSEED	3					20	9.28	3.20	6.08	0.61		
GGA	1					6	9.39	5.39	4	168	173.67	
GGA	2					6	9.39	5.28	4.11	173.5		
GGA	3					6	9.38	5.15	4.23	179.5		
Q1804-01	1	No	6.30	6.69	20.20	5	9.26	6.62	2.64	120	120	pH Adjusted
Q1804-01	2					20	8.98	0.49	-	0		
Q1804-01	3					50	8.07	0.22	-	0		
Q1804-01	4					150	4.98	0.09	-	0		
Q1804-02	1	No	6.38	6.99	20.30	5	9.32	7.29	2.03	83.4	83.4	pH Adjusted
Q1804-02	2					20	8.95	0.75	-	0		
Q1804-02	3					50	8.07	0.35	-	0		
Q1804-02	4					150	4.98	0.15	-	0		
Q1810-02	1	No	9.55	7.39	20.70	5	9.47	4.54	4.93	257.4	183.22	pH Adjusted
Q1810-02	2					20	9.45	1.54	7.91	109.05		
Q1810-02	3					50	9.36	0.14	-	0		
Q1810-02	4					150	9.28	0.07	-	0		
Q1820-02	1	No	6.83	N/A	20.30	0.5	9.47	7.09	2.38	1044	965	
Q1820-02	2					1	9.40	5.49	3.91	981		
Q1820-02	3					2	9.33	2.89	6.44	870		
Q1820-02	4					3	9.22	0.07	-	0		
Q1820-02DUP	1	No	6.83	N/A	20.30	0.5	9.47	7.21	2.26	972	939	
Q1820-02DUP	2					1	9.40	5.60	3.8	948		
Q1820-02DUP	3					2	9.33	2.71	6.62	897		
Q1820-02DUP	4					3	9.20	0.07	-	0		
Q1822-01	1	No	5.95	6.82	20.20	5	9.45	7.99	-	0	47.9	pH Adjusted
Q1822-01	2					20	9.44	5.07	4.37	55.95		
Q1822-01	3					50	9.19	1.91	7.28	39.84		
Q1822-01	4					150	8.01	0.09	-	0		

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)

16135459

WorkList Name : bod5-4-16      WorkList ID : 188953      Department : Wet-Chemistry      Date : 04-16-2025 08:13:57

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1804-01	001-WILLETS-PT-BLVD(APR)	Water	BOD5	Cool 4 deg C	TULL01	L31	04/10/2025	SM5210 B
Q1804-02	002-35TH-AVE(APR)	Water	BOD5	Cool 4 deg C	TULL01	L31	04/10/2025	SM5210 B
Q1810-02 M	MOO-25-0118	Water	BOD5	Cool 4 deg C	PSEG03	L51	04/14/2025	SM5210 B

Date/Time 04/16/2025 13:50  
Raw Sample Received by: RM (wco)  
Raw Sample Relinquished by: JRCOC

Date/Time 04/16/2025 15:40  
Raw Sample Received by: JRCOC  
Raw Sample Relinquished by: RM (wco)

# WORKLIST(Hardcopy Internal Chain)

6135459

WorkList Name : bod5-04-16

WorkList ID : 188971

Department : Wet-Chemistry

Date : 04-16-2025 15:00:33

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1820-02	COMP	Water	BOD5	Cool 4 deg C	ARAM01	L41	04/16/2025	SM5210 B
Q1822-01	TW-WTS-06	Water	BOD5	Cool 4 deg C	ENTA05	L21	04/15/2025	SM5210 B

Date/Time 04/16/2025 15.10  
Raw Sample Received by: RMcw7  
Raw Sample Relinquished by: JP(COC)

Date/Time 04/16/2025 15.40  
Raw Sample Received by: JP(COC)  
Raw Sample Relinquished by: RMcw7

**TOTAL SUSPENDED SOLIDS - SM2540D**

**SUPERVISOR:** Iwona

**ANALYST:** jignesh

**Date:** 04/16/2025

**Run Number:** LB135467

**BalanceID:** WC SC-6

**OvenID:** WC OVEN-1

**FilterID:** 17416528

**ThermometerID:** WET OVEN#1

**TEMP1 IN:** 104 °C 04/16/2025 14:00 **TEMP1 OUT:** 104 °C 04/16/2025 15:00  
**TEMP2 IN:** 103 °C 04/16/2025 15:30 **TEMP2 OUT:** 104 °C 04/16/2025 16:30  
**TEMP3 IN:** 104 °C 04/17/2025 10:00 **TEMP3 OUT:** 103 °C 04/17/2025 11:30  
**TEMP4 IN:** 104 °C 04/17/2025 12:00 **TEMP4 OUT:** 103 °C 04/17/2025 13:35

Dish #	Lab ID	Client ID	Empty Dish Weight (g)	Final Empty Dish Weight (g)	Sample Volume (ml)	1st Empty Dish+Sample weight after 1.5hr drying @103-@105°C (g)	2nd Empty Dish+Sample weight after 1.5hr drying @103-@105°C (g)	Final Empty Dish+Sample weight after 1.5hr drying @103-@105°C (g)	Weight (g)	Result mg/L
1	LB135467BL	LB135467BL	1.3568	1.3568	100	1.3569	1.3569	1.3569	0.0001	1
2	LB135467BS	LB135467BS	1.5036	1.5036	100	1.5568	1.5568	1.5568	0.0532	532
3	Q1814-01	A3729	1.4678	1.4678	1000	1.5355	1.5355	1.5355	0.0677	67.7
4	Q1815-01	001-WILLETTS-PT-BLVD (MAR)	1.4927	1.4927	300	1.5106	1.5106	1.5106	0.0179	59.7
5	Q1815-02	002-35TH-AVE (MAR)	1.4819	1.4819	300	1.4976	1.4976	1.4976	0.0157	52.3
6	Q1820-02	COMP	1.4723	1.4723	50	1.4992	1.4992	1.4992	0.0269	538
7	Q1820-02DUP	COMPDUP	1.4724	1.4724	50	1.4987	1.4987	1.4987	0.0263	526
8	Q1822-01	TW-WTS-06	1.4870	1.4870	1000	1.5869	1.5869	1.5869	0.0999	99.9

A = Sample Volume (ml)  
 B = Final Empty Dish Weight (g)  
 C = Final Empty Dish + Sample weight after 1.5 hr drying @105°C(g)  
 D = Weight (g)

**Weight (g) = C - B**

**Result mg/L =  $\frac{D}{A} \times 1000 \times 1000$**

# WORKLIST(Hardcopy Internal Chain)

UB 135467

WorkList Name : TSS Q1815

WorkList ID : 188972

Department : Wet-Chemistry

Date : 04-17-2025 08:15:15

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1814-01	A3729	Water	TSS	Cool 4 deg C	PSEG03		04/16/2025	SM2540 D
Q1815-01	001-WILLETS-PT-BLVD(MAR)	Water	TSS	Cool 4 deg C	TULL01	L31	04/15/2025	SM2540 D
Q1815-02	002-35TH-AVE(MAR)	Water	TSS	Cool 4 deg C	TULL01	L31	04/15/2025	SM2540 D
Q1820-02	COMP	Water	TSS	Cool 4 deg C	ARAM01	L41	04/16/2025	SM2540 D
Q1822-01	TW-WTS-06	Water	TSS	Cool 4 deg C	ENTA05	L21	04/15/2025	SM2540 D

Date/Time 04-17-25 08:20  
 Raw Sample Received by: SP WDCI  
 Raw Sample Relinquished by: SP WDCI

Date/Time 04-17-25  
 Raw Sample Received by: SP WDCI  
 Raw Sample Relinquished by: SP WDCI

# Analytical Summary Report

Analysis Method: 1010B

Reviewed By: Iwona

Parameter: Flash Point

Supervisor Review By: jignesh

Run Number: LB135473

Ambient Barometric Pressure (mmHg): 765.00

Thermometer ID: Flashpoint

Barometric Scale ID: 0511064

Reagent/Standard	Lot/Log #
p-xylene (ICV)	W3193

Seq	LabID	True Value °F	DL	Initial Sample °C	Celsius °C	Result °F	Final Result °F	Anal Date	Anal Time
1	ICV	81	1	8	28.00	82.4	82.1	04/17/2025	10:20
2	Q1814-01		1	13	100.00	>212.0	>212.0	04/17/2025	10:50
3	Q1814-01DUP		1	14	100.00	>212.0	>212.0	04/17/2025	11:20
4	Q1814-03		1	13	100.00	>212.0	>212.0	04/17/2025	11:50
5	Q1816-01		1	13	100.00	>212.0	>212.0	04/17/2025	12:20
6	Q1818-05		1	13	100.00	>212.0	>212.0	04/17/2025	12:50
7	Q1818-06		1	12	100.00	>212.0	>212.0	04/17/2025	13:20
8	Q1818-07		1	13	100.00	>212.0	>212.0	04/17/2025	13:50
9	Q1821-03		1	14	100.00	>212.0	>212.0	04/17/2025	14:20
10	Q1822-01		1	14	100.00	>212.0	>212.0	04/17/2025	14:50

Result = (Celsius \* 1.8) + 32

Final Result = Result + (760 - Ambient Barometric Pressure) \* 0.06

# WORKLIST(Hardcopy Internal Chain)

LB135473

WorkList Name : FLASH POINT-41725      WorkList ID : 189011      Department : Wet-Chemistry      Date : 04-17-2025 10:03:21

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1814-01	A3729	Water	Flash Point	Cool 4 deg C	PSEG03		04/16/2025	1010B
Q1814-03	SCRUBBLE-TANK-LIQUID	Water	Flash Point	Cool 4 deg C	PSEG03	L41	04/16/2025	1010B
Q1816-01	441	Water	Flash Point	Cool 4 deg C	PSEG03	L41	04/16/2025	1010B
Q1818-05	3828	Water	Flash Point	Cool 4 deg C	PSEG03	L41	04/16/2025	1010B
Q1818-06	3829	Water	Flash Point	Cool 4 deg C	PSEG03	L41	04/16/2025	1010B
Q1818-07	3651	Water	Flash Point	Cool 4 deg C	PSEG03	L41	04/16/2025	1010B
Q1821-03	GW-DRUM	Water	Flash Point	Cool 4 deg C	PSEG03	N31	04/16/2025	1010B
Q1822-01	TW-WTS-06	Water	Flash Point	Cool 4 deg C	ENTA05	L21	04/15/2025	1010B

Date/Time 04/17/25 10:10  
 Raw Sample Received by: 12/13/25  
 Raw Sample Relinquished by: 12/13/25

Date/Time 04/17/25 15:40  
 Raw Sample Received by: 12/13/25  
 Raw Sample Relinquished by: 12/13/25

**Instrument ID:** DO METER

**Daily Analysis Runlog For Sequence/QC Batch ID # LB135459**

Review By	rubina	Review On	4/21/2025 2:14:34 PM
Supervise By	Iwona	Supervise On	4/21/2025 2:14:48 PM
SubDirectory	LB135459	Test	BOD5
<b>STD. NAME</b>	<b>STD REF.#</b>		
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	WP112719,W3149,WP110386,W3103,W3109,W3105,WP112721,WP112720,WP111323		

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	LB135459BL	LB135459BL	MB	04/16/25 16:00		rubina	OK
2	LB135459BS	LB135459BS	LCS	04/16/25 16:00		rubina	OK
3	Q1804-01	001-WILLETS-PT-BL	SAM	04/16/25 16:00		rubina	OK
4	Q1804-02	002-35TH-AVE(APR)	SAM	04/16/25 16:00		rubina	OK
5	Q1810-02	MOO-25-0118	SAM	04/16/25 16:00		rubina	OK
6	Q1820-02	COMP	SAM	04/16/25 16:00	Intermediate dilution-10X	rubina	OK
7	Q1820-02DUP	COMPDUP	DUP	04/16/25 16:00	Intermediate dilution-10X	rubina	OK
8	Q1822-01	TW-WTS-06	SAM	04/16/25 16:00		rubina	OK

**Instrument ID:** WC SC-3

**Daily Analysis Runlog For Sequence/QC Batch ID # LB135467**

Review By	jignesh	Review On	4/17/2025 11:22:26 AM
Supervise By	Iwona	Supervise On	4/17/2025 11:57:46 AM
SubDirectory	LB135467	Test	TSS
<b>STD. NAME</b>	<b>STD REF.#</b>		
ICAL Standard	N/A		
ICV Standard	N/A		
CCV Standard	N/A		
ICSA Standard	N/A		
CRI Standard	N/A		
LCS Standard	N/A		
Chk Standard	N/A		

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	LB135467BL	LB135467BL	MB	04/17/25 10:00		jignesh	OK
2	LB135467BS	LB135467BS	LCS	04/17/25 10:00		jignesh	OK
3	Q1814-01	A3729	SAM	04/17/25 10:00		jignesh	OK
4	Q1815-01	001-WILLETS-PT-BLV	SAM	04/17/25 10:00		jignesh	OK
5	Q1815-02	002-35TH-AVE(MAR)	SAM	04/17/25 10:00		jignesh	OK
6	Q1820-02	COMP	SAM	04/17/25 10:00		jignesh	OK
7	Q1820-02DUP	COMPDUP	DUP	04/17/25 10:00		jignesh	OK
8	Q1822-01	TW-WTS-06	SAM	04/17/25 10:00		jignesh	OK



**Instrument ID:** IGN-1

**Daily Analysis Runlog For Sequence/QC Batch ID # LB135473**

Review By	Iwona	Review On	4/17/2025 4:11:19 PM
Supervise By	jignesh	Supervise On	4/17/2025 4:12:36 PM
SubDirectory	LB135473	Test	Flash Point
<b>STD. NAME</b>	<b>STD REF.#</b>		
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	W3193		

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	ICV	ICV	ICV	04/17/25 10:20		Iwona	OK
2	Q1814-01	A3729	SAM	04/17/25 10:50		Iwona	OK
3	Q1814-01DUP	A3729DUP	DUP	04/17/25 11:20		Iwona	OK
4	Q1814-03	SCRUBBLE-TANK-LI	SAM	04/17/25 11:50		Iwona	OK
5	Q1816-01	441	SAM	04/17/25 12:20		Iwona	OK
6	Q1818-05	3828	SAM	04/17/25 12:50		Iwona	OK
7	Q1818-06	3829	SAM	04/17/25 13:20		Iwona	OK
8	Q1818-07	3651	SAM	04/17/25 13:50		Iwona	OK
9	Q1821-03	GW-DRUM	SAM	04/17/25 14:20		Iwona	OK
10	Q1822-01	TW-WTS-06	SAM	04/17/25 14:50		Iwona	OK

## Prep Standard - Chemical Standard Summary

**Order ID :** Q1822

**Test :** BOD5,Flash Point,TSS

**Prepbatch ID :**

**Sequence ID/Qc Batch ID:** LB135459, LB135467, LB135473,

**Standard ID :**

WP110386, WP111323, WP112719, WP112720, WP112721,

**Chemical ID :**

M5673, W2653, W2654, W3059, W3103, W3105, W3109, W3112, W3113, W3144, W3149, W3193,



<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
1841	Sulfuric Acid, 1N	<a href="#">WP110386</a>	10/24/2024	04/24/2025	Rubina Mughal	None	WETCHEM_PIPETTE_3 (WC)	Iwona Zarych 10/24/2024
<b>FROM</b> 2.80000ml of M5673 + 97.20000ml of W3112 = Final Quantity: 100.000 ml								

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
1571	Sodium hydroxide, 1N	<a href="#">WP111323</a>	01/09/2025	07/09/2025	Rubina Mughal	WETCHEM_S CALE_8 (WC SC-7)	None	Iwona Zarych  01/09/2025
<b><u>FROM</u></b> 4.00000gram of W3113 + 96.00000ml of W3112 = Final Quantity: 100.000 ml								

## Wet Chemistry STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
127	BOD Dilution fluid	<a href="#">WP112719</a>	04/16/2025	04/17/2025	Rubina Mughal	None	None	Iwona Zarych
								04/16/2025

**FROM** 18.00000L of W3112 + 3.00000PILLOW of W3144 = Final Quantity: 18.000 L

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
129	Glutamic acid-glucose mix for BOD	<a href="#">WP112720</a>	04/16/2025	04/17/2025	Rubina Mughal	WETCHEM_SCALE_7 (WC SC-6)	None	Iwona Zarych
								04/16/2025

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

## Wet Chemistry STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
128	polyseed seed control	<a href="#">WP112721</a>	04/16/2025	04/17/2025	Rubina Mughal	None	None	Iwona Zarych 04/16/2025
<p><b>FROM</b>    1.00000PILLOW of W3059 + 300.00000ml of WP112719 = Final Quantity: 300.000 ml</p>								

## CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9673-33 / Sulfuric Acid, Instra-Analyzed (cs/6c2.5L)	23D2462010	03/20/2028	09/21/2023 / mohan	09/05/2023 / mohan	M5673

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

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	136742-80 / POLYSEED	152305	05/30/2025	02/15/2024 / Rubina	10/18/2023 / lwona	W3059

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 / lwona	04/22/2024 / lwona	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,4LIT RE	4403S13	09/30/2025	04/22/2024 / lwona	04/22/2024 / lwona	W3105

## CHEMICAL RECEIPT LOG BOOK

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 / lwona	05/23/2024 / lwona	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 / lwona	07/03/2024 / lwona	W3112

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


Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
HACH	1486266 / BOD Nutrient Buffer Pillows, 6 mL concentrate to make 6 L, 50/pk	A4169	06/30/2029	11/20/2024 / rubina	10/01/2024 / lwona	W3144


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 / lwona	10/16/2024 / lwona	W3149

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	TCX0014-500ML / p-xylene	C6PEN	03/19/2029	03/21/2025 / rubina	03/19/2025 / lwona	W3193



**ACROS ORGANICS** part of Thermo Fisher Scientific





**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 responsibility 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.

<b>Catalog Number</b>	15621	<b>Quality Test / Release Date</b>	13 March 2019
<b>Lot Number</b>	A0405990	<b>Suggested Retest Date</b>	March 2022
<b>Description</b>	L(+)-Glutamic acid, 99%		
<b>Country of Origin</b>	CHINA		
<b>Declaration of Origin</b>	plant		

<b>Origin Comment</b>	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





A handwritten signature in black ink, which appears to read "L. Van den Broek".

L. Van den Broek, QA Manager

Issued: 24 January 2020

Acros Organics

ENA23, zone 1, nr 1350, Janssen Pharmaceuticaaan 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



## CERTIFICATE OF ANALYSIS

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

W 3059  
REC. 10/18/23 12

**FINISHED PRODUCT, LOT NUMBER, MFG. /EXP DATE:**

PolySeed® • Part No. P-110 • Lot 152305 • Mfg. Date: 05/2023 • Exp. Date: 05/2025

**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  $4.00 \times 10^9$  cfu/g.

**GLUCOSE/GLUTAMIC-ACID RESULTS:**

Tested results within acceptable range  $198 \pm 30.5$  mg/L (167.5 - 228.5 mg/L). GGA Lot# L257-09 – Average Test Result: 203.4

See [www.polyseed.com](http://www.polyseed.com) for details.

**SEED CONTROL FACTOR:**

Tested results within acceptable range 0.6 – 1.0 see [www.polyseed.com](http://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 assure that the Finished Product conforms to the above specification.

Signature: \_\_\_\_\_

*Quality Control Department*

Date: 05/15/2023

POLYSEED.Ref.1.19

Revised Jan 23

**InterLab®**  
International Laboratory Supply





## 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	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

*Jerisa 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.

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

 **avantor™**



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 <sub>2</sub> SO <sub>4</sub> )	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 SO <sub>2</sub> )	≤ 2 ppm	< 2 ppm
Ammonium (NH <sub>4</sub> )	≤ 1 ppm	1 ppm
Chloride (Cl)	≤ 0.1 ppm	< 0.1 ppm
Nitrate (NO <sub>3</sub> )	≤ 0.2 ppm	< 0.1 ppm
Phosphate (PO <sub>4</sub> )	≤ 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



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

Test	Specification	Result
Trace Impurities – Sodium (Na)	$\leq 500.0$ ppb	5.4 ppb
Trace Impurities – Strontium (Sr)	$\leq 5.0$ ppb	< 0.2 ppb
Trace Impurities – Tin (Sn)	$\leq 5.0$ ppb	< 0.8 ppb
Trace Impurities – Zinc (Zn)	$\leq 5.0$ ppb	0.4 ppb

For Laboratory, Research, or Manufacturing Use

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

A handwritten signature in cursive script that reads 'James Ethier'.  
Jamie Ethier  
Vice President Global Quality



# 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

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Contents of Certificates and Labels."

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# 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-CI 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

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# 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

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## Sodium Hydroxide (Pellets)

**Material:** 0583  
**Grade:** ACS GRADE  
**Batch Number:** 23B1556310

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

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

Storage: Room Temperature

Pellets

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

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.



## Sodium Hydroxide (Pellets)

**Material:** 0583  
**Grade:** ACS GRADE  
**Batch Number:** 23B1556310

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

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

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.



An ISO 9001 Certified Company

Loveland, CO 80539

(970) 669-3050

## Certificate of Analysis

*This is a Component of 1486266 / LOT A4169*

**PRODUCT:** BOD Nutrient Buffer Pillows

**PRODUCT NUMBER:** 1486227

**LOT NUMBER:** A4169

**MANUFACTURE DATE:** 06/24/2024

**DATE OF ANALYSIS:** 07/03/2024

TEST	SPECIFICATIONS	RESULTS
Calcium Concentration of a diluted pillow	0.93 to 1.29 ppm	0.960 ppm
Magnesium Concentration of a diluted pillow	0.35 to 0.48 ppm	0.390 ppm
pH in a 6 L of DI water	7.1 to 7.6	7.37
Ammonia Concentration of a diluted pillow	0.57 to 0.79 ppm	0.593 ppm
Iron Concentration of a diluted pillow	0.27 to 0.36 ppm	0.311 ppm
Sterility	To Pass	Passed
Phosphorus Concentration of a diluted pillow	7.6 to 10.3 ppm	8.32 ppm
Five Day Change in Dissolved Oxygen Concentration	-0.2 to 0.2 ppm	0.03 ppm

The expiration date is Jun 2029

Certified by: *Scott Als*

Analytical Services Chemist



# 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-CI 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-CI 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)

A handwritten signature in blue ink that reads "Paul Brandon". The signature is fluid and cursive, with the first name "Paul" and last name "Brandon" clearly distinguishable.

Paul Brandon (08/28/2024)  
Production Manager

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



W3193, W3194 Received on 03/19/2025 by IZ

## Certificate of Analysis

03/19/2025(JST)

TOKYO CHEMICAL INDUSTRY CO.,LTD.

T-PLUS Nihonbashi-Kodemmacho

16-12 Nihonbashi-kodemmacho, Chuo-ku, Tokyo 103-0001, Japan

Chemical Name: <i>p</i> -Xylene		
Product Number: X0014 CAS RN: 106-42-3	Lot: C6PEN	

Tests	Results	Specifications
Appearance	Colorless clear liquid	Colorless to Almost colorless clear liquid
Purity(GC)	99.7 %	min. 99.0 %

TCI Lot numbers are 4-5 characters in length. Characters listed after the first 4-5 characters are control numbers for internal purpose only.

The contents of the specifications are subject to change without advance notice. The specification values displayed here are the most up to date values. There may be cases where the product labels display a different specification, however, the product quality still meets the latest specification.

### Customer Service:

TCI AMERICA

Tel: +1-800-423-8616 / +1-503-283-1681

Fax: +1-888-520-1075 / +1-503-283-1987

E-mail: Sales-US@TCIchemicals.com

Takuya Nishioka  
Quality Assurance Department Manager





# SHIPPING DOCUMENTS

## CHAIN OF CUSTODY RECORD

Alliance Project Number:

Q1822

COC Number:

Page 1 of 1

### CLIENT INFORMATION

COMPANY: ENTACT, LLC  
ADDRESS: 150 Bay Street, Suite 806  
CITY: Jersey City STATE: NJ ZIP: 07302  
ATTENTION: Jarod Stanfield  
PHONE: 570-886-0442 FAX:

### PROJECT INFORMATION

PROJECT NAME: 540 Degraw St Brooklyn, NY  
PROJECT #: E9309 LOCATION: Brooklyn, NY  
PROJECT MANAGER: Jarod Stanfield  
E-MAIL: jstanfield@entact.com  
PHONE: 570-886-0442 FAX:

### BILLING INFORMATION

BILL TO: ENTACT, LLC PO# E9309  
ADDRESS: 999 Oakmont Plaza Drive, Suite 300  
CITY: Westmont STATE: IL ZIP: 60559  
ATTENTION: Wendy Murray PHONE: 800-936-8228

### DATA TURNAROUND INFORMATION

FAX: 5 DAYS\*  
HARD COPY: 5 DAYS\*  
EDD 5 DAYS\*  
\* TO BE APPROVED BY ALLIANCE  
STANDARD TURNAROUND TIME IS 10 BUSINESS DAYS

### DATA DELIVERABLE INFORMATION

- ☐ RESULTS ONLY ☐ USEPA CLP  
☐ RESULTS + QC ☐ New York State ASP "B"  
☐ New Jersey REDUCED ☐ New York State ASP "A"  
☐ New Jersey CLP ☐ Other \_\_\_\_\_  
☐ EDD Format \_\_\_\_\_

### ANALYSIS

SVOC-TCL BNA-20	Flash Point	PCB	BOD5	TSS	VOC-TCLVOA- 10	Metals ICP-TAL			
1	2	3	4	5	6	7	8	9	

### PRESERVATIVES

E	E	E	E	E	A	B			
1	2	3	4	5	6	7	8	9	

### COMMENTS

<-- Specify Preservatives  
A-HCl B-HNO3  
C-H2SO4 D-NaOH  
E-ICE F-Other

CHEMTECH  
SAMPLE  
ID

PROJECT  
SAMPLE IDENTIFICATION

SAMPLE  
MATRIX

SAMPLE  
TYPE  
COMP GRAB

SAMPLE  
COLLECTION  
DATE TIME

# of Bottles

1.	TW-WTS-06	Surface Water		X	4/15	15:30	7
2.							
3.							
4.							
5.							
6.							
7.							
8.							
9.							
10.							

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

RELINQUISHED BY SAMPLER  
1. Jarod Stanfield

DATE/TIME  
04/15/25  
15:30

RECEIVED BY

1.  1300 4-15-25

RELINQUISHED BY

DATE/TIME

RECEIVED BY

2.

DATE/TIME

RECEIVED BY

3.

DATE/TIME

RECEIVED FOR LAB BY

1445 4-16-25

Conditions of bottles or coolers at receipt: ☐ Compliant ☐ Non Compliant ☐ Cooler Temp 4.6° ☐ Ice in Cooler? \_\_\_\_\_

Comments:

Temp 4.6° C Adjustment factor +1.0 IR Gun #1

Page \_\_\_\_\_ of \_\_\_\_\_

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

Shipment Complete

☐ YES ☐ NO

WHITE - ALLIANCE COPY FOR RETURN TO CLIENT

YELLOW - ALLIANCE COPY

PINK - SAMPLER COPY

### Laboratory Certification

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

## LOGIN REPORT/SAMPLE TRANSFER

<b>Order ID :</b> Q1822	ENTA05	<b>Order Date :</b> 4/16/2025 1:17:00 PM	<b>Project Mgr :</b>
<b>Client Name :</b> ENTACT		<b>Project Name :</b> 540 Degraw St, Brooklyn, N	<b>Report Type :</b> Level 1
<b>Client Contact :</b> Jarod Stanfield		<b>Receive DateTime :</b> 4/16/2025 12:00:00 AM	<b>EDD Type :</b> Excel NJ
<b>Invoice Name :</b> ENTACT		<b>Purchase Order :</b> 14:48	<b>Hard Copy Date :</b>
<b>Invoice Contact :</b> Jarod Stanfield			<b>Date Signoff :</b>

LAB ID	CLIENT ID	MATRIX	SAMPLE DATE	SAMPLE TIME	TEST	TEST GROUP	METHOD	FAX DATE	DUE DATES
Q1822-01	TW-WTS-06	Water	04/15/2025	15:30		VOCMS Group4	8260-Low		5 Bus. Days

Relinquished By :

Date / Time : 4-16-25 1500

Received By :

Date / Time :

Storage Area : VOA Refridgerator Room