

Cover Page

Order ID : Q3258

Project ID : Waste Water

Client : Dal-Tile - Dickson Plant

Lab Sample Number

Q3258-01
Q3258-02
Q3258-03
Q3258-04
Q3258-05
Q3258-06

Client Sample Number

MONTHLY-CYANIDE
MONTHLY-CYANIDEMS
MONTHLY-CYANIDEMSD
ADDITIONAL-CYANIDE-3
OIL-AND-GREASE
COMPOSITE

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

Signature : _____

Date: 10/10/2025



284 Sheffield Street, Mountainside, NJ 7092, Phone: 908 789 8900, Fax: 908 789 8922

CASE NARRATIVE

Dal-Tile - Dickson Plant

Project Name: Waste Water

Project # N/A

Order ID # Q3258

Test Name: Mercury,Metal ICP-Group1Ammonia,BOD5,Cyanide,Hexavalent Chromium,Oil and Grease,Phosphorus-Total,TSS

A. Number of Samples and Date of Receipt:

6 Water samples were received on 10/01/2025.

B. Parameters

According to the Chain of Custody document, the following analyses were requested: Mercury,Metal ICP-Group1Ammonia,BOD5,Cyanide,Hexavalent Chromium,Oil and Grease,Phosphorus-Total,TSS. This data package contains results for Mercury(7470A), Metal ICP-Group1(6010D)Ammonia(SM4500-NH3),BOD5(SM5210 B), Cyanide(SM4500-CN C,E),Hexavalent Chromium(7196A),Oil and Grease(1664A), Phosphorus-Total(365.3),TSS(SM2540 D).

C. Analytical Techniques:

Mercury,Metals ICP-Group1 : The analysis of Metals ICP-Group1 was based on method 6010D, digestion based on method 3010 (waters). The analysis and digestion of Mercury was based on method 7470A.

Wetchem : The analysis of Oil and Grease was based on method 1664A, The analysis of Phosphorus-Total was based on method 365.3, The analysis of Hexavalent Chromium was based on method 7196A, The analysis of TSS was based on method SM2540 D, The analysis of Cyanide was based on method SM4500-CN C,E, The analysis of Ammonia was based on method SM4500-NH3 and The analysis of BOD5 was based on method SM5210 B.

D. QA/ QC Samples:

The Holding Times were met for all analysis.

The MS recoveries met the requirements for all compounds.

The MSD recoveries met the acceptable requirements.

The RPD recoveries met criteria.

The Blank Spike met requirements for all compounds.

The Blank analysis did not indicate the presence of lab contamination.

The Initial Calibration met the requirements.

The Continuous Calibration met the requirements.



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The Duplicate analysis met criteria for all compounds.
The Serial Dilution met the acceptable requirements.

E. Additional Comments:

Ammonia, BOD5, Cyanide, Hexavalent Chromium, Oil and Grease, Phosphorus-Total, TSS :
As per method, aqueous sample for Hexavalent Chromium analysis should be filtered within 15 minutes of collection time. However, samples were not filtered as per requirement therefore Lab has filtered the samples in-house and analyzed within 24 hours from collection.

Due to limited volume DUP, MS and MSD were not performed for Hexavalent Chromium.

As per method 1664A, MS/MSD is required to be performed with the sample analysis. However, Lab did not receive sufficient volume to perform the MS/MSD for Q3258 therefore Lab reported MS-MSD from Q3229

Due to low volume MS and MSD were not performed for PB170085 of Cyanide.

This package has been revised because Sample#08 and Sample#09 added for Cyanide.

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

Signature_____

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

APPENDIX A

QA REVIEW GENERAL DOCUMENTATION

Project #: Q3258

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: SOHIL JODHANI

Date: 10/10/2025

LAB CHRONICLE

OrderID:	Q3258	OrderDate:	10/1/2025 10:50:59 AM
Client:	Dal-Tile - Dickson Plant	Project:	Waste Water
Contact:	Michel Gil	Location:	D31

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q3258-01	MONTHLY-CYANIDE	WATER			09/29/25 14:21			10/01/25
			Cyanide	SM4500-CN C,E		10/06/25	10/06/25 14:43	
Q3258-04	ADDITIONAL-CYANIDE -3	WATER			09/30/25 14:47			10/01/25
			Cyanide	SM4500-CN C,E		10/06/25	10/06/25 14:51	
Q3258-05	OIL-AND-GREASE	WATER			09/30/25 15:05			10/01/25
			Oil and Grease	1664A			10/03/25 10:35	
Q3258-06	COMPOSITE	WATER			09/30/25 15:12			10/01/25
			Ammonia	SM4500-NH3		10/02/25	10/03/25 10:29	
			BOD5	SM5210 B			10/01/25 17:40	
			Hexavalent Chromium	7196A			10/01/25 12:47	
			Phosphorus-Total	365.3		10/09/25	10/09/25 13:29	
			TSS	SM2540 D			10/03/25 13:30	
Q3258-08	ADDITIONAL-CYANIDE -1	WATER			09/30/25 14:47			10/01/25
			Cyanide	SM4500-CN C,E		10/14/25	10/14/25 11:18	

LAB CHRONICLE

Q3258-09	ADDITIONAL-CYANIDE -2	WATER			09/30/25 14:47			10/01/25
			Cyanide	SM4500-CN C,E		10/14/25	10/14/25 11:18	



SAMPLE DATA

Report of Analysis

Client: Dal-Tile - Dickson Plant
Project: Waste Water
Client Sample ID: MONTHLY-CYANIDE
Lab Sample ID: Q3258-01

Date Collected: 09/29/25 14:21
Date Received: 10/01/25
SDG No.: Q3258
Matrix: WATER
% Solid: 0

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Cyanide	0.25		1	0.0012	0.0050	mg/L	10/06/25 11:05	10/06/25 14:43	SM 4500-CN C-21 plus E-21

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

Report of Analysis

Client: Dal-Tile - Dickson Plant
Project: Waste Water
Client Sample ID: ADDITIONAL-CYANIDE-3
Lab Sample ID: Q3258-04

Date Collected: 09/30/25 14:47
Date Received: 10/01/25
SDG No.: Q3258
Matrix: WATER
% Solid: 0

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Cyanide	0.0024	J	1	0.0012	0.0050	mg/L	10/06/25 11:05	10/06/25 14:51	SM 4500-CN C-21 plus E-21

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

Report of Analysis

Client: Dal-Tile - Dickson Plant
Project: Waste Water
Client Sample ID: OIL-AND-GREASE
Lab Sample ID: Q3258-05

Date Collected: 09/30/25 15:05
Date Received: 10/01/25
SDG No.: Q3258
Matrix: WATER
% Solid: 0

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Oil and Grease	3.60	J	1	0.29	5.00	mg/L		10/03/25 10:35	1664A

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

Report of Analysis

Client: Dal-Tile - Dickson Plant
Project: Waste Water
Client Sample ID: COMPOSITE
Lab Sample ID: Q3258-06

Date Collected: 09/30/25 15:12
Date Received: 10/01/25
SDG No.: Q3258
Matrix: WATER
% Solid: 0

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Ammonia as N	0.32		1	0.030	0.10	mg/L	10/02/25 14:10	10/03/25 10:29	SM 4500-NH3 B plus G-21
BOD5	349		1	0.20	2.00	mg/L		10/01/25 17:40	SM 5210 B-16
Dissolved Hexavalent Chromium	0.0030	U	1	0.0030	0.010	mg/L		10/01/25 12:47	7196A
Phosphorus, Total	0.021	J	1	0.0050	0.050	mg/L	10/09/25 09:40	10/09/25 13:29	365.3
TSS	26.2		1	1.00	4.00	mg/L		10/03/25 13:30	SM 2540 D-20

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

Report of Analysis

Client: Dal-Tile - Dickson Plant
Project: Waste Water
Client Sample ID: ADDITIONAL-CYANIDE-1
Lab Sample ID: Q3258-08

Date Collected: 09/30/25 14:47
Date Received: 10/01/25
SDG No.: Q3258
Matrix: WATER
% Solid: 0

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Cyanide	0.0033	J	1	0.0012	0.0050	mg/L	10/14/25 08:30	10/14/25 11:18	SM 4500-CN C-21 plus E-21

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

Report of Analysis

Client: Dal-Tile - Dickson Plant
Project: Waste Water
Client Sample ID: ADDITIONAL-CYANIDE-2
Lab Sample ID: Q3258-09

Date Collected: 09/30/25 14:47
Date Received: 10/01/25
SDG No.: Q3258
Matrix: WATER
% Solid: 0

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Cyanide	0.0035	J	1	0.0012	0.0050	mg/L	10/14/25 08:30	10/14/25 11:18	SM 4500-CN C-21 plus E-21

Comments: _____

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

D = Dilution

Q = indicates LCS control criteria did not meet requirements

H = Sample Analysis Out Of Hold Time

J = Estimated Value

B = Analyte Found in Associated Method Blank

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

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

OR = Over Range

N = Spiked sample recovery not within control limits



QC RESULT SUMMARY

Initial and Continuing Calibration Verification

Client: Dal-Tile - Dickson Plant

SDG No.: Q3258

Project: Waste Water

RunNo.: LB137386

Analyte	Units	Result	True Value	% Recovery	Acceptance Window (%R)	Analysis Date
Sample ID: ICV Hexavalent Chromium	mg/L	0.502	0.5	100	90-110	10/01/2025
Sample ID: CCV1 Hexavalent Chromium	mg/L	0.497	0.5	99	90-110	10/01/2025
Sample ID: CCV2 Hexavalent Chromium	mg/L	0.504	0.5	101	90-110	10/01/2025

Initial and Continuing Calibration Verification

Client: Dal-Tile - Dickson Plant

SDG No.: Q3258

Project: Waste Water

RunNo.: LB137417

Analyte	Units	Result	True Value	% Recovery	Acceptance Window (%R)	Analysis Date
Sample ID: ICV1 Ammonia as N	mg/L	0.98	1	98	90-110	10/03/2025
Sample ID: CCV1 Ammonia as N	mg/L	0.97	1	97	90-110	10/03/2025
Sample ID: CCV2 Ammonia as N	mg/L	0.97	1	97	90-110	10/03/2025
Sample ID: CCV3 Ammonia as N	mg/L	1	1	100	90-110	10/03/2025
Sample ID: CCV4 Ammonia as N	mg/L	0.98	1	98	90-110	10/03/2025

Initial and Continuing Calibration Verification

Client: Dal-Tile - Dickson Plant

SDG No.: Q3258

Project: Waste Water

RunNo.: LB137435

Analyte	Units	Result	True Value	% Recovery	Acceptance Window (%R)	Analysis Date
Sample ID: ICV1 Cyanide	mg/L	0.095	0.099	96	85-115	10/06/2025
Sample ID: CCV1 Cyanide	mg/L	0.24	0.25	96	90-110	10/06/2025
Sample ID: CCV2 Cyanide	mg/L	0.24	0.25	96	90-110	10/06/2025

Initial and Continuing Calibration Verification

Client: Dal-Tile - Dickson Plant

SDG No.: Q3258

Project: Waste Water

RunNo.: LB137481

Analyte	Units	Result	True Value	% Recovery	Acceptance Window (%R)	Analysis Date
Sample ID: ICV Phosphorus, Total	mg/L	0.489	0.50	98	90-110	10/09/2025
Sample ID: CCV1 Phosphorus, Total	mg/L	0.506	0.50	101	90-110	10/09/2025
Sample ID: CCV2 Phosphorus, Total	mg/L	0.502	0.50	100	90-110	10/09/2025

Initial and Continuing Calibration Verification

Client: Dal-Tile - Dickson Plant

SDG No.: Q3258

Project: Waste Water

RunNo.: LB137517

Analyte	Units	Result	True Value	% Recovery	Acceptance Window (%R)	Analysis Date
Sample ID: ICV1 Cyanide	mg/L	0.096	0.099	97	85-115	10/14/2025
Sample ID: CCV1 Cyanide	mg/L	0.24	0.25	96	90-110	10/14/2025
Sample ID: CCV2 Cyanide	mg/L	0.24	0.25	96	90-110	10/14/2025

Initial and Continuing Calibration Blank Summary

Client: Dal-Tile - Dickson Plant

SDG No.: Q3258

Project: Waste Water

RunNo.: LB137386

Analyte	Units	Result	Acceptance Limits	Conc Qual	MDL	RDL	Analysis Date
Sample ID: ICB Hexavalent Chromium	mg/L	< 0.0050	0.0050	U	0.0029	0.01	10/01/2025
Sample ID: CCB1 Hexavalent Chromium	mg/L	< 0.0050	0.0050	U	0.0029	0.01	10/01/2025
Sample ID: CCB2 Hexavalent Chromium	mg/L	< 0.0050	0.0050	U	0.0029	0.01	10/01/2025

Initial and Continuing Calibration Blank Summary

Client: Dal-Tile - Dickson Plant

SDG No.: Q3258

Project: Waste Water

RunNo.: LB137417

Analyte	Units	Result	Acceptance Limits	Conc Qual	MDL	RDL	Analysis Date
Sample ID: ICB1 Ammonia as N	mg/L	< 0.0500	0.0500	U	0.030	0.1	10/03/2025
Sample ID: CCB1 Ammonia as N	mg/L	< 0.0500	0.0500	U	0.030	0.1	10/03/2025
Sample ID: CCB2 Ammonia as N	mg/L	< 0.0500	0.0500	U	0.030	0.1	10/03/2025
Sample ID: CCB3 Ammonia as N	mg/L	< 0.0500	0.0500	U	0.030	0.1	10/03/2025
Sample ID: CCB4 Ammonia as N	mg/L	< 0.0500	0.0500	U	0.030	0.1	10/03/2025

Initial and Continuing Calibration Blank Summary

Client: Dal-Tile - Dickson Plant

SDG No.: Q3258

Project: Waste Water

RunNo.: LB137435

Analyte	Units	Result	Acceptance Limits	Conc Qual	MDL	RDL	Analysis Date
Sample ID: ICB1 Cyanide	mg/L	< 0.0025	0.0025	U	0.0012	0.005	10/06/2025
Sample ID: CCB1 Cyanide	mg/L	< 0.0025	0.0025	U	0.0012	0.005	10/06/2025
Sample ID: CCB2 Cyanide	mg/L	< 0.0025	0.0025	U	0.0012	0.005	10/06/2025

Initial and Continuing Calibration Blank Summary

Client: Dal-Tile - Dickson Plant

SDG No.: Q3258

Project: Waste Water

RunNo.: LB137481

Analyte	Units	Result	Acceptance Limits	Conc Qual	MDL	RDL	Analysis Date
Sample ID: ICB Phosphorus, Total	mg/L	0.008	0.0250	J	0.0045	0.05	10/09/2025
Sample ID: CCB1 Phosphorus, Total	mg/L	0.007	0.0250	J	0.0045	0.05	10/09/2025
Sample ID: CCB2 Phosphorus, Total	mg/L	0.005	0.0250	J	0.0045	0.05	10/09/2025

Initial and Continuing Calibration Blank Summary

Client: Dal-Tile - Dickson Plant

SDG No.: Q3258

Project: Waste Water

RunNo.: LB137517

Analyte	Units	Result	Acceptance Limits	Conc Qual	MDL	RDL	Analysis Date
Sample ID: ICB1 Cyanide	mg/L	< 0.0025	0.0025	U	0.0012	0.005	10/14/2025
Sample ID: CCB1 Cyanide	mg/L	< 0.0025	0.0025	U	0.0012	0.005	10/14/2025
Sample ID: CCB2 Cyanide	mg/L	< 0.0025	0.0025	U	0.0012	0.005	10/14/2025

Preparation Blank Summary

Client: Dal-Tile - Dickson Plant

SDG No.: Q3258

Project: Waste Water

Analyte	Units	Result	Acceptance Limits	Conc Qual	MDL	RDL	Analysis Date
Sample ID: LB137386BL Hexavalent Chromium	mg/L	< 0.0050	0.0050	U	0.003	0.01	10/01/2025
Sample ID: LB137388BL BOD5	mg/L	< 0.2000	0.2000	U	0.20	2.0	10/01/2025
Sample ID: LB137413BL Oil and Grease	mg/L	< 2.5000	2.5000	U	0.29	5.0	10/03/2025
Sample ID: LB137419BL TSS	mg/L	1	2.0000	J	1	4	10/03/2025
Sample ID: PB169946BL Ammonia as N	mg/L	< 0.0500	0.0500	U	0.03	0.1	10/03/2025
Sample ID: PB169962BL Cyanide	mg/L	< 0.0025	0.0025	U	0.0012	0.005	10/06/2025
Sample ID: PB170046BL Phosphorus, Total	mg/L	0.007	0.0250	J	0.005	0.05	10/09/2025
Sample ID: PB170085BL Cyanide	mg/L	< 0.0025	0.0025	U	0.0012	0.005	10/14/2025

Matrix Spike Summary

Client:	Dal-Tile - Dickson Plant	SDG No.:	Q3258
Project:	Waste Water	Sample ID:	Q3229-01
Client ID:	MH-9-26-25MS	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
Oil and Grease	mg/L	78-114	192		172		20.0	1	101		10/03/2025

Matrix Spike Summary

Client:	Dal-Tile - Dickson Plant	SDG No.:	Q3258
Project:	Waste Water	Sample ID:	Q3229-01
Client ID:	MH-9-26-25MSD	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
Oil and Grease	mg/L	78-114	192		172		20.0	1	102		10/03/2025

Matrix Spike Summary

Client:	Dal-Tile - Dickson Plant	SDG No.:	Q3258
Project:	Waste Water	Sample ID:	Q3234-01
Client ID:	DA-1MS	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
Phosphorus, Total	mg/L	90-110	0.51		0.043	J	0.5	1	93		10/09/2025

Matrix Spike Summary

Client:	Dal-Tile - Dickson Plant	SDG No.:	Q3258
Project:	Waste Water	Sample ID:	Q3234-01
Client ID:	DA-1MSD	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
Phosphorus, Total	mg/L	90-110	0.50		0.043	J	0.5	1	92		10/09/2025

Matrix Spike Summary

Client:	Dal-Tile - Dickson Plant	SDG No.:	Q3258
Project:	Waste Water	Sample ID:	Q3258-01
Client ID:	MONTHLY-CYANIDE MS	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
Cyanide	mg/L	75-125	0.28		0.25		0.04	1	75		10/06/2025

Matrix Spike Summary

Client:	Dal-Tile - Dickson Plant	SDG No.:	Q3258
Project:	Waste Water	Sample ID:	Q3258-01
Client ID:	MONTHLY-CYANIDE MSD	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
Cyanide	mg/L	75-125	0.28		0.25		0.04	1	75		10/06/2025

Matrix Spike Summary

Client:	Dal-Tile - Dickson Plant	SDG No.:	Q3258
Project:	Waste Water	Sample ID:	Q3263-02
Client ID:	266380MS	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
Ammonia as N	mg/L	75-125	1.00		0.030	U	1	1	100		10/03/2025

Matrix Spike Summary

Client:	Dal-Tile - Dickson Plant	SDG No.:	Q3258
Project:	Waste Water	Sample ID:	Q3263-02
Client ID:	266380MSD	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
Ammonia as N	mg/L	75-125	1.00		0.030	U	1	1	100		10/03/2025

Duplicate Sample Summary

Client:	Dal-Tile - Dickson Plant	SDG No.:	Q3258
Project:	Waste Water	Sample ID:	Q3229-01
Client ID:	MH-9-26-25MSD	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
Oil and Grease	mg/L	+/-18	192		192		1	0.05		10/03/2025

Duplicate Sample Summary

Client: Dal-Tile - Dickson Plant	SDG No.: Q3258
Project: Waste Water	Sample ID: Q3234-01
Client ID: DA-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
Phosphorus, Total	mg/L	+/-20	0.043	J	0.042	J	1	2.35		10/09/2025

Duplicate Sample Summary

Client:	Dal-Tile - Dickson Plant	SDG No.:	Q3258
Project:	Waste Water	Sample ID:	Q3234-01
Client ID:	DA-1MSD	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
Phosphorus, Total	mg/L	+/-20	0.51		0.50		1	0.99		10/09/2025

Duplicate Sample Summary

Client: Dal-Tile - Dickson Plant	SDG No.: Q3258
Project: Waste Water	Sample ID: Q3258-01
Client ID: MONTHLY-CYANIDE DUP	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
Cyanide	mg/L	+/-20	0.25		0.24		1	4		10/06/2025

Duplicate Sample Summary

Client: Dal-Tile - Dickson Plant	SDG No.: Q3258
Project: Waste Water	Sample ID: Q3258-01
Client ID: MONTHLY-CYANIDE MSD	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
Cyanide	mg/L	+/-20	0.28		0.28		1	0		10/06/2025

Duplicate Sample Summary

Client:	Dal-Tile - Dickson Plant	SDG No.:	Q3258
Project:	Waste Water	Sample ID:	Q3258-08
Client ID:	ADDITIONAL-CYANIDE-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
Cyanide	mg/L	+/-20	0.0033	J	0.0034	J	1	3		10/14/2025

Duplicate Sample Summary

Client: Dal-Tile - Dickson Plant	SDG No.: Q3258
Project: Waste Water	Sample ID: Q3260-02
Client ID: COMPDUP	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	3020		2930		1	2.83		10/01/2025
TSS	mg/L	+/-5	481		480		1	0.21		10/03/2025

Duplicate Sample Summary

Client: Dal-Tile - Dickson Plant	SDG No.: Q3258
Project: Waste Water	Sample ID: Q3263-02
Client ID: 266380DUP	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
Ammonia as N	mg/L	+/-20	0.030	U	0.030	U	1	0		10/03/2025

Duplicate Sample Summary

Client:	Dal-Tile - Dickson Plant	SDG No.:	Q3258
Project:	Waste Water	Sample ID:	Q3263-02
Client ID:	266380MSD	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
Ammonia as N	mg/L	+/-20	1.00		1.00		1	0		10/03/2025

Laboratory Control Sample Summary

Client: Dal-Tile - Dickson Plant

SDG No.: Q3258

Project: Waste Water

Run No.: LB137386

Analyte	Units	True Value	Result	Conc. Qualifier	% Recovery	Dilution Factor	Acceptance Limit %R	Analysis Date
Sample ID	LB137386BS							
Hexavalent Chromium	mg/L	0.5	0.51		103	1	90-111	10/01/2025

Laboratory Control Sample Summary

Client: Dal-Tile - Dickson Plant

SDG No.: Q3258

Project: Waste Water

Run No.: LB137388

Analyte	Units	True Value	Result	Conc. Qualifier	% Recovery	Dilution Factor	Acceptance Limit %R	Analysis Date
Sample ID	LB137388BS							
BOD5	mg/L	198	181		92	1	84.6-115.4	10/01/2025

Laboratory Control Sample Summary

Client: Dal-Tile - Dickson Plant

SDG No.: Q3258

Project: Waste Water

Run No.: LB137413

Analyte	Units	True Value	Result	Conc. Qualifier	% Recovery	Dilution Factor	Acceptance Limit %R	Analysis Date
Sample ID	LB137413BS							
Oil and Grease	mg/L	20.0	16.8		84	1	78-114	10/03/2025

Laboratory Control Sample Summary

Client: Dal-Tile - Dickson Plant

SDG No.: Q3258

Project: Waste Water

Run No.: LB137419

Analyte	Units	True Value	Result	Conc. Qualifier	% Recovery	Dilution Factor	Acceptance Limit %R	Analysis Date
Sample ID	LB137419BS							
TSS	mg/L	550	532		97	1	90-110	10/03/2025

Laboratory Control Sample Summary

Client: Dal-Tile - Dickson Plant

SDG No.: Q3258

Project: Waste Water

Run No.: LB137417

Analyte	Units	True Value	Result	Conc. Qualifier	% Recovery	Dilution Factor	Acceptance Limit %R	Analysis Date
Sample ID	PB169946BS							
Ammonia as N	mg/L	1	1.00		100	1	90-110	10/03/2025

Laboratory Control Sample Summary

Client: Dal-Tile - Dickson Plant

SDG No.: Q3258

Project: Waste Water

Run No.: LB137435

Analyte	Units	True Value	Result	Conc. Qualifier	% Recovery	Dilution Factor	Acceptance Limit %R	Analysis Date
Sample ID	PB169962BS							
Cyanide	mg/L	0.1	0.096		96	1	85-115	10/06/2025

Laboratory Control Sample Summary

Client: Dal-Tile - Dickson Plant

SDG No.: Q3258

Project: Waste Water

Run No.: LB137481

Analyte	Units	True Value	Result	Conc. Qualifier	% Recovery	Dilution Factor	Acceptance Limit %R	Analysis Date
Sample ID	PB170046BS							
Phosphorus, Total	mg/L	0.50	0.48		97	1	90-110	10/09/2025

Laboratory Control Sample Summary

Client: Dal-Tile - Dickson Plant

SDG No.: Q3258

Project: Waste Water

Run No.: LB137517

Analyte	Units	True Value	Result	Conc. Qualifier	% Recovery	Dilution Factor	Acceptance Limit %R	Analysis Date
Sample ID	PB170085BS							
Cyanide	mg/L	0.1	0.097		97	1	85-115	10/14/2025



RAW DATA

Analytical Summary Report

Analysis Method: 7196A

ANALYST: rubina

Parameter: ~~Hexavalent Chromium~~

SUPERVISOR REVIEW BY: Iwona

Run Number: LB137386

pH Meter ID: WC pH Meter-1

Reagent/Standard	Lot/Log #
Calibration Std. hexchrome 0.1 ppm	WP115000
Calibration Std. hexchrome 0.05 ppm	WP114999
calibration std. hexchrome 0.01 ppm	WP114997
calibration std. hexchrome 0 ppm	WP114996
hexavalent chromium color reagent	WP114995
5N sulfuric acid	WP112831
Calibration Std Hexachrome 0.025 ppm	WP114998
Hexavalent Chromium ICV-LCS Std	WP115003
Calibration and CCV std HexChrome 0.5PPM	WP115001
Calibration std HexChrome 1.0PPM	WP115002

Intercept: 0.0001

Slope: 0.7841

Regression: 0.999987

Seq	Lab ID	True Value (mg/l)	DF	Initial Vol (ml)	Final Vol (ml)	pH HN03	pH H2SO4	Absorb.at 540nm		Absorbance Difference	Result (mg/L)	%D	Anal Date	Anal Time
								Backgrnd	Color					
1	CAL1	0	1	100	100		1.92	0.000	0.000	0.000	-0.00		10/01/2025	12:40
2	CAL2	0.01	1	100	100		1.99	0.000	0.007	0.007	0.008	-20	10/01/2025	12:40
3	CAL3	0.025	1	100	100		2.01	0.000	0.019	0.019	0.024	-4	10/01/2025	12:41
4	CAL4	0.05	1	100	100		2.06	0.000	0.040	0.040	0.050	0	10/01/2025	12:41
5	CAL5	0.1	1	100	100		2.02	0.000	0.081	0.081	0.103	3	10/01/2025	12:42
6	CAL6	0.5	1	100	100		1.97	0.000	0.390	0.390	0.497	-0.6	10/01/2025	12:42
7	CAL7	1	1	100	100		1.92	0.000	0.785	0.785	1.001	0.1	10/01/2025	12:43

Analytical Summary Report

Analysis Method: 7196A

ANALYST:rubina

Parameter: Hexavalent Chromium

SUPERVISOR REVIEW BY:Iwona

Run Number: LB137386

pH Meter ID:WC pH Meter-1

Seq	Lab ID	True Value	DF	Initial Vol (ml/gm)	Final Vol (ml)	pH HN03	pH H2SO4	Absorb.at540nm		Absorbance Difference	Intermediate Result (mg/L)	Anal Date	Anal Time
								Backgrnd	Color				
1	ICV	0.5	1	100	100		1.90	0.000	0.394	0.394	0.502	10/01/2025	12:43
2	ICB		1	100	100		2.01	0.000	0.001	0.001	0.001	10/01/2025	12:44
3	CCV1	0.5	1	100	100		2.07	0.000	0.390	0.390	0.497	10/01/2025	12:44
4	CCB1		1	100	100		2.04	0.000	0.000	0.000	0.000	10/01/2025	12:45
5	RL Check	0.01	1	100	100		2.02	0.000	0.008	0.008	0.010	10/01/2025	12:45
6	LB137386BL		1	100	100		2.00	0.000	0.001	0.001	0.001	10/01/2025	12:46
7	LB137386BS	0.5	1	100	100		1.97	0.000	0.402	0.402	0.513	10/01/2025	12:46
8	Q3258-06		1	100	100		1.95	0.000	0.000	0.000	0.000	10/01/2025	12:47
9	CCV2	0.5	1	100	100		2.00	0.000	0.395	0.395	0.504	10/01/2025	12:47
10	CCB2		1	100	100		1.89	0.000	0.000	0.000	0.000	10/01/2025	12:48

WORKLIST(Hardcopy Internal Chain)

66137386

WorkList Name : HEX-10-01-

WorkList ID : 192217

Department : Wet-Chemistry

Date : 10-01-2025 10:49:45

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q3258-06	COMPOSITE	Water	Hexavalent Chromium	Ammonium sulfate buffer	DALT01	D31	09/30/2025	7196A

Date/Time 10/01/2025 11:05
 Raw Sample Received by: RM CWO
 Raw Sample Relinquished by: RM CWO

Date/Time 10/01/2025 13:00
 Raw Sample Received by: RM CWO
 Raw Sample Relinquished by: RM CWO

BOD5 LOG

ANALYST: rubin
Inst Id :DO METER
LB :LB137388

Reviewed By:Iwona
On:10/6/2025 1:45:50
PM

SUPERVISOR: Iwona

QC BATCH ID: LB137388

Analysis Date: 10/01/2025

BOD Water: WP114992

MANGANOUS SULFATE SOLUTION: W3103

Starch: W3149

Alkaline Iodide Azide: W3109

Sulfuric acid, 1N: WP112832

Sodium Thiosulfate, 0.025N: W3105

POLYSEED: WP114994

NaOH, 1N: WP113878

GGA: WP114993

IncubatorID: INCUBATOR #3

Chlorine Strips: W3155

GuageID: 0511064

pH Strips: W3215

Zero DO: WP114920

Lab SampleID	Client ID	Bottle No.	VOL. ML	Initial Reading (ML)	Final Reading (ML)	Difference	Average
WINKLER 1	WINKLER 1	1	300	0.0	9.6	9.6	9.6
WINKLER 2	WINKLER 2	2	300	9.8	19.4	9.6	9.6

Meter Calibration1: 9.45

Zero DO Reading1: 0.12 mg/L (<=0.2 Criteria)

Barometric Pressure1: 765 mmHg

DO Meter BOD fluid reading for winkler comparison: 9.67

After Incubation

Meter Calibration2: 8.34

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

Barometric Pressure2: 765 mmHg

QC BATCH ID: LB137388

INCUBATOR TEMP IN(C): 20.1

INCUBATOR TEMP OUT(C): 19.9

TIME IN: 17:40

TIME OUT: 13:00

DATE IN: 10/01/2025

DATE OUT: 10/06/2025

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
LB137388BL	1	No	9.65	N/A	20.80	300	9.66	9.64	0.02	0.02	0.02	
POLYSEED	1					10	9.62	6.31	3.31	0.66	0.66	
POLYSEED	2					15	9.60	4.63	4.97	0.66		
POLYSEED	3					20	9.57	3.06	6.51	0.65		
GGA	1					6	9.60	5.41	4.19	176.5	181.33	
GGA	2					6	9.60	5.29	4.31	182.5		
GGA	3					6	9.58	5.22	4.36	185		
Q3258-06	1	No	9.22	7.31	20.00	5	9.42	2.95	6.47	348.6	348.6	pH Adjusted
Q3258-06	2					20	9.40	0.58	-	0		
Q3258-06	3					50	8.97	0.13	-	0		
Q3258-06	4					150	7.27	0.10	-	0		
Q3260-02	1	No	6.92	N/A	20.00	5	9.47	2.57	6.9	3744	3015	
Q3260-02	2					10	9.45	1.17	8.28	2286		
Q3260-02	3					20	9.27	0.24	-	0		
Q3260-02	4					30	9.14	0.20	-	0		
Q3260-02DUP	1	No	6.92	N/A	20.00	5	9.45	2.72	6.73	3642	2931	
Q3260-02DUP	2					10	9.42	1.36	8.06	2220		
Q3260-02DUP	3					20	9.25	0.87	-	0		
Q3260-02DUP	4					30	9.15	0.20	-	0		
Q3263-01	1	No	8.53	7.04	20.40	5	9.47	8.87	-	0		pH Adjusted
Q3263-01	2					20	9.45	8.64	-	0		
Q3263-01	3					50	9.30	8.40	-	0		
Q3263-01	4					150	9.15	7.91	-	0		
Q3263-02	1	No	7.60	7.33	20.40	5	9.51	8.84	-	0		pH Adjusted
Q3263-02	2					20	9.50	8.60	-	0		
Q3263-02	3					50	9.45	8.45	-	0		
Q3263-02	4					150	9.24	8.11	-	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.

66137388

WORKLIST(Hardcopy Internal Chain)

WorkList Name : bod5-3260

WorkList ID : 192224

Department : Wet-Chemistry

Date : 10-01-2025 16:20:48

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q3260-02	COMP	Water	BOD5	Cool 4 deg C	ARAM01	D31	10/01/2025	SM5210 B

Date/Time 10/01/2025 16.40
Raw Sample Received by: RM CWG
Raw Sample Relinquished by: JG/CWG

Date/Time 10/01/2025 17.30
Raw Sample Received by: JG/CWG
Raw Sample Relinquished by: RM CWG

6137388

WORKLIST(Hardcopy Internal Chain)

WorkList Name : bod5-10-01

WorkList ID : 192221

Department : Wet-Chemistry

Date : 10-01-2025 14:55:26

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q3258-06	COMPOSITE	Water	BOD5	Cool 4 deg C	DALT01	D31	09/30/2025	SM5210 B
Q3263-01	251818	Water	BOD5	Cool 4 deg C	PSEG03	D31	10/01/2025	SM5210 B
Q3263-02	266380	Water	BOD5	Cool 4 deg C	PSEG03	D31	10/01/2025	SM5210 B

Date/Time 10/01/2025 15.30
Raw Sample Received by: RY CWS
Raw Sample Relinquished by: Jellol

Date/Time 10/01/2025 17.30
Raw Sample Received by: Jellol
Raw Sample Relinquished by: RY CWS

Extraction and Analytical Summary Report

Analysis Method: 1664A

Test: Oil and Grease

Run Number: LB137413

Analysis Date: 10/03/2025

BalanceID: WC SC-5

OvenID: EXT OVEN-3

ANALYST: jignesh

REVIEWED BY: Iwona

Extraction Date: 10/03/2025

Extraction IN Time: 09:00

Extraction OUT Time: 09:35

Thermometer ID: EXT OVEN#3

Dish #	Lab ID	Client ID	Matrix	pH	Sample Vol (ml)	Final Volume (ml)	Empty Dish Weight (g)	Final Empty Dish Weight (g)	Silica Gel Weight (g)	Weight After Drying (g)	Final Weight After Drying (g)	Change Weight (g)	Result in ppm
1	LB137413BL	LB137413BL	WATER	1.3	1000	100	3.1456	3.1456	0	3.1457	3.1457	0.0001	0.1
2	LB137413BS	LB137413BS	WATER	1.3	1000	100	2.7470	2.7470	0	2.7638	2.7638	0.0168	16.8
3	Q3217-01	Outfall 1	WATER	1.3	250	100	3.0434	3.0434	0	3.0451	3.0451	0.0017	6.8
4	Q3218-01	Outfall 1	WATER	1.3	200	100	3.0105	3.0105	0	3.0121	3.0121	0.0016	8
5	Q3218-02	Outfall 2	WATER	1.6	300	100	3.1071	3.1071	0	3.1083	3.1083	0.0012	4
6	Q3218-03	Outfall 3	WATER	1.6	400	100	3.0393	3.0393	0	3.0427	3.0427	0.0034	8.5
7	Q3229-01	MH-9-26-25	WATER	1.6	1000	100	3.0454	3.0454	0	3.2169	3.2169	0.1715	171.5
8	Q3229-02	Q3229-01MS	WATER	1.6	1000	100	3.1305	3.1305	0	3.3222	3.3222	0.1917	191.7
9	Q3229-03	Q3229-01MSD	WATER	1.6	1000	100	2.7411	2.7411	0	2.9329	2.9329	0.1918	191.8
10	Q3234-01	DA-1	WATER	1.3	1000	100	3.0165	3.0165	0	3.0167	3.0167	0.0002	0.2
11	Q3234-02	DA-2	WATER	1.6	1000	100	3.0870	3.0870	0	3.0916	3.0916	0.0046	4.6
12	Q3258-05	OIL-AND-GREASE	WATER	1.6	1000	100	3.0349	3.0349	0	3.0385	3.0385	0.0036	3.6

QC Batch# LB137413

Test: Oil and Grease

Analysis Date: 10/03/2025

Chemicals Used:

Chemical Name	Chemical Lot #
HEXANE	W3240
pH Paper 0-14	M6069
Sodium Sulfate	EP2646
1:1 HCL	WP115016
Silica Gel	NA
Sand	NA

Standards Used:

Standard Name	Amount Used	Standard Lot #
LCSW	2.5 ML	WP115017
LCSWD	NA	N/A
MS/MSD	2.5 ML	WP115018

BALANCE CALIBRATION / OVEN Dessicator Data

Analytical Balance ID # : WC SC-6

Before Analysis

0.0020 gram Balance: 0.0018 (0.0018-0.0022) In OVEN TEMP1 : 71 °C Dessicator Time In1 : 11:11

1.0000 gram Balance: 1.0004 (0.9950-1.0050) In Time1: 10:35

Bal Check Time: 09:10 Out OVEN TEMP1: 70 °C Dessicator Time Out1: 11:50

Out Time1: 11:10

After Analysis

0.0020 gram Balance: 0.0019 (0.0018-0.0022) In OVEN TEMP2 : 71 °C Dessicator Time In2 : 12:46

1.0000 gram Balance: 1.0005 (0.9950-1.0050) In Time2: 12:25

Bal Check Time: 13:15 Out OVEN TEMP2: 71 °C Dessicator Time Out2: 13:10

Out Time2: 12:45

WORKLIST(Hardcopy Internal Chain)

137413

WorkList Name : OIL & GREASE Q2463 WorkList ID : 192266 Department : Wet-Chemistry Date : 10-03-2025 08:39:55

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q3217-01	B Outfall 1	Water	Oil and Grease	1:1 NaOH to pH >12	ATGG01	J42	09/25/2025	1664A
Q3218-01	B Outfall 1	Water	Oil and Grease	1:1 NaOH to pH >12	ATGG01	J33	09/25/2025	1664A
Q3218-02	B Outfall 2	Water	Oil and Grease	1:1 NaOH to pH >12	ATGG01	J33	09/25/2025	1664A
Q3218-03	B Outfall 3	Water	Oil and Grease	1:1 NaOH to pH >12	ATGG01	J33	09/25/2025	1664A
Q3229-01	A MH-9-26-25	Water	Oil and Grease	Conc H2SO4 to pH < 2	EURO03	D31	09/26/2025	1664A
Q3229-02	Q3229-01MS	Water	Oil and Grease	Conc H2SO4 to pH < 2	EURO03	D31	09/26/2025	1664A
Q3229-03	Q3229-01MSD	Water	Oil and Grease	Conc H2SO4 to pH < 2	EURO03	D31	09/26/2025	1664A
Q3234-01	D DA-1	Water	Oil and Grease	Conc H2SO4 to pH < 2	ATGG01	D31	09/29/2025	1664A
Q3234-02	D DA-2	Water	Oil and Grease	Conc H2SO4 to pH < 2	ATGG01	D31	09/29/2025	1664A
Q3258-05	OIL-AND-GREASE	Water	Oil and Grease	Conc H2SO4 to pH < 2	DALT01	D31	09/30/2025	1664A

Date/Time 10/03/25 08:45
 Raw Sample Received by: 16 wlc
 Raw Sample Relinquished by: cd sm

Date/Time 10/03/25 16:30
 Raw Sample Received by: cd sm
 Raw Sample Relinquished by: 16 wlc

661374

Test results

Aquakem 7.2AQ1

Page:

Alliance Technical Group
284 Sheffield Street, Mountainside, NJ 07092Reviewed by : RM

Instrument ID : Konelab

10/3/2025 11:15

Test: Ammonia-N

Sample Id	Result	Dil. 1 +	Response	Errors
ICV1	0.982	0.0	0.215	
ICB1	0.009	0.0	0.026	
CCV1	0.970	0.0	0.212	
CCB1	0.009	0.0	0.026	
RL CHECK	0.093	0.0	0.043	
PB169946BL	0.009	0.0	0.026	
PB169946BS	1.027	0.0	0.223	
Q3254-01	0.019	0.0	0.028	
Q3254-03	11.838	0.0	2.317	Test limit high
Q3254-05	4.803	0.0	0.955	Test limit high
Q3254-07	11.716	0.0	2.293	Test limit high
Q3258-06	0.316	0.0	0.086	
Q3263-01	0.016	0.0	0.028	
Q3263-02	0.010	0.0	0.027	
CCV2	0.968	0.0	0.212	
CCB2	0.011	0.0	0.027	
Q3263-02DUP	0.008	0.0	0.026	
Q3263-02MS	1.038	0.0	0.226	
Q3263-02MSD	1.041	0.0	0.226	
Q3268-01	0.639	0.0	0.148	
CCV3	1.014	0.0	0.221	
CCB3	0.015	0.0	0.028	
Q3254-03DLX10	1.107	0.0	0.239	
Q3254-05DLX5	0.919	0.0	0.202	
Q3254-07DLX10	1.118	0.0	0.241	
CCV4	0.978	0.0	0.214	
CCB4	0.011	0.0	0.027	
N	27			
Mean	1.507			
SD	3.1074			
CV%	206.22			

93% CSO-ISO
10/03/2025
RM

Aquakem v. 7.2AQ1

Results from time period:

Fri Oct 03 09:28:04 2025

Fri Oct 03 11:10:19 2025

Sample Id	Sam/Ctr/c/	Test short r	Test type	Result	Result unit	Result date and time	Stat
0.0PPM	A	Ammonia-† P		0.0099	mg/l	10/3/2025 9:28:04	
0.1PPM	A	Ammonia-† P		0.1173	mg/l	10/3/2025 9:28:05	
0.2PPM	A	Ammonia-† P		0.2087	mg/l	10/3/2025 9:28:06	
0.4PPM	A	Ammonia-† P		0.3836	mg/l	10/3/2025 9:28:07	
1.0PPM	A	Ammonia-† P		0.9767	mg/l	10/3/2025 9:28:08	
1.3PPM	A	Ammonia-† P		1.3053	mg/l	10/3/2025 9:28:09	
2.0PPM	A	Ammonia-† P		2.0319	mg/l	10/3/2025 9:28:10	
ICV1	S	Ammonia-† P		0.9818	mg/l	10/3/2025 10:18:24	
ICB1	S	Ammonia-† P		0.0094	mg/l	10/3/2025 10:18:26	
CCV1	S	Ammonia-† P		0.9696	mg/l	10/3/2025 10:18:29	
CCB1	S	Ammonia-† P		0.0089	mg/l	10/3/2025 10:18:31	
RL CHECK	S	Ammonia-† P		0.0932	mg/l	10/3/2025 10:18:33	
PB169946BL	S	Ammonia-† P		0.0095	mg/l	10/3/2025 10:29:09	
PB169946BS	S	Ammonia-† P		1.0265	mg/l	10/3/2025 10:29:12	
Q3254-01	S	Ammonia-† P		0.0192	mg/l	10/3/2025 10:29:13	
Q3254-03	S	Ammonia-† P		11.8381	mg/l	10/3/2025 10:29:14	
Q3254-05	S	Ammonia-† P		4.8029	mg/l	10/3/2025 10:29:15	
Q3254-07	S	Ammonia-† P		11.716	mg/l	10/3/2025 10:29:16	
Q3258-06	S	Ammonia-† P		0.316	mg/l	10/3/2025 10:29:17	
Q3263-01	S	Ammonia-† P		0.0156	mg/l	10/3/2025 10:29:18	
Q3263-02	S	Ammonia-† P		0.0103	mg/l	10/3/2025 10:29:19	
CCV2	S	Ammonia-† P		0.9675	mg/l	10/3/2025 10:39:53	
CCB2	S	Ammonia-† P		0.0108	mg/l	10/3/2025 10:39:56	
Q3263-02DUP	S	Ammonia-† P		0.0078	mg/l	10/3/2025 10:39:57	
Q3263-02MS	S	Ammonia-† P		1.0379	mg/l	10/3/2025 10:39:59	
Q3263-02MSD	S	Ammonia-† P		1.0414	mg/l	10/3/2025 10:40:00	
Q3268-01	S	Ammonia-† P		0.6394	mg/l	10/3/2025 10:40:01	
CCV3	S	Ammonia-† P		1.0144	mg/l	10/3/2025 10:46:30	
CCB3	S	Ammonia-† P		0.0151	mg/l	10/3/2025 10:46:32	
Q3254-03DLX10	S	Ammonia-† P		1.107	mg/l	10/3/2025 11:10:10	
Q3254-05DLX5	S	Ammonia-† P		0.9186	mg/l	10/3/2025 11:10:13	
Q3254-07DLX10	S	Ammonia-† P		1.1184	mg/l	10/3/2025 11:10:14	
CCV4	S	Ammonia-† P		0.9777	mg/l	10/3/2025 11:10:16	
CCB4	S	Ammonia-† P		0.0106	mg/l	10/3/2025 11:10:18	

Calibration results

Aquakem 7.2AQ1

Page:

Alliance Technical Group

284 Sheffield Street, Mountainside, NJ 07092

Reviewed by : RM

Instrument ID : Konelab

10/3/2025 9:30

Test Ammonia-N

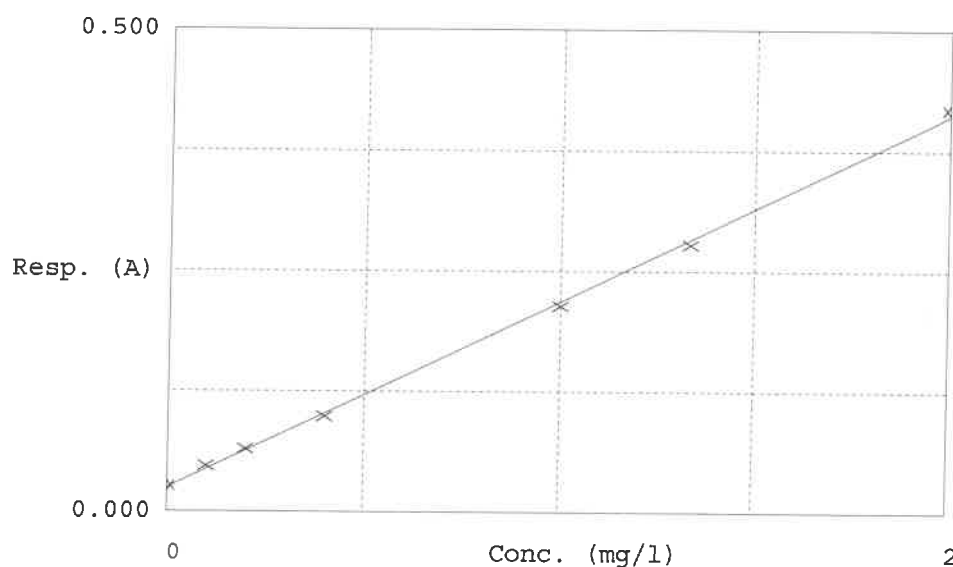
Accepted 10/3/2025 9:30

Factor 5.164

Bias 0.025

Coeff. of det. 0.999084

Errors



	Calibrator	Response	Calc. con.	Conc.	Errors
1	0.00PPM	0.026	0.0099	0.0000	-
2	NH3-2PPM	0.047	0.1173	0.1000	17.3
3	NH3-2PPM	0.065	0.2087	0.2000	4.3
4	NH3-2PPM	0.099	0.3836	0.4000	-4.1
5	NH3-2PPM	0.214	0.9767	1.0000	-2.3
6	NH3-2PPM	0.277	1.3053	1.3333	0.4
7	NH3-2PPM	0.418	2.0319	2.0000	1.6

10/03/2025
RM

TOTAL SUSPENDED SOLIDS - SM2540D

SUPERVISOR: Iwona

ANALYST: jignesh

Date: 10/02/2025

Run Number: LB137419

BalanceID: WC SC-5

OvenID: WC OVEN-1

FilterID: 17416528

ThermometerID: WET OVEN#1

TEMP1 IN: 104 °C 10/02/2025 15:00 TEMP1 OUT: 103 °C 10/02/2025 16:00
 TEMP2 IN: 104 °C 10/02/2025 16:30 TEMP2 OUT: 104 °C 10/02/2025 17:30
 TEMP3 IN: 104 °C 10/03/2025 13:30 TEMP3 OUT: 103 °C 10/03/2025 15:00
 TEMP4 IN: 104 °C 10/03/2025 15:30 TEMP4 OUT: 103 °C 10/03/2025 16:35

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	LB137419BL	LB137419BL	1.4653	1.4653	100	1.4654	1.4654	1.4654	0.0001	1
2	LB137419BS	LB137419BS	1.5309	1.5310	100	1.5841	1.5842	1.5842	0.0532	532
3	Q3254-01	MW-1	1.4832	1.4833	2000	1.4834	1.4835	1.4835	0.0002	0.1
4	Q3254-03	MW-2	1.4842	1.4842	2000	1.5831	1.5831	1.5831	0.0989	49.5
5	Q3254-05	MW-3	1.4897	1.4897	2000	1.5117	1.5117	1.5117	0.0220	11
6	Q3254-07	MW-4	1.4888	1.4888	2000	1.5353	1.5353	1.5353	0.0465	23.3
7	Q3258-06	COMPOSITE	1.4694	1.4695	500	1.4825	1.4826	1.4826	0.0131	26.2
8	Q3260-02	COMP	1.4872	1.4873	100	1.5353	1.5354	1.5354	0.0481	481
9	Q3260-02DUP	COMPDUP	1.4754	1.4755	100	1.5235	1.5235	1.5235	0.0480	480
10	Q3263-01	251818	1.4994	1.4994	2000	1.5042	1.5042	1.5042	0.0048	2.4
11	Q3263-02	266380	1.4947	1.4947	2000	1.4952	1.4952	1.4952	0.0005	0.3

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)

WB 137419

WorkList Name : tss q3263 WorkList ID : 192276 Department : Wet-Chemistry Date : 10-03-2025 11:12:52

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q3254-01	6711 MW-1	Water	TSS	Cool 4 deg C	LOCK01	D31	09/29/2025	SM2540 D
Q3254-03	6711 MW-2	Water	TSS	Cool 4 deg C	LOCK01	D31	09/29/2025	SM2540 D
Q3254-05	6711 MW-3	Water	TSS	Cool 4 deg C	LOCK01	D31	09/29/2025	SM2540 D
Q3254-07	6711 MW-4	Water	TSS	Cool 4 deg C	LOCK01	D31	09/29/2025	SM2540 D
Q3258-06	B COMPOSITE	Water	TSS	Cool 4 deg C	DALT01	D31	09/30/2025	SM2540 D
Q3260-02	A COMP	Water	TSS	Cool 4 deg C	ARAM01	D31	10/01/2025	SM2540 D
Q3263-01	6712-251818	Water	TSS	Cool 4 deg C	PSEG03	D31	10/01/2025	SM2540 D
Q3263-02	6712 266380	Water	TSS	Cool 4 deg C	PSEG03	D31	10/01/2025	SM2540 D

Date/Time 10/03/25 11:30
 Raw Sample Received by: JH WBC
 Raw Sample Relinquished by: JH WBC

Date/Time 10/03/25 17:00
 Raw Sample Received by: JH WBC
 Raw Sample Relinquished by: JH WBC

LB13743

Test results

Aquakem 7.2AQ1

Page: 1

Alliance Technical Group
284 Sheffield Street, Mountainside, NJ 07092

Reviewed by : RM

Instrument ID : Konelab

10/6/2025 14:54

Test: Total CN

Sample Id	Result	Dil. 1 +	Response	Errors
ICV1	95.404	0.0	0.084	
ICB1	0.529	0.0	0.001	
CCV1	240.797	0.0	0.212	
CCB1	0.363	0.0	0.001	
RL CHECK	5.266	0.0	0.005	
PB169962BL	0.096	0.0	0.001	
PB169962BS	96.246	0.0	0.085	
MIDPB169962	240.808	0.0	0.212	
Q3258-01	245.338	0.0	0.216	
Q3258-01DUP	243.665	0.0	0.215	
Q3258-02MS	282.012	0.0	0.248	
Q3258-03MSD	281.906	0.0	0.248	
Q3258-04	2.433	0.0	0.003	
Q3267-01	0.491	0.0	0.001	
CCV2	240.656	0.0	0.212	
CCB2	0.108	0.0	0.001	

105% (50-150)

96% (90-110)

10/06/2025

RM

N	16
Mean	123.507
SD	122.9600
CV%	99.56

Aquakem v. 7.2AQ1

Results from time period:

Mon Oct 06 14:36:09 2025

Mon Oct 06 14:54:04 2025

Sample Id	Sam/Ctr/c/	Test short r	Test type	Result	Result unit	Result date and time	Stat
0.0PPBCN	A	Total CN	P	-0.1146	µg/l	10/6/2025 11:48:33	
5.0PPBCN	A	Total CN	P	5.1765	µg/l	10/6/2025 11:48:34	
10PPBCN	A	Total CN	P	10.0597	µg/l	10/6/2025 11:48:35	
50PPBCN	A	Total CN	P	48.076	µg/l	10/6/2025 11:48:36	
100PPBCN	A	Total CN	P	101.2694	µg/l	10/6/2025 11:48:37	
250PPBCN	A	Total CN	P	251.1949	µg/l	10/6/2025 11:48:38	
500PPBCN	A	Total CN	P	499.3381	µg/l	10/6/2025 11:48:39	
ICV1	S	Total CN	P	95.4036	µg/l	10/6/2025 14:36:10	
ICB1	S	Total CN	P	0.5289	µg/l	10/6/2025 14:36:12	
CCV1	S	Total CN	P	240.7973	µg/l	10/6/2025 14:36:14	
CCB1	S	Total CN	P	0.3632	µg/l	10/6/2025 14:36:16	
RL CHECK	S	Total CN	P	5.2656	µg/l	10/6/2025 14:36:17	
PB169962BL	S	Total CN	P	0.0959	µg/l	10/6/2025 14:43:42	
PB169962BS	S	Total CN	P	96.2458	µg/l	10/6/2025 14:43:44	
MIDPB169962	S	Total CN	P	240.8082	µg/l	10/6/2025 14:43:46	
Q3258-01	S	Total CN	P	245.3385	µg/l	10/6/2025 14:43:48	
Q3258-01DUP	S	Total CN	P	243.6653	µg/l	10/6/2025 14:43:51	
Q3258-02MS	S	Total CN	P	282.0124	µg/l	10/6/2025 14:51:18	
Q3258-03MSD	S	Total CN	P	281.9064	µg/l	10/6/2025 14:51:19	
Q3258-04	S	Total CN	P	2.4328	µg/l	10/6/2025 14:51:20	
Q3267-01	S	Total CN	P	0.4914	µg/l	10/6/2025 14:51:21	
CCV2	S	Total CN	P	240.6565	µg/l	10/6/2025 14:51:24	
CCB2	S	Total CN	P	0.1076	µg/l	10/6/2025 14:51:26	

Calibration results

Aquakem 7.2AQ1

Page: 1

Alliance Technical Group
284 Sheffield Street, Mountainside, NJ 07092

Reviewed by : RM Instrument ID : Konelab

10/6/2025 11:49

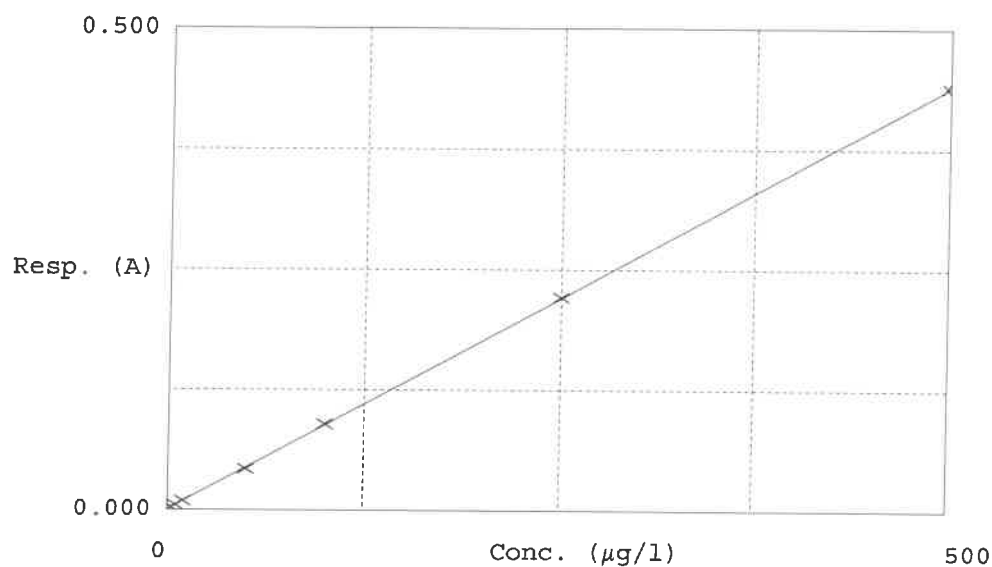
Test Total CN

Accepted 10/6/2025 11:49

Factor 1138
Bias 0.001

Coeff. of det. 0.999965

Errors



	Calibrator	Response	Calc. con.	Conc.	^R Errors
1	0.0PPBCN	0.001	-0.1146	0.0000	-
2	5.0PPBCN	0.005	5.1765	5.0000	3.5
3	10PPBCN	0.009	10.0597	10.0000	0.6
4	50PPBCN	0.043	48.0760	50.0000	-3.8
5	100PPBCN	0.090	101.2694	100.0000	1.3
6	250PPBCN	0.221	251.1949	250.0000	0.5
7	500PPBCN	0.439	499.3381	500.0000	-0.1

10/06/2025
RM

Analytical Summary Report

Analysis Method: 365.3
Parameter: Phosphorus-Total
Run Number: LB137481

ANALYST: Iwona
SUPERVISOR REVIEW BY: jignesh

Reagent/Standard	Lot/Log #
calibration std. phosphate 1 ppm	WP115114
calibration std. phosphate 0.5 ppm	WP115113
calibration std. phosphate 0.3 ppm	WP115112
calibration std. phosphate 0.1 ppm	WP115111
calibration std. phosphate 0.05 ppm	WP115110
calibration std. 0 ppm	WP115109
phosphate CCV std.	WP115115
5N sulfuric acid	WP112831
Combined reagent	WP115119
Phenolphthalein indicator	WP113378
Sodium hydroxide, 1N	WP113878
Phosphate ICV-LCS Std	WP115116

Intercept: -0.0024 Slope: 0.6536 Regression: 0.999817

Seq	Lab ID	True Value (mg/L)	DF	Initial Volume (mL)	Final Volume (mL)	Absorbance Reading at 880nm	Result (mg/L)	%D	AnalDate	AnalTime
1	CAL1	0.00	1	50	50	0.000	0.004		10/09/2025	13:20
2	CAL2	0.05	1	50	50	0.032	0.053	6	10/09/2025	13:20
3	CAL3	0.10	1	50	50	0.065	0.103	3	10/09/2025	13:21
4	CAL4	0.30	1	50	50	0.184	0.285	-5	10/09/2025	13:21
5	CAL5	0.50	1	50	50	0.326	0.502	0.4	10/09/2025	13:22
6	CAL6	1.00	1	50	50	0.653	1.003	0.3	10/09/2025	13:22

Analytical Summary Report

Analysis Method: 365.3

ANALYST: Iwona

Parameter: Phosphorus-Total

SUPERVISOR REVIEW BY: jignesh

Run Number: LB137481

Seq	Lab ID	True Value (mg/l)	DF	Initial Volume (mL)	Final Volume (mL)	Absorbance Reading at 880nm	Result (mg/L)	AnalDate	AnalTime
1	ICV	0.50	1	50	50	0.317	0.489	10/09/2025	13:23
2	ICB		1	50	50	0.003	0.008	10/09/2025	13:23
3	CCV1	0.50	1	50	50	0.328	0.506	10/09/2025	13:24
4	CCB1		1	50	50	0.002	0.007	10/09/2025	13:24
5	RL Check	0.05	1	50	50	0.014	0.025	10/09/2025	13:25
6	PB170046BL		1	50	50	0.002	0.007	10/09/2025	13:25
7	PB170046BS	0.50	1	50	50	0.314	0.484	10/09/2025	13:26
8	Q3234-01		1	50	50	0.026	0.043	10/09/2025	13:26
9	Q3234-01DUP		1	50	50	0.025	0.042	10/09/2025	13:27
10	Q3234-01MS	0.50	1	50	50	0.328	0.506	10/09/2025	13:27
11	Q3234-01MSD	0.50	1	50	50	0.325	0.501	10/09/2025	13:28
12	Q3234-02		1	50	50	0.144	0.224	10/09/2025	13:28
13	Q3258-06		1	50	50	0.011	0.021	10/09/2025	13:29
14	CCV2	0.50	1	50	50	0.326	0.502	10/09/2025	13:29
15	CCB2		1	50	50	0.001	0.005	10/09/2025	13:30

LB137517

Test results

Aquakem 7.2AQ1

Page:

Alliance Technical Group

284 Sheffield Street, Mountainside, NJ 07092

Reviewed by : RM

Instrument ID : Konelab

10/14/2025 11:18

Test: Total CN

Sample Id	Result	Dil. 1 +	Response	Errors
ICV1	95.907	0.0	0.087	
ICB1	0.629	0.0	0.001	
CCV1	236.260	0.0	0.213	
CCB1	0.777	0.0	0.001	
RL CHECK	4.649	0.0	0.004	
PB170085BL	0.497	0.0	0.001	
PB170085BS	96.548	0.0	0.087	
MIDPB170085	238.203	0.0	0.215	
Q3258-08	3.336	0.0	0.003	
Q3258-08DUP	3.381	0.0	0.003	
Q3258-09	3.519	0.0	0.003	
CCV2	244.830	0.0	0.220	
CCB2	0.872	0.0	0.001	

93% (50-150)

10/14/2025

RM

95% (90-110)

N	13
Mean	71.493
SD	101.9123
CV%	142.55

Aquakem v. 7.2AQ1

Results from time period:

Tue Oct 14 10:44:54 2025

Tue Oct 14 11:18:09 2025

Sample Id	Sam/Ctr/c/	Test short r	Test type	Result	Result unit	Result date and time	Stat
0.0PPBCN	A	Total CN	P	0.2291	µg/l	10/14/2025 9:13:26	
5.0PPBCN	A	Total CN	P	5.3249	µg/l	10/14/2025 9:13:27	
10PPBCN	A	Total CN	P	10.1874	µg/l	10/14/2025 9:13:28	
50PPBCN	A	Total CN	P	48.0572	µg/l	10/14/2025 9:13:29	
100PPBCN	A	Total CN	P	102.1669	µg/l	10/14/2025 9:13:30	
250PPBCN	A	Total CN	P	248.5611	µg/l	10/14/2025 9:13:31	
500PPBCN	A	Total CN	P	500.4734	µg/l	10/14/2025 9:13:32	
ICV1	S	Total CN	P	95.9068	µg/l	10/14/2025 10:44:54	
ICB1	S	Total CN	P	0.6288	µg/l	10/14/2025 10:44:56	
CCV1	S	Total CN	P	236.2605	µg/l	10/14/2025 10:44:59	
CCB1	S	Total CN	P	0.7775	µg/l	10/14/2025 10:45:01	
RL CHECK	S	Total CN	P	4.6494	µg/l	10/14/2025 10:52:29	
PB170085BL	S	Total CN	P	0.4973	µg/l	10/14/2025 10:52:30	
PB170085BS	S	Total CN	P	96.5475	µg/l	10/14/2025 10:52:33	
MIDPB170085	S	Total CN	P	238.2027	µg/l	10/14/2025 10:52:35	
Q3258-08	S	Total CN	P	3.3358	µg/l	10/14/2025 11:18:02	
Q3258-08DUP	S	Total CN	P	3.381	µg/l	10/14/2025 11:18:04	
Q3258-09	S	Total CN	P	3.5186	µg/l	10/14/2025 11:18:06	
CCV2	S	Total CN	P	244.8302	µg/l	10/14/2025 11:18:08	
CCB2	S	Total CN	P	0.8723	µg/l	10/14/2025 11:18:09	

Calibration results

Aquakem 7.2AQ1

Page:

Alliance Technical Group

284 Sheffield Street, Mountainside, NJ 07092

Reviewed by : RM

Instrument ID : Konelab

10/14/2025 9:13

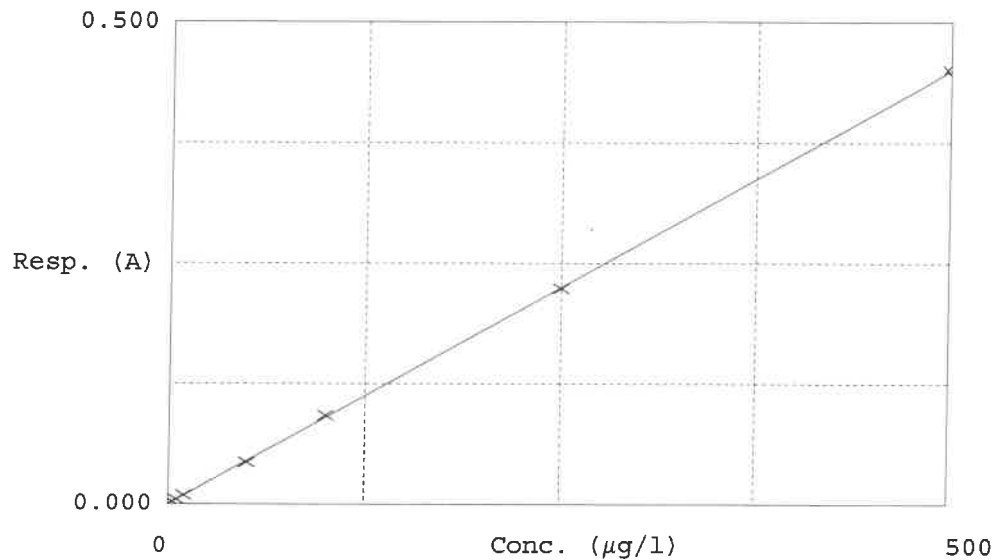
Test Total CN

Accepted 10/14/2025 9:13

Factor 1112
 Bias 0

Coeff. of det. 0.999947

Errors



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

10/14/2025
 RM

SOP ID : MSM4500-NH3 B,G-Ammonia-18

SDG No : N/A

Start Digest Date: 10/02/2025 Time : 14:10 Temp : 150 °C

Matrix : WATER

End Digest Date: 10/02/2025 Time : 15:10 Temp : 160 °C

Pipette ID : WC

π batch
10/02/2025 15:45 150°C
10/02/2025 16:45 160°C

Balance ID : N/A

Hood ID : HOOD#2

Digestion tube ID : M5595

Block Thermometer ID : WC CYANIDE

Block ID : WC-DIST-BLOCK-1

Filter paper ID : N/A

Prep Technician Signature:

RH

Weigh By : N/A

pH Meter ID : N/A

Supervisor Signature:

12

Standard Name	MLS USED	STD REF. # FROM LOG
LCSW	1.0ML	WP114786
MS/MSD SPIKE SOL.	1.0ML	WP114785
PBW	50.0ML	W3112
RL CHECK	0.1ML	WP114785
N/A	N/A	N/A

Chemical Used	ML/SAMPLE USED	Lot Number
BORATE BUFFER	2.5ML	WP113886
NAOH 6N	0.5-2.0ML	WP113887
H2SO4 0.04N	5.0ML	WP112828
pH strip-Ammonia	N/A	W3133
KI-starch paper	N/A	W3155
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A

Extraction Conformance/Non-Conformance Comments:

ALL GLASSWEAR ARE STEAMED OUT AND THERE WERE NO TRACE OF AMMONIA USING NESLER REAGENT
WP114104,

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
10/02/2025 17:00	<i>RH (WC)</i>	<i>RH (WC)</i>
	Preparation Group	Analysis Group

Lab Sample ID	Client Sample ID	Initial Vol (ml)	Final Vol (ml)	pH	Sulfide	Oxidizing	Nitrate/ Nitrite	Comment	Prep Pos
PB169946BL	PBW946	50	50	<2	N/A	Negative	N/A	AFTER ADDING 6N NAOH PH IS 9.5	N/A
PB169946BS	LCS946	50	50	<2	N/A	Negative	N/A	AFTER ADDING 6N NAOH PH IS 9.5	N/A
Q3254-01	MW-1	50	50	<2	N/A	Negative	N/A	AFTER ADDING 6N NAOH PH IS 9.5	N/A
Q3254-03	MW-2	50	50	<2	N/A	Negative	N/A	AFTER ADDING 6N NAOH PH IS 9.5	N/A
Q3254-05	MW-3	50	50	<2	N/A	Negative	N/A	AFTER ADDING 6N NAOH PH IS 9.5	N/A
Q3254-07	MW-4	50	50	<2	N/A	Negative	N/A	AFTER ADDING 6N NAOH PH IS 9.5	N/A
Q3258-06	COMPOSITE	50	50	<2	N/A	Negative	N/A	AFTER ADDING 6N NAOH PH IS 9.5	N/A
Q3263-01	251818	50	50	<2	N/A	Negative	N/A	AFTER ADDING 6N NAOH PH IS 9.5	N/A
Q3263-02	266380	50	50	<2	N/A	Negative	N/A	AFTER ADDING 6N NAOH PH IS 9.5	N/A
Q3263-02DUP	266380DUP	50	50	<2	N/A	Negative	N/A	AFTER ADDING 6N NAOH PH IS 9.5	N/A
Q3263-02MS	266380MS	50	50	<2	N/A	Negative	N/A	AFTER ADDING 6N NAOH PH IS 9.5	N/A
Q3263-02MSD	266380MSD	50	50	<2	N/A	Negative	N/A	AFTER ADDING 6N NAOH PH IS 9.5	N/A
Q3268-01	WATER-TREATMENT-DISCHARGE	50	50	<2	N/A	Negative	N/A	AFTER ADDING 6N NAOH PH IS 9.5	N/A

WORKLIST(Hardcopy Internal Chain)

WorkList Name : ammonia-10-01 WorkList ID : 192223 Department : Distillation Date : 10-01-2025 15:47:51

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q3254-01	MW-1	Water	Ammonia	Conc H2SO4 to pH < 2	LOCK01	D31	09/29/2025	SM4500-NH3
Q3254-03	MW-2	Water	Ammonia	Conc H2SO4 to pH < 2	LOCK01	D31	09/29/2025	SM4500-NH3
Q3254-05	MW-3	Water	Ammonia	Conc H2SO4 to pH < 2	LOCK01	D31	09/29/2025	SM4500-NH3
Q3254-07	MW-4	Water	Ammonia	Conc H2SO4 to pH < 2	LOCK01	D31	09/29/2025	SM4500-NH3
Q3258-06	COMPOSITE	Water	Ammonia	Conc H2SO4 to pH < 2	DALT01	D31	09/30/2025	SM4500-NH3
Q3263-01	251818	Water	Ammonia	Conc H2SO4 to pH < 2	PSEG03	D31	10/01/2025	SM4500-NH3
Q3263-02	266380	Water	Ammonia	Conc H2SO4 to pH < 2	PSEG03	D31	10/01/2025	SM4500-NH3

Date/Time 10/02/2025 08:10
 Raw Sample Received by: RHCW
 Raw Sample Relinquished by: JF (0801)

Date/Time 10/02/2025 16:00
 Raw Sample Received by: JF (0801)
 Raw Sample Relinquished by: RHCW

WORKLIST(Hardcopy Internal Chain)

WorkList Name : ammonia-3268

WorkList ID : 192256

Department : Distillation

Date : 10-02-2025 13:03:07

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q3268-01	WATER-TREATMENT-DISCHA	Water	Ammonia	Conc H2SO4 to pH < 2	VERI01	D31	10/02/2025	SM4500-NH3

Date/Time 10/02/2025 14:30
 Raw Sample Received by: RH CWG
 Raw Sample Relinquished by: afwcl

Date/Time 10/02/2025 16:00
 Raw Sample Received by: afwcl
 Raw Sample Relinquished by: RH CWG

SOP ID : MSM4500-CN C,E-Cyanide-13

SDG No : N/A

Start Digest Date: 10/06/2025 Time : 11:05 Temp : 123 °C

Matrix : WATER

End Digest Date: 10/06/2025 Time : 12:35 Temp : 127 °C

Pipette ID : WC

Balance ID : N/A

Hood ID : HOOD#1

Digestion tube ID : M5595

Block Thermometer ID : WC CYANIDE

Block ID : MC-1,MC-2

Filter paper ID : N/A

Prep Technician Signature: 

Weigh By : N/A

pH Meter ID : N/A

Supervisor Signature: 12

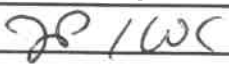
Standard Name	MLS USED	STD REF. # FROM LOG
LCSW	1.0ML	WP113838
MS/MSD SPIKE SOL.	0.40ML	WP113837
PBW	50.0ML	W3112
RL CHECK	50.0ML	WP115062
N/A	N/A	N/A

Chemical Used	ML/SAMPLE USED	Lot Number
0.25N NaOH	50.0ML	WP113836
50% v/v H2SO4	5.0ML	WP112826
51% w/v MgCL2	2.0ML	WP112827
pH Paper 0-14	N/A	W3215
Nitrate/Nitrite Strip	N/A	W3182
Lead Acetate strip	N/A	W3134
KI-starch paper	N/A	W3155
0.4N Sulfamic Acid	5.ML	WP112829
N/A	N/A	N/A
N/A	N/A	N/A

LAB SAMPLE ID	CLIENT SAMPLE ID	Wt(g)/Vol(ml)	Comment
S0	S0	N/A	N/A
S5.0	S5.0	N/A	N/A
S10.0	S10.0	N/A	N/A
S100.0	S100.0	N/A	N/A
S250.0	S250.0	N/A	N/A
S500.0	S500.0	N/A	N/A
ICV	ICV	0.5ML	W3012
ICB	ICB	N/A	N/A
CCV	CCV	N/A	N/A
CCB	CCB	N/A	N/A
Midrange	Midrange	2.5ML	WP113837
HIGHSTD	HIGHSTD	N/A	N/A
LOWSTD	LOWSTD	N/A	N/A

Extraction Conformance/Non-Conformance Comments:

N/A

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
10/06/2025 12:50	 / WC	RM CWG
	Preparation Group	Analysis Group

Lab Sample ID	Client Sample ID	Initial Vol (ml)	Final Vol (ml)	pH	Sulfide	Oxidizing	Nitrate/ Nitrite	Comment	Prep Pos
PB169962BL	PBW962	50	50	>12	Negative	Negative	Negative	N/A	N/A
PB169962BS	LCS962	50	50	>12	Negative	Negative	Negative	N/A	N/A
Q3258-01DUP	MONTHLY-CYANIDE DUP	50	50	>12	Negative	Negative	Negative	N/A	N/A
Q3258-01	MONTHLY-CYANIDE	50	50	>12	Negative	Negative	Negative	N/A	N/A
Q3258-02	Q3258-01MS	50	50	>12	Negative	Negative	Negative	N/A	N/A
Q3258-03	Q3258-01MSD	50	50	>12	Negative	Negative	Negative	N/A	N/A
Q3258-04	ADDITIONAL-CYANIDE-3	50	50	>12	Negative	Negative	Negative	N/A	N/A
Q3267-01	Q4	50	50	>12	Negative	Negative	Positive	N/A	N/A

WORKLIST(Hardcopy Internal Chain)

WorkList Name : cn-10-06

WorkList ID : 192302

Department : Distillation

Date : 10-06-2025 07:42:42

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q3258-01	MONTHLY-CYANIDE	Water	Cyanide	Cool 4 deg C	DALT01	D31	09/29/2025	SM4500-CN C
Q3258-02	Q3258-01MS	Water	Cyanide	Cool 4 deg C	DALT01	D31	09/29/2025	SM4500-CN C
Q3258-03	Q3258-01MSD	Water	Cyanide	Cool 4 deg C	DALT01	D31	09/29/2025	SM4500-CN C
Q3258-04	ADDITIONAL-CYANIDE-3	Water	Cyanide	Cool 4 deg C	DALT01	D31	09/30/2025	SM4500-CN C
Q3267-01	Q4	Water	Cyanide	1:1 NaOH to pH >12	METE01	D31	10/01/2025	SM4500-CN C

Date/Time 10/06/2025 10:04
Raw Sample Received by: SPM
Raw Sample Relinquished by: SPM

Date/Time 10/06/2025 11:45
Raw Sample Received by: SPM
Raw Sample Relinquished by: SPM

SOP ID : M365.3 & SM4500-P E-19

SDG No : N/A

Start Digest Date: 10/09/2025 Time : 09:40 Temp : 94 °C

Matrix : WATER

End Digest Date: 10/09/2025 Time : 10:40 Temp : 96 °C

Pipette ID : WC

Balance ID : N/A

Hood ID : HOOD#3

Digestion tube ID : M5595

Block Thermometer ID : WC-BLOCK#1

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

Filter paper ID : 400213

Prep Technician Signature: 12

Weigh By : N/A

pH Meter ID : N/A

Supervisor Signature:

Standardized Name	MLS USED	STD REF. # FROM LOG
LCSW	0.5ML	WP112914
MS/MSD SPIKE SOL.	0.5ML	WP112913
PBW	50.ML	W3112
RL CHECK	50.0ML	WP115117
N/A	N/A	N/A

Chemical Used	ML/SAMPLE USED	Lot Number
11N H2SO4	1ML	WP112615
AMMONIUM PERSULFATE	0.4g	W3035
pH Paper 0-14	N/A	W3241
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A

LAB SAMPLE ID	CLIENT SAMPLE ID	Wt(g)/Vol(ml)	Comment
CAL1	CAL1	50.0ML	WP115109
CAL2	CAL2	50.0ML	WP115110
CAL3	CAL3	50.0ML	WP115111
CAL4	CAL4	50.0ML	WP115112
CAL5	CAL5	50.0ML	WP115113
CAL6	CAL6	50.0ML	WP115114
ICV	ICV	50.0ML	WP115116
ICB	ICB	50.0ML	W3112
CCV	CCV	50.0ML	WP115115
CCB	CCB	50.0ML	W3112

Extraction Conformance/Non-Conformance Comments:

N/A

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

12

10/9/25

Lab Sample ID	Client Sample ID	Initial Vol (ml)	Final Vol (ml)	pH	Sulfide	Oxidizing	Nitrate/ Nitrite	Comment	Prep Pos
PB170046BL	PBW046	50	50	<2	N/A	N/A	N/A	N/A	N/A
PB170046BS	LCS046	50	50	<2	N/A	N/A	N/A	N/A	N/A
Q3234-01	DA-1	50	50	<2	N/A	N/A	N/A	N/A	N/A
Q3234-01DUP	DA-1DUP	50	50	<2	N/A	N/A	N/A	N/A	N/A
Q3234-01MS	DA-1MS	50	50	<2	N/A	N/A	N/A	N/A	N/A
Q3234-01MSD	DA-1MSD	50	50	<2	N/A	N/A	N/A	N/A	N/A
Q3234-02	DA-2	50	50	<2	N/A	N/A	N/A	N/A	N/A
Q3258-06	COMPOSITE	50	50	<2	N/A	N/A	N/A	N/A	N/A

WORKLIST(Hardcopy Internal Chain)

WorkList Name : TotalPhos-100925

WorkList ID : 192372

Department : Distillation

Date : 10-09-2025 09:13:19

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q3234-01	DA-1	Water	Phosphorus-Total	Conc H2SO4 to pH < 2	ATGG01	D31	09/29/2025	365.3
Q3234-02	DA-2	Water	Phosphorus-Total	Conc H2SO4 to pH < 2	ATGG01	D31	09/29/2025	365.3
Q3258-06	COMPOSITE	Water	Phosphorus-Total	Cool 4 deg C	DALT01	D31	09/30/2025	365.3

Date/Time 10/09/25 09:20
 Raw Sample Received by: 12(usr)
 Raw Sample Relinquished by: [Signature]

Date/Time 10/09/25 10:15
 Raw Sample Received by: [Signature]
 Raw Sample Relinquished by: 12(usr)

SOP ID : MSM4500-CN C,E-Cyanide-13

SDG No : N/A

Start Digest Date: 10/14/2025 Time : 08:30 Temp : 123 °C

Matrix : WATER

End Digest Date: 10/14/2025 Time : 10:00 Temp : 126 °C

Pipette ID : WC

Balance ID : N/A

Hood ID : HOOD#1

Digestion tube ID : M5595

Block Thermometer ID : WC CYANIDE

Block ID : MC-1

Filter paper ID : N/A

Prep Technician Signature: 

Weigh By : N/A

pH Meter ID : N/A

Supervisor Signature: 12

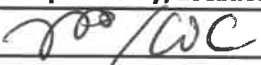
Standardized Name	MLS USED	STD REF. # FROM LOG
LCSW	1.0ML	WP113838
PBW	50.0ML	W3112
RL CHECK	50.0ML	WP115175
N/A	N/A	N/A
N/A	N/A	N/A

Chemical Used	ML/SAMPLE USED	Lot Number
0.25N NaOH	50.0ML	WP113836
50% v/v H2SO4	5.0ML	WP112826
51% w/v MgCL2	2.0ML	WP112827
pH Paper 0-14	N/A	W3241
Nitrate/Nitrite Strip	N/A	W3182
Lead Acetate strip	N/A	W3134
KI-starch paper	N/A	W3155
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A

LAB SAMPLE ID	CLIENT SAMPLE ID	Wt(g)/Vol(ml)	Comment
S0	S0	N/A	N/A
S5.0	S5.0	N/A	N/A
S10.0	S10.0	N/A	N/A
S100.0	S100.0	N/A	N/A
S250.0	S250.0	N/A	N/A
S500.0	S500.0	N/A	N/A
ICV	ICV	0.5ML	W3012
ICB	ICB	N/A	N/A
CCV	CCV	N/A	N/A
CCB	CCB	N/A	N/A
Midrange	Midrange	2.5ML	WP113837
HIGHSTD	HIGHSTD	N/A	N/A
LOWSTD	LOWSTD	N/A	N/A

Extraction Conformance/Non-Conformance Comments:

N/A

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
10/14/2025 10:15		RM (WC)
	Preparation Group	Analysis Group

Lab Sample ID	Client Sample ID	Initial Vol (ml)	Final Vol (ml)	pH	Sulfide	Oxidizing	Nitrate/ Nitrite	Comment	Prep Pos
PB170085BL	PBW085	50	50	>12	Negative	Negative	Negative	N/A	N/A
PB170085BS	LCS085	50	50	>12	Negative	Negative	Negative	N/A	N/A
Q3258-08DUP	ADDITIONAL-CYANIDE-1DUP	50	50	>12	Negative	Negative	Negative	N/A	N/A
Q3258-08	ADDITIONAL-CYANIDE-1	50	50	>12	Negative	Negative	Negative	N/A	N/A
Q3258-09	ADDITIONAL-CYANIDE-2	50	50	>12	Negative	Negative	Negative	N/A	N/A

Instrument ID: SPECTROPHOTOMETER-1

Daily Analysis Runlog For Sequence/QC Batch ID # LB137386

Review By	rubina	Review On	10/1/2025 2:51:36 PM
Supervise By	Iwona	Supervise On	10/1/2025 3:19:04 PM
SubDirectory	LB137386	Test	Hexavalent Chromium
STD. NAME	STD REF.#		
ICAL Standard	N/A		
ICV Standard	N/A		
CCV Standard	N/A		
ICSA Standard	N/A		
CRI Standard	N/A		
LCS Standard	N/A		
Chk Standard	WP115000,WP114999,WP114997,WP114996,WP114995,WP112831,WP114998,WP115003,WP115001,WP115002		

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	CAL1	CAL1	CAL	10/01/25 12:40		rubina	OK
2	CAL2	CAL2	CAL	10/01/25 12:40		rubina	OK
3	CAL3	CAL3	CAL	10/01/25 12:41		rubina	OK
4	CAL4	CAL4	CAL	10/01/25 12:41		rubina	OK
5	CAL5	CAL5	CAL	10/01/25 12:42		rubina	OK
6	CAL6	CAL6	CAL	10/01/25 12:42		rubina	OK
7	CAL7	CAL7	CAL	10/01/25 12:43		rubina	OK
8	ICV	ICV	ICV	10/01/25 12:43		rubina	OK
9	ICB	ICB	ICB	10/01/25 12:44		rubina	OK
10	CCV1	CCV1	CCV	10/01/25 12:44		rubina	OK
11	CCB1	CCB1	CCB	10/01/25 12:45		rubina	OK
12	RL Check	RL Check	RL	10/01/25 12:45		rubina	OK
13	LB137386BL	LB137386BL	MB	10/01/25 12:46		rubina	OK
14	LB137386BS	LB137386BS	LCS	10/01/25 12:46		rubina	OK
15	Q3258-06	COMPOSITE	SAM	10/01/25 12:47		rubina	OK
16	CCV2	CCV2	CCV	10/01/25 12:47		rubina	OK
17	CCB2	CCB2	CCB	10/01/25 12:48		rubina	OK

Instrument ID: DO METER

Daily Analysis Runlog For Sequence/QC Batch ID # LB137388

Review By	rubina	Review On	10/6/2025 1:32:19 PM
Supervise By	Iwona	Supervise On	10/6/2025 1:45:50 PM
SubDirectory	LB137388	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	WP114992,W3149,W314992,W3103,W3109,W3105,W3105,WP114994,WP114993,WP113878		

Sr#	SampleID	ClientID	QcType	Date	Comment	Operator	Status
1	LB137388BL	LB137388BL	MB	10/01/25 17:40		rubina	OK
2	LB137388BS	LB137388BS	LCS	10/01/25 17:40		rubina	OK
3	Q3258-06	COMPOSITE	SAM	10/01/25 17:40		rubina	OK
4	Q3260-02	COMP	SAM	10/01/25 17:40	Due to bad matrix difference between highest and lowest results is >30% for	rubina	OK
5	Q3260-02DUP	COMPDUP	DUP	10/01/25 17:40	Due to bad matrix difference between highest and lowest results is >30% for	rubina	OK
6	Q3263-01	251818	SAM	10/01/25 17:40		rubina	OK
7	Q3263-02	266380	SAM	10/01/25 17:40		rubina	OK

Instrument ID: WC SC-3

Daily Analysis Runlog For Sequence/QC Batch ID # LB137413

Review By	jignesh	Review On	10/3/2025 2:03:03 PM
Supervise By	Iwona	Supervise On	10/3/2025 2:37:50 PM
SubDirectory	LB137413	Test	Oil and Grease
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	W3240,M6069,EP2646,WP115016,NA,NA,WP115017,N/A,WP115018		

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	LB137413BL	LB137413BL	MB	10/03/25 10:35		jignesh	OK
2	LB137413BS	LB137413BS	LCS	10/03/25 10:35		jignesh	OK
3	Q3217-01	Outfall 1	SAM	10/03/25 10:35		jignesh	OK
4	Q3218-01	Outfall 1	SAM	10/03/25 10:35		jignesh	OK
5	Q3218-02	Outfall 2	SAM	10/03/25 10:35		jignesh	OK
6	Q3218-03	Outfall 3	SAM	10/03/25 10:35		jignesh	OK
7	Q3229-01	MH-9-26-25	SAM	10/03/25 10:35		jignesh	OK
8	Q3229-02	Q3229-01MS	MS	10/03/25 10:35		jignesh	OK
9	Q3229-03	Q3229-01MSD	MSD	10/03/25 10:35		jignesh	OK
10	Q3234-01	DA-1	SAM	10/03/25 10:35		jignesh	OK
11	Q3234-02	DA-2	SAM	10/03/25 10:35		jignesh	OK
12	Q3258-05	OIL-AND-GREASE	SAM	10/03/25 10:35		jignesh	OK

Instrument ID: KONELAB

Daily Analysis Runlog For Sequence/QC Batch ID # LB137417

Review By	rubina	Review On	10/3/2025 1:41:40 PM
Supervise By	Iwona	Supervise On	10/3/2025 4:37:40 PM
SubDirectory	LB137417	Test	Ammonia
STD. NAME	STD REF.#		
ICAL Standard	WP115036		
ICV Standard	WP115038		
CCV Standard	WP115037		
ICSA Standard	N/A		
CRI Standard	N/A		
LCS Standard	WP114786		
Chk Standard	WP114799,WP114133,WP113929,WP114132		

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	0.0PPM	0.0PPM	CAL1	10/03/25 09:28		rubina	OK
2	0.1PPM	0.1PPM	CAL2	10/03/25 09:28		rubina	OK
3	0.2PPM	0.2PPM	CAL3	10/03/25 09:28		rubina	OK
4	0.4PPM	0.4PPM	CAL4	10/03/25 09:28		rubina	OK
5	1.0PPM	1.0PPM	CAL5	10/03/25 09:28		rubina	OK
6	1.3PPM	1.3PPM	CAL6	10/03/25 09:28		rubina	OK
7	2.0PPM	2.0PPM	CAL7	10/03/25 09:28		rubina	OK
8	ICV1	ICV1	ICV	10/03/25 10:18		rubina	OK
9	ICB1	ICB1	ICB	10/03/25 10:18		rubina	OK
10	CCV1	CCV1	CCV	10/03/25 10:18		rubina	OK
11	CCB1	CCB1	CCB	10/03/25 10:18		rubina	OK
12	RL	RL	LOQ	10/03/25 10:18		rubina	OK
13	PB169946BL	PB169946BL	MB	10/03/25 10:29		rubina	OK
14	PB169946BS	PB169946BS	LCS	10/03/25 10:29		rubina	OK
15	Q3254-01	MW-1	SAM	10/03/25 10:29		rubina	OK
16	Q3254-03	MW-2	SAM	10/03/25 10:29	NH3 is high , need dilution	rubina	Dilution
17	Q3254-05	MW-3	SAM	10/03/25 10:29	NH3 is high , need dilution	rubina	Dilution
18	Q3254-07	MW-4	SAM	10/03/25 10:29	NH3 is high , need dilution	rubina	Dilution

Instrument ID: KONELAB

Daily Analysis Runlog For Sequence/QC Batch ID # LB137417

Review By	rubina	Review On	10/3/2025 1:41:40 PM
Supervise By	Iwona	Supervise On	10/3/2025 4:37:40 PM
SubDirectory	LB137417	Test	Ammonia
STD. NAME	STD REF.#		
ICAL Standard	WP115036		
ICV Standard	WP115038		
CCV Standard	WP115037		
ICSA Standard	N/A		
CRI Standard	N/A		
LCS Standard	WP114786		
Chk Standard	WP114799,WP114133,WP113929,WP114132		

19	Q3258-06	COMPOSITE	SAM	10/03/25 10:29		rubina	OK
20	Q3263-01	251818	SAM	10/03/25 10:29		rubina	OK
21	Q3263-02	266380	SAM	10/03/25 10:29		rubina	OK
22	CCV2	CCV2	CCV	10/03/25 10:39		rubina	OK
23	CCB2	CCB2	CCB	10/03/25 10:39		rubina	OK
24	Q3263-02DUP	266380DUP	DUP	10/03/25 10:39		rubina	OK
25	Q3263-02MS	266380MS	MS	10/03/25 10:39		rubina	OK
26	Q3263-02MSD	266380MSD	MSD	10/03/25 10:40		rubina	OK
27	Q3268-01	WATER-TREATMENT	SAM	10/03/25 10:40		rubina	OK
28	CCV3	CCV3	CCV	10/03/25 10:46		rubina	OK
29	CCB3	CCB3	CCB	10/03/25 10:46		rubina	OK
30	Q3254-03DL	MW-2DL	SAM	10/03/25 11:10	10X For NH3	rubina	Confirms
31	Q3254-05DL	MW-3DL	SAM	10/03/25 11:10	5X For NH3	rubina	Confirms
32	Q3254-07DL	MW-4DL	SAM	10/03/25 11:10	10X For NH3	rubina	Confirms
33	CCV4	CCV4	CCV	10/03/25 11:10		rubina	OK
34	CCB4	CCB4	CCB	10/03/25 11:10		rubina	OK

Instrument ID: WC SC-3

Daily Analysis Runlog For Sequence/QC Batch ID # LB137419

Review By	jignesh	Review On	10/3/2025 12:53:44 PM
Supervise By	Iwona	Supervise On	10/3/2025 2:37:22 PM
SubDirectory	LB137419	Test	TSS
STD. NAME	STD REF.#		
ICAL Standard	N/A		
ICV Standard	N/A		
CCV Standard	N/A		
ICSA Standard	N/A		
CRI Standard	N/A		
LCS Standard	N/A		
Chk Standard	N/A		

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	LB137419BL	LB137419BL	MB	10/03/25 13:30		jignesh	OK
2	LB137419BS	LB137419BS	LCS	10/03/25 13:30		jignesh	OK
3	Q3254-01	MW-1	SAM	10/03/25 13:30		jignesh	OK
4	Q3254-03	MW-2	SAM	10/03/25 13:30		jignesh	OK
5	Q3254-05	MW-3	SAM	10/03/25 13:30		jignesh	OK
6	Q3254-07	MW-4	SAM	10/03/25 13:30		jignesh	OK
7	Q3258-06	COMPOSITE	SAM	10/03/25 13:30		jignesh	OK
8	Q3260-02	COMP	SAM	10/03/25 13:30		jignesh	OK
9	Q3260-02DUP	COMPDUP	DUP	10/03/25 13:30		jignesh	OK
10	Q3263-01	251818	SAM	10/03/25 13:30		jignesh	OK
11	Q3263-02	266380	SAM	10/03/25 13:30		jignesh	OK

Instrument ID: KONELAB

Daily Analysis Runlog For Sequence/QC Batch ID # LB137435

Review By	rubina	Review On	10/7/2025 3:23:29 PM
Supervise By	Iwona	Supervise On	10/7/2025 3:24:02 PM
SubDirectory	LB137435	Test	Cyanide
STD. NAME	STD REF.#		
ICAL Standard	WP115057,WP115058,WP115059,WP115060,WP115061,WP115062,WP115063		
ICV Standard	W3012		
CCV Standard	WP115058		
ICSA Standard	N/A		
CRI Standard	N/A		
LCS Standard	WP113838		
Chk Standard	WP112643,WP114324,WP115065		

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	0.0PPBCN	0.0PPBCN	CAL1	10/06/25 11:48		rubina	OK
2	5.0PPBCN	5.0PPBCN	CAL2	10/06/25 11:48		rubina	OK
3	10PPBCN	10PPBCN	CAL3	10/06/25 11:48		rubina	OK
4	50PPBCN	50PPBCN	CAL4	10/06/25 11:48		rubina	OK
5	100PPBCN	100PPBCN	CAL5	10/06/25 11:48		rubina	OK
6	250PPBCN	250PPBCN	CAL6	10/06/25 11:48		rubina	OK
7	500PPBCN	500PPBCN	CAL7	10/06/25 11:48		rubina	OK
8	ICV1	ICV1	ICV	10/06/25 14:36		rubina	OK
9	ICB1	ICB1	ICB	10/06/25 14:36		rubina	OK
10	CCV1	CCV1	CCV	10/06/25 14:36		rubina	OK
11	CCB1	CCB1	CCB	10/06/25 14:36		rubina	OK
12	RL	RL	SAM	10/06/25 14:36		rubina	OK
13	PB169962BL	PB169962BL	MB	10/06/25 14:43		rubina	OK
14	PB169962BS	PB169962BS	LCS	10/06/25 14:43		rubina	OK
15	MIDPB169962	MIDPB169962	SAM	10/06/25 14:43		rubina	OK
16	Q3258-01	MONTHLY-CYANIDE	SAM	10/06/25 14:43		rubina	OK
17	Q3258-01DUP	MONTHLY-CYANIDE	DUP	10/06/25 14:43		rubina	OK
18	Q3258-02	MONTHLY-CYANIDE	MS	10/06/25 14:51		rubina	OK

Instrument ID: KONELAB

Daily Analysis Runlog For Sequence/QC Batch ID # LB137435

Review By	rubina	Review On	10/7/2025 3:23:29 PM
Supervise By	Iwona	Supervise On	10/7/2025 3:24:02 PM
SubDirectory	LB137435	Test	Cyanide
STD. NAME	STD REF.#		
ICAL Standard	WP115057,WP115058,WP115059,WP115060,WP115061,WP115062,WP115063		
ICV Standard	W3012		
CCV Standard	WP115058		
ICSA Standard	N/A		
CRI Standard	N/A		
LCS Standard	WP113838		
Chk Standard	WP112643,WP114324,WP115065		

19	Q3258-03	MONTHLY-CYANIDE	MSD	10/06/25 14:51		rubina	OK
20	Q3258-04	ADDITIONAL-CYANID	SAM	10/06/25 14:51		rubina	OK
21	Q3267-01	Q4	SAM	10/06/25 14:51		rubina	OK
22	CCV2	CCV2	CCV	10/06/25 14:51		rubina	OK
23	CCB2	CCB2	CCB	10/06/25 14:51		rubina	OK

Instrument ID: SPECTROPHOTOMETER-1

Daily Analysis Runlog For Sequence/QC Batch ID # LB137481

Review By	Iwona	Review On	10/9/2025 2:34:06 PM
Supervise By	jignesh	Supervise On	10/9/2025 2:51:17 PM
SubDirectory	LB137481	Test	Phosphorus-Total
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	WP115114,WP115113,WP115112,WP115111,WP115110,WP115109,WP115115,WP112831,WP115119,WP113378,WI		

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	CAL1	CAL1	CAL	10/09/25 13:20		Iwona	OK
2	CAL2	CAL2	CAL	10/09/25 13:20		Iwona	OK
3	CAL3	CAL3	CAL	10/09/25 13:21		Iwona	OK
4	CAL4	CAL4	CAL	10/09/25 13:21		Iwona	OK
5	CAL5	CAL5	CAL	10/09/25 13:22		Iwona	OK
6	CAL6	CAL6	CAL	10/09/25 13:22		Iwona	OK
7	ICV	ICV	ICV	10/09/25 13:23		Iwona	OK
8	ICB	ICB	ICB	10/09/25 13:23		Iwona	OK
9	CCV1	CCV1	CCV	10/09/25 13:24		Iwona	OK
10	CCB1	CCB1	CCB	10/09/25 13:24		Iwona	OK
11	RL Check	RL Check	RL	10/09/25 13:25		Iwona	OK
12	PB170046BL	PB170046BL	MB	10/09/25 13:25		Iwona	OK
13	PB170046BS	PB170046BS	LCS	10/09/25 13:26		Iwona	OK
14	Q3234-01	DA-1	SAM	10/09/25 13:26		Iwona	OK
15	Q3234-01DUP	DA-1DUP	DUP	10/09/25 13:27		Iwona	OK
16	Q3234-01MS	DA-1MS	MS	10/09/25 13:27		Iwona	OK
17	Q3234-01MSD	DA-1MSD	MSD	10/09/25 13:28		Iwona	OK
18	Q3234-02	DA-2	SAM	10/09/25 13:28		Iwona	OK

Instrument ID: SPECTROPHOTOMETER-1

Daily Analysis Runlog For Sequence/QC Batch ID # LB137481

Review By	Iwona	Review On	10/9/2025 2:34:06 PM
Supervise By	jignesh	Supervise On	10/9/2025 2:51:17 PM
SubDirectory	LB137481	Test	Phosphorus-Total
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	WP115114,WP115113,WP115112,WP115111,WP115110,WP115109,WP115115,WP112831,WP115119,WP113378,WI		

19	Q3258-06	COMPOSITE	SAM	10/09/25 13:29		Iwona	OK
20	CCV2	CCV2	CCV	10/09/25 13:29		Iwona	OK
21	CCB2	CCB2	CCB	10/09/25 13:30		Iwona	OK

Instrument ID: KONELAB

Daily Analysis Runlog For Sequence/QC Batch ID # LB137517

Review By	rubina	Review On	10/14/2025 11:54:04 AM
Supervise By	Iwona	Supervise On	10/14/2025 11:54:47 AM
SubDirectory	LB137517	Test	Cyanide
STD. NAME	STD REF.#		
ICAL Standard	WP115170,WP115171,WP115172,WP115173,WP115174,WP115175,WP115176		
ICV Standard	W3012		
CCV Standard	WP115171		
ICSA Standard	N/A		
CRI Standard	N/A		
LCS Standard	WP113838		
Chk Standard	WP115157,WP114324,WP115178		

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	0.0PPBCN	0.0PPBCN	CAL1	10/14/25 09:13		rubina	OK
2	5.0PPBCN	5.0PPBCN	CAL2	10/14/25 09:13		rubina	OK
3	10PPBCN	10PPBCN	CAL3	10/14/25 09:13		rubina	OK
4	50PPBCN	50PPBCN	CAL4	10/14/25 09:13		rubina	OK
5	100PPBCN	100PPBCN	CAL5	10/14/25 09:13		rubina	OK
6	250PPBCN	250PPBCN	CAL6	10/14/25 09:13		rubina	OK
7	500PPBCN	500PPBCN	CAL7	10/14/25 09:13		rubina	OK
8	ICV1	ICV1	ICV	10/14/25 10:44		rubina	OK
9	ICB1	ICB1	ICB	10/14/25 10:44		rubina	OK
10	CCV1	CCV1	CCV	10/14/25 10:44		rubina	OK
11	CCB1	CCB1	CCB	10/14/25 10:45		rubina	OK
12	RL	RL	SAM	10/14/25 10:52		rubina	OK
13	PB170085BL	PB170085BL	MB	10/14/25 10:52		rubina	OK
14	PB170085BS	PB170085BS	LCS	10/14/25 10:52		rubina	OK
15	MIDPB170085	MIDPB170085	SAM	10/14/25 10:52		rubina	OK
16	Q3258-08	ADDITIONAL-CYANID	SAM	10/14/25 11:18		rubina	OK
17	Q3258-08DUP	ADDITIONAL-CYANID	DUP	10/14/25 11:18		rubina	OK
18	Q3258-09	ADDITIONAL-CYANID	SAM	10/14/25 11:18		rubina	OK

Instrument ID: KONELAB

Daily Analysis Runlog For Sequence/QC Batch ID # LB137517

Review By	rubina	Review On	10/14/2025 11:54:04 AM
Supervise By	Iwona	Supervise On	10/14/2025 11:54:47 AM
SubDirectory	LB137517	Test	Cyanide
STD. NAME	STD REF.#		
ICAL Standard	WP115170,WP115171,WP115172,WP115173,WP115174,WP115175,WP115176		
ICV Standard	W3012		
CCV Standard	WP115171		
ICSA Standard	N/A		
CRI Standard	N/A		
LCS Standard	WP113838		
Chk Standard	WP115157,WP114324,WP115178		

19	CCV2	CCV2	CCV	10/14/25 11:18		rubina	OK
20	CCB2	CCB2	CCB	10/14/25 11:18		rubina	OK

Prep Standard - Chemical Standard Summary

Order ID : Q3258

Test : Ammonia,BOD5,Cyanide,Hexavalent Chromium,Oil and Grease,Phosphorus-Total,TSS

Prepbatch ID : PB169946,PB169962,PB170046,PB170085,

Sequence ID/Qc Batch ID: LB137386,LB137388,LB137413,LB137417,LB137419,LB137435,LB137481,LB137517,

Standard ID :

EP2646,WP112611,WP112612,WP112615,WP112643,WP112826,WP112827,WP112828,WP112831,WP112832,WP112913,WP112914,WP113112,WP113113,WP113378,WP113836,WP113837,WP113838,WP113878,WP113880,WP113881,WP113885,WP113886,WP113887,WP113929,WP114132,WP114133,WP114324,WP114785,WP114786,WP114799,WP114972,WP114992,WP114993,WP114994,WP114995,WP114996,WP114997,WP114998,WP114999,WP115000,WP115001,WP115002,WP115003,WP115016,WP115017,WP115018,WP115036,WP115037,WP115038,WP115056,WP115057,WP115058,WP115059,WP115060,WP115061,WP115062,WP115063,WP115065,WP115109,WP115110,WP115111,WP115112,WP115113,WP115114,WP115115,WP115116,WP115117,WP115118,WP115119,WP115157,WP115169,WP115170,WP115171,WP115172,WP115173,WP115174,WP115175,WP115176,WP115178,

Chemical ID :

E3875,E3972,E3975,M6041,M6069,M6151,W2306,W2650,W2651,W2652,W2653,W2654,W2663,W2664,W2666,W2668,W2788,W2817,W2871,W2979,W3009,W3012,W3019,W3035,W3082,W3103,W3105,W3109,W3112,W3113,W3132,W3133,W3139,W3149,W3152,W3155,W3182,W3195,W3196,W3198,W3201,W3203,W3206,W3212,W3214,W3215,W3222,W3224,W3233,W3240,W3241,W3243,



<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>
3923	Baked Sodium Sulfate	EP2646	09/26/2025	01/28/2026	Evelyn Huang	Extraction_SC ALE_2 (EX-SC-2)	None	Riteshkumar Patel 09/26/2025
<u>FROM</u> 4000.00000gram of E3875 = Final Quantity: 4000.000 gram								

<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>
153	Ammonia Stock Std. (1000 ppm)	WP112611	04/07/2025	11/08/2025	Rubina Mughal	None	WETCHEM_PIPETTE_3 (WC)	Iwona Zarych 04/07/2025
<u>FROM</u> 3.81900gram of W3196 + 95.00000ml 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>
1895	Ammonia Stock Std, 1000PPM-SS	WP112612	04/07/2025	10/07/2025	Rubina Mughal	WETCHEM_S CALE_8 (WC SC-7)	None	Iwona Zarych 04/07/2025
<u>FROM</u>	3.81900gram of W3195 + 996.18100ml of W3112 = Final Quantity: 1000.000 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>
1211	11 N sulfuric acid	WP112615	04/03/2025	10/07/2025	Niha Farheen Shaik	None	None	Iwona Zarych 04/07/2025
<u>FROM</u> 306.00000ml of M6041 + 694.00000ml of W3112 = Final Quantity: 1000.000 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>
539	CN BUFFER	WP112643	04/09/2025	10/09/2025	Niha Farheen Shaik	WETCHEM_SCALE_5 (WCS-5)	None	Iwona Zarych 04/09/2025
<u>FROM</u> 138.00000gram of W2668 + 862.00000ml of W3112 = Final Quantity: 1000.000 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>
1714	Sulfuric Acid, 50% (v/v)	WP112826	04/25/2025	10/25/2025	Rubina Mughal	None	None	Iwona Zarych 04/25/2025
<u>FROM</u> 1000.00000ml of M6041 + 1000.00000ml of W3112 = Final Quantity: 2000.000 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>
3214	Magnesium Chloride For Cyanide 2.5M(51%W/V)	WP112827	04/25/2025	10/25/2025	Rubina Mughal	WETCHEM_SCALE_8 (WC SC-7)	None	Iwona Zarych 04/25/2025
<u>FROM</u> 500.00000ml of W3112 + 510.00000gram of W3152 = Final Quantity: 1000.000 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>
1597	0.04 N H2SO4	WP112828	04/25/2025	10/25/2025	Rubina Mughal	None	WETCHEM_PIPETTE_3 (WC)	Iwona Zarych 04/25/2025
<u>FROM</u> 1.00000ml of M6041 + 999.00000ml 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>
126	5N sulfuric acid	WP112831	04/25/2025	10/25/2025	Rubina Mughal	None	None	Iwona Zarych
								04/25/2025

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

<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	WP112832	04/25/2025	10/25/2025	Rubina Mughal	None	WETCHEM_FIPETTE_3	Iwona Zarych
							(WC)	04/25/2025

FROM 2.80000ml of M6041 + 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>
115	Phosphate Stock Std. (50 ppm)	WP112913	05/01/2025	11/01/2025	Iwona Zarych	WETCHEM_SCALE_5 (WCS-5)	None	Jignesh Parikh 05/06/2025
<u>FROM</u> 0.11000gram of W3198 + 500.00000ml of W3112 = Final Quantity: 500.000 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>
2790	Phosphate Stock std, 50PPM-SS	WP112914	05/01/2025	11/01/2025	Iwona Zarych	WETCHEM_SCALE_5 (WCS-5)	None	Jignesh Parikh
<u>FROM</u> 0.11000gram of W3206 + 500.00000ml of W3112 = Final Quantity: 500.000 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>
648	Ammonium molybdate solution	WP113112	05/16/2025	11/16/2025	Iwona Zarych	WETCHEM_SCALE_5 (WCS-5)	None	Jignesh Parikh 05/16/2025
<u>FROM</u>	20.00000gram of W2664 + 480.00000ml of W3112 = Final Quantity: 500.000 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>
588	Potassium Antimonyl Tartrate	WP113113	05/16/2025	11/16/2025	Iwona Zarych	WETCHEM_SCALE_5 (WC SC-5)	None	Jignesh Parikh 05/16/2025
<u>FROM</u>	1.37150gram of W2306 + 500.00000ml of W3112 = Final Quantity: 500.000 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>
1213	Phenolphthalein indicator	WP113378	06/04/2025	12/04/2025	Iwona Zarych	WETCHEM_SCALE_5 (WCS)	None	Jignesh Parikh 06/05/2025
<u>FROM</u> 0.10000gram of W2650 + 50.00000ml of W2788 + 50.00000ml 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>
11	Sodium hydroxide absorbing solution 0.25 N	WP113836	07/08/2025	12/31/2025	Rubina Mughal	WETCHEM_SCALE_8 (WCS-7)	None	Iwona Zarych 07/08/2025
<u>FROM</u> 21.00000L of W3112 + 210.00000gram of W3113 = Final Quantity: 21.000 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>
3850	Cyanide MS-MSD spiking solution, 5PPM	WP113837	07/08/2025	11/30/2025	Rubina Mughal	None	WETCHEM_PIPETTE_3	Iwona Zarych
<u>FROM</u>		(WC)						
1.00000ml of W3214 + 199.00000ml of WP113836 = Final Quantity: 200.000 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>
3371	Cyanide LCS Spike Solution, 5PPM	WP113838	07/08/2025	12/24/2025	Rubina Mughal	None	WETCHEM_PIPETTE_3	Iwona Zarych
<p>(WC)</p> <p><u>FROM</u> 1.00000ml of W3224 + 199.00000ml of WP113836 = Final Quantity: 200.000 ml</p>								



<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	WP113878	07/09/2025	12/31/2025	Iwona Zarych	WETCHEM_S CALE_7 (WC SC-6)	None	Jignesh Parikh 07/09/2025
<u>FROM</u> 4.00000gram of W3113 + 96.00000ml 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>
1993	HEXAVALENTCHROMIUM STOCK STD 1, 50PPM	WP113880	07/10/2025	01/10/2026	Rubina Mughal	WETCHEM_SCALE_5 (WCS-5)	None	Iwona Zarych 07/10/2025
<u>FROM</u> 0.14140gram of W2651 + 1000.00000ml of W3112 = Final Quantity: 1000.000 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>
1994	HEXAVALENTCHROMIUM STOCK STD 2, 50PPM	WP113881	07/10/2025	01/10/2026	Rubina Mughal	WETCHEM_SCALE_5 (WCS-5)	None	Iwona Zarych 07/10/2025
<u>FROM</u> 0.14140gram of W2652 + 1000.00000ml of W3112 = Final Quantity: 1000.000 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>
1796	NaOH, 0.1N	WP113885	07/10/2025	12/31/2025	Rubina Mughal	WETCHEM_SCALE_8 (WC SC-7)	None	Iwona Zarych 07/10/2025
<u>FROM</u>	4.00000gram of W3113 + 996.00000ml of W3112 = Final Quantity: 1000.000 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>
1494	BORATE BUFFER	WP113886	07/10/2025	12/31/2025	Rubina Mughal	WETCHEM_SCALE_8 (WCS-7)	None	Iwona Zarych
FROM 0.90250L of W3112 + 9.50000gram of W3201 + 88.00000ml of WP113885 = Final Quantity: 1.000 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>
1471	NaOH Solution, 6N	WP113887	07/10/2025	12/31/2025	Rubina Mughal	WETCHEM_S CALE_8 (WC SC-7)	None	Iwona Zarych 07/10/2025
<u>FROM</u> 240.00000gram of W3113 + 760.00000ml of W3112 = Final Quantity: 1000.000 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>
290	Phenol reagent for Ammonia	WP113929	07/14/2025	12/31/2025	Rubina Mughal	WETCHEM_SCALE_8 (WC SC-7)	None	Iwona Zarych 07/15/2025
<u>FROM</u> 3.20000gram of W3113 + 8.30000gram of W2663 + 88.80000ml 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>
635	EDTA BUFFER FOR AMMONIA	WP114132	07/31/2025	12/31/2025	Rubina Mughal	WETCHEM_SCALE_8 (WC SC-7)	None	Iwona Zarych 07/31/2025
<u>FROM</u> 5.50000gram of W3113 + 50.00000gram of W3132 + 950.00000ml of W3112 = Final Quantity: 1000.000 ml								

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289	Sodium Hypochlorite for Ammonia	WP114133	07/31/2025	12/31/2025	Rubina Mughal	None	None	Iwona Zarych
								08/04/2025

FROM 50.00000ml of W3112 + 50.00000ml of W3222 = 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>
607	PYRIDINE-BARBITURIC ACID	WP114324	08/19/2025	02/17/2026	Rubina Mughal	WETCHEM_S CALE_5 (WC SC-5)	Glass Pipette-A	Jignesh Parikh
								08/19/2025

FROM 145.00000ml of W3112 + 15.00000gram of W3203 + 15.00000ml of M6151 + 75.00000ml of W3019 = Final Quantity: 250.000 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>
1322	Ammonia Intermediate Std, 50PPM	WP114785	09/16/2025	10/07/2025	Rubina Mughal	None	WETCHEM_PIPETTE_3 (WC)	Iwona Zarych 09/17/2025
<u>FROM</u> 95.00000ml of W3112 + 5.00000ml of WP112611 = 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>
1639	Ammonia Intermediate Std-Second source, 50PPM	WP114786	09/16/2025	10/07/2025	Rubina Mughal	None	WETCHEM_PIPETTE_3 (WC)	Iwona Zarych 09/17/2025
<u>FROM</u> 95.00000ml of W3112 + 5.00000ml of WP112612 = 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>
740	sodium nitroferricyanide for ammonia	WP114799	09/17/2025	10/17/2025	Rubina Mughal	WETCHEM_SCALE_5 (WC SC-5)	None	Jignesh Parikh 09/18/2025
FROM 0.05000gram of W2666 + 99.95000ml 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>
1103	HEX CHROME INTERMEDIATE STD SOURCE 1 (5PPM)	WP114972	10/01/2025	10/02/2025	Rubina Mughal	None	WETCHEM_PIPETTE_3 (WC)	Iwona Zarych 10/02/2025
<u>FROM</u>	9.00000ml of W3112 + 1.00000ml of WP113880 = Final Quantity: 10.000 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	WP114992	10/01/2025	10/02/2025	Rubina Mughal	None	None	Iwona Zarych
								10/02/2025

FROM 18.00000L of W3112 + 3.00000PILLOW of W3233 = 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	WP114993	10/01/2025	10/02/2025	Rubina Mughal	WETCHEM_SCALE_7 (WC SC-6)	None	Iwona Zarych
								10/02/2025

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

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128	polyseed seed control	WP114994	10/01/2025	10/02/2025	Rubina Mughal	None	None	Iwona Zarych
								10/02/2025

FROM 1.00000PILLOW of W3212 + 300.00000ml of WP114992 = Final Quantity: 300.000 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>
114	hexavalent chromium color reagent	WP114995	10/01/2025	10/08/2025	Rubina Mughal	WETCHEM_SCALE_5 (WC SC-5)	None	Iwona Zarych
								10/02/2025

FROM 0.22500gram of W2979 + 50.00000ml of E3975 = Final Quantity: 50.000 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>
110	calibration std. hexchrome 0 ppm	WP114996	10/01/2025	10/02/2025	Rubina Mughal	None	None	Iwona Zarych
								10/02/2025

FROM 100.00000ml 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>
109	calibration std. hexchrome 0.01 ppm	WP114997	10/01/2025	10/02/2025	Rubina Mughal	None	WETCHEM_FIPETTE_3	Iwona Zarych
							(WC)	10/02/2025

FROM 99.80000ml of W3112 + 0.20000ml of WP114972 = 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>
3800	Calibration Std Hexachrome 0.025 ppm	WP114998	10/01/2025	10/02/2025	Rubina Mughal	None	WETCHEM_PIPETTE_3	Iwona Zarych
(WC) FROM 99.50000ml of W3112 + 0.50000ml of WP114972 = 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>
108	Calibration Std. hexchrome 0.05 ppm	WP114999	10/01/2025	10/02/2025	Rubina Mughal	None	WETCHEM_PIPETTE_3 (WC)	Iwona Zarych 10/02/2025
<u>FROM</u> 99.00000ml of W3112 + 1.00000ml of WP114972 = 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>
107	Calibration Std. hexchrome 0.1 ppm	WP115000	10/01/2025	10/02/2025	Rubina Mughal	None	WETCHEM_PIPETTE_3 (WC)	Iwona Zarych 10/02/2025
<u>FROM</u> 99.80000ml of W3112 + 0.20000ml of WP113880 = 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>
3808	Calibration and CCV std HexChrome 0.5PPM	WP115001	10/01/2025	10/02/2025	Rubina Mughal	None	WETCHEM_PIPETTE_3 (WC)	Iwona Zarych 10/02/2025
<u>FROM</u> 99.00000ml of W3112 + 1.00000ml of WP113880 = 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>
3809	Calibration std HexChrome 1.0PPM	WP115002	10/01/2025	10/02/2025	Rubina Mughal	None	WETCHEM_PIPETTE_3	Iwona Zarych
<p>(WC)</p> <p>FROM 98.00000ml of W3112 + 2.00000ml of WP113880 = Final Quantity: 100.000 ml</p>								

<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>
3804	Hexavalent Chromium ICV-LCS Std	WP115003	10/01/2025	10/02/2025	Rubina Mughal	None	WETCHEM_PIPETTE_3	Iwona Zarych
(WC) <u>FROM</u> 99.00000ml of W3112 + 1.00000ml of WP113881 = Final Quantity: 100.000 ml								

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229	1:1 HCL	WP115016	10/02/2025	02/17/2026	Jignesh Parikh	None	None	Iwona Zarych
								10/02/2025

FROM 500.00000ml of M6151 + 500.00000ml of W3112 = Final Quantity: 1.000 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>
2470	1664A SPIKING SOLN	WP115017	10/02/2025	04/02/2026	Jignesh Parikh	WETCHEM_S CALE_7 (WC SC-6)	None	Iwona Zarych
								10/02/2025

FROM 1000.00000ml of E3972 + 4.00000gram of W2817 + 4.00000gram of W2871 = Final Quantity: 1000.000 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>
3374	1664A QCS spiking solution-SS	WP115018	10/02/2025	04/02/2026	Jignesh Parikh	WETCHEM_SCALE_7 (WCS-6)	None	Iwona Zarych 10/02/2025
<u>FROM</u>	1000.00000ml of E3972 + 4.00000gram of W3009 + 4.00000gram of W3082 = Final Quantity: 1000.000 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>
275	Ammonia Calibration Std. (2 ppm)	WP115036	10/03/2025	10/04/2025	Rubina Mughal	None	WETCHEM_PIPETTE_3 (WC)	Iwona Zarych 10/03/2025
<u>FROM</u> 48.00000ml of W3112 + 2.00000ml of WP114785 = Final Quantity: 50.000 ml								

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285	Ammonia CCV Std. (1 ppm)	WP115037	10/03/2025	10/04/2025	Rubina Mughal	None	WETCHEM_F IPETTE_3 (WC)	Iwona Zarych 10/03/2025
FROM 49.00000ml of W3112 + 1.00000ml of WP114785 = Final Quantity: 50.000 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>
286	Ammonia ICV Std. (1 ppm)	WP115038	10/03/2025	10/04/2025	Rubina Mughal	None	WETCHEM_F IPETTE_3 (WC)	Iwona Zarych 10/03/2025
FROM 49.00000ml of W3112 + 1.00000ml of WP114786 = Final Quantity: 50.000 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>
3456	Cyanide Intermediate Working Std, 5PPM	WP115056	10/06/2025	10/07/2025	Rubina Mughal	None	WETCHEM_PIPETTE_3	Iwona Zarych
<p>(WC)</p> <p>FROM 0.25000ml of W3214 + 49.75000ml of WP113836 = Final Quantity: 50.000 ml</p>								

<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>
4	Calibration standard 500 ppb	WP115057	10/06/2025	10/07/2025	Rubina Mughal	None	WETCHEM_PIPETTE_3	Iwona Zarych
<p>(WC)</p> <p>FROM 45.00000ml of WP113836 + 5.00000ml of WP115056 = Final Quantity: 50.000 ml</p>								



<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>
3761	Calibration-CCV CN Standard 250 ppb	WP115058	10/06/2025	10/07/2025	Rubina Mughal	None	WETCHEM_PIPETTE_3	Iwona Zarych
<p>(WC)</p> <p>FROM 2.50000ml of WP115056 + 47.50000ml of WP113836 = Final Quantity: 50.000 ml</p>								

<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>
6	Calibration Standard 100 ppb	WP115059	10/06/2025	10/07/2025	Rubina Mughal	None	WETCHEM_PIPETTE_3	Iwona Zarych
<p>FROM 1.00000ml of WP115056 + 49.00000ml of WP113836 = Final Quantity: 50.000 ml</p>								



<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>
7	Calibration Standard 50 ppb	WP115060	10/06/2025	10/07/2025	Rubina Mughal	None	WETCHEM_PIPETTE_3	Iwona Zarych
<p>(WC)</p> <p>FROM 0.50000ml of WP115056 + 49.50000ml of WP113836 = Final Quantity: 50.000 ml</p>								

<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>
8	Calibration Standard 10 ppb	WP115061	10/06/2025	10/07/2025	Rubina Mughal	None	WETCHEM_PIPETTE_3 (WC)	Iwona Zarych 10/06/2025
<u>FROM</u>	1.00000ml of WP115057 + 49.00000ml of WP113836 = Final Quantity: 50.000 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>
9	Calibration Standard 5 ppb	WP115062	10/06/2025	10/07/2025	Rubina Mughal	None	WETCHEM_PIPETTE_3	Iwona Zarych
FROM 0.50000ml of WP115057 + 49.50000ml of WP113836 = Final Quantity: 50.000 ml <div></div>								

<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>
167	0 ppb CN calibration std	WP115063	10/06/2025	10/07/2025	Rubina Mughal	None	None	Iwona Zarych 10/06/2025
<u>FROM</u> 50.00000ml of WP113836 = Final Quantity: 50.000 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>
1582	Chloramine T solution, 0.014M	WP115065	10/06/2025	10/07/2025	Rubina Mughal	WETCHEM_S CALE_5 (WC SC-5)	Glass Pipette-A	Iwona Zarych 10/06/2025
<u>FROM</u>	0.08000gram of W3139 + 20.00000ml of W3112 = Final Quantity: 20.000 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>
122	calibration std. 0 ppm	WP115109	10/09/2025	10/16/2025	Iwona Zarych	None	None	Jignesh Parikh 10/09/2025
<u>FROM</u> 100.00000ml 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>
121	calibration std. phosphate 0.05 ppm	WP115110	10/09/2025	10/16/2025	Iwona Zarych	None	WETCHEM_F IPETTE_3 (WC)	Jignesh Parikh 10/09/2025
FROM 99.90000ml of W3112 + 0.10000ml of WP112913 = 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>
120	calibration std. phosphate 0.1 ppm	WP115111	10/09/2025	10/16/2025	Iwona Zarych	None	WETCHEM_F IPETTE_3 (WC)	Jignesh Parikh 10/09/2025
FROM 99.80000ml of W3112 + 0.20000ml of WP112913 = 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>
119	calibration std. phosphate 0.3 ppm	WP115112	10/09/2025	10/16/2025	Iwona Zarych	None	WETCHEM_F IPETTE_3 (WC)	Jignesh Parikh 10/09/2025
FROM 99.40000ml of W3112 + 0.60000ml of WP112913 = 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>
118	calibration std. phosphate 0.5 ppm	WP115113	10/09/2025	10/16/2025	Iwona Zarych	None	WETCHEM_F IPETTE_3 (WC)	Jignesh Parikh 10/09/2025
FROM 99.00000ml of W3112 + 1.00000ml of WP112913 = 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>
117	calibration std. phosphate 1 ppm	WP115114	10/09/2025	10/16/2025	Iwona Zarych	None	WETCHEM_F IPETTE_3 (WC)	Jignesh Parikh 10/09/2025
FROM 98.00000ml of W3112 + 2.00000ml of WP112913 = 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>
124	phosphate CCV std.	WP115115	10/09/2025	10/16/2025	Iwona Zarych	None	WETCHEM_F IPETTE_3 (WC)	Jignesh Parikh 10/09/2025
FROM 99.00000ml of W3112 + 1.00000ml of WP112913 = 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>
3805	Phosphate ICV-LCS Std	WP115116	10/09/2025	10/16/2025	Iwona Zarych	None	WETCHEM_F IPETTE_3 (WC)	Jignesh Parikh 10/09/2025
FROM 99.00000ml of W3112 + 1.00000ml of WP112914 = 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>
4212	Phosphate RL CHECK	WP115117	10/09/2025	10/16/2025	Iwona Zarych	None	WETCHEM_F IPETTE_3 (WC)	Jignesh Parikh 10/09/2025
FROM 99.80000ml of W3112 + 0.20000ml of WP112913 = 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>
590	Ascorbic Acid	WP115118	10/09/2025	10/10/2025	Iwona Zarych	WETCHEM_SCALE_5 (WCS-5)	None	Jignesh Parikh 10/09/2025
<u>FROM</u> 0.52800gram of W3243 + 30.00000ml of W3112 = Final Quantity: 30.000 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>
658	Combined reagent	WP115119	10/09/2025	10/10/2025	Iwona Zarych	None	Glass Pipette-A	Jignesh Parikh 10/09/2025
<u>FROM</u> 15.00000ml of WP113112 + 30.00000ml of WP115118 + 5.00000ml of WP113113 + 50.00000ml of WP112831 = 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>
539	CN BUFFER	WP115157	10/10/2025	12/03/2025	Rubina Mughal	WETCHEM_SCALE_8 (WC SC-7)	None	Iwona Zarych 10/14/2025
<u>FROM</u>	138.00000gram of W2668 + 862.00000ml of W3112 = Final Quantity: 1000.000 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>
3456	Cyanide Intermediate Working Std, 5PPM	WP115169	10/14/2025	10/15/2025	Rubina Mughal	None	WETCHEM_PIPETTE_3	Iwona Zarych
FROM 0.25000ml of W3214 + 49.75000ml of WP113836 = Final Quantity: 50.000 ml <div></div>								



<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>
4	Calibration standard 500 ppb	WP115170	10/14/2025	10/15/2025	Rubina Mughal	None	WETCHEM_PIPETTE_3	Iwona Zarych
<p>(WC)</p> <p>FROM 45.00000ml of WP113836 + 5.00000ml of WP115169 = Final Quantity: 50.000 ml</p>								

<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>
3761	Calibration-CCV CN Standard 250 ppb	WP115171	10/14/2025	10/15/2025	Rubina Mughal	None	WETCHEM_PIPETTE_3	Iwona Zarych
<p>(WC)</p> <p>FROM 2.50000ml of WP115169 + 47.50000ml of WP113836 = Final Quantity: 50.000 ml</p>								



<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>
6	Calibration Standard 100 ppb	WP115172	10/14/2025	10/15/2025	Rubina Mughal	None	WETCHEM_PIPETTE_3	Iwona Zarych
<p>(WC)</p> <p>FROM 1.00000ml of WP115169 + 49.00000ml of WP113836 = Final Quantity: 50.000 ml</p>								

<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>
7	Calibration Standard 50 ppb	WP115173	10/14/2025	10/15/2025	Rubina Mughal	None	WETCHEM_PIPETTE_3	Iwona Zarych
<p>FROM 0.50000ml of WP115169 + 49.50000ml of WP113836 = Final Quantity: 50.000 ml</p>								



<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>
8	Calibration Standard 10 ppb	WP115174	10/14/2025	10/15/2025	Rubina Mughal	None	WETCHEM_PIPETTE_3	Iwona Zarych
(WC)								
<u>FROM</u>	1.00000ml of WP115170 + 49.00000ml of WP113836 = Final Quantity: 50.000 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>
9	Calibration Standard 5 ppb	WP115175	10/14/2025	10/15/2025	Rubina Mughal	None	WETCHEM_PIPETTE_3	Iwona Zarych
<p>FROM 0.50000ml of WP115170 + 49.50000ml of WP113836 = Final Quantity: 50.000 ml</p>								

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>
167	0 ppb CN calibration std	WP115176	10/14/2025	10/15/2025	Rubina Mughal	None	None	Iwona Zarych
								10/14/2025

FROM 50.00000ml of WP113836 = Final Quantity: 50.000 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>
1582	Chloramine T solution, 0.014M	WP115178	10/14/2025	10/15/2025	Rubina Mughal	WETCHEM_S CALE_5 (WC SC-5)	Glass Pipette-A	Iwona Zarych
								10/14/2025

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

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	PC19631-100 / SODIUM SULFATE, ANHYDROUS, PEST GRADE, 1	417203	01/28/2026	07/28/2025 / RUPESH	01/29/2025 / Rajesh	E3875

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9254-03 / Acetone, Ultra Resi (cs/4x4L)	24H1462005	05/24/2027	09/16/2025 / Evelyn	09/04/2025 / Riteshkumar	E3972

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9254-03 / Acetone, Ultra Resi (cs/4x4L)	24L1062001	04/10/2027	09/26/2025 / Riteshkumar	09/26/2025 / Riteshkumar	E3975

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.	140440 / TEST PAPERS,PH,0-2.5,.2SENSI, 100PK	80A0441	02/29/2028	09/03/2024 / jignesh	08/19/2024 / Jaswal	M6069

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9530-33 / Hydrochloric Acid, Instra-Analyzed (cs/6x2.5L)	22G2862015	02/17/2026	02/18/2025 / Sagar	01/15/2025 / Sagar	M6151

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	A1561-500GM / POTASSIUM ANTIMONY TARTRATE TRIHYDRATE, 500G	2GH0057	12/11/2027	12/11/2017 / apatel	12/11/2017 / apatel	W2306

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	J2870-1 / PHENOLPHTHALEIN, INDICATOR F/TITRATION, 500G	0000235350	06/04/2025	01/31/2020 / AMANDEEP	01/20/2020 / apatel	W2650

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

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	P188-500 / Potassium Dichromate, 500g(new-2nd lot)	194664	01/24/2030	01/24/2020 / apatel	01/24/2020 / apatel	W2652

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	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

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	P1060-10 / PHENOL, ACS, 500G	2HD0179	01/27/2030	01/27/2020 / apatel	01/27/2020 / apatel	W2663

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	J07716-1 / Ammonium Molybdate 500G	0000234410	02/11/2026	02/10/2020 / AMANDEEP	01/31/2020 / apatel	W2664

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	87683 / Sodium Nitroferrocyanide 250g	W12F013	02/10/2030	02/10/2020 / apatel	02/10/2020 / apatel	W2666

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	J3818-5 / SODIUM PHOSPHATE, MONOBAS/HYD, CRYST, ACS, 2.5 KG	0000225799	12/03/2025	04/05/2021 / Alexander	02/10/2020 / apatel	W2668

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	PC16721-3 / Isopropanol, 99%	C20F23007	06/30/2025	12/30/2020 / apatel	12/30/2020 / apatel	W2788

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	A12244 / Stearic acid, 98%, 100 g	U20E006	04/02/2026	04/02/2021 / apatel	04/02/2021 / apatel	W2817

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	H223-57 / Hexadecane, 99.0%	0000266903	05/04/2027	09/07/2021 / apatel	08/26/2021 / apatel	W2871

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

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	H223-57 / Hexadecane, 99.0%	SHBP8192	02/27/2028	02/27/2023 / lwona	02/27/2023 / lwona	W3009

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
EPA	/ ICV-CN	ICV6-400	12/31/2025	01/08/2025 / lwona	02/20/2020 / lwona	W3012

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
SIGMA ALDRICH	270970-1L / Pyridine 1L	SHBQ2113	04/03/2028	04/03/2023 / lwona	04/03/2023 / lwona	W3019

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	BDH0214-500G / Ammonium Persulfate Crystal, 500g	MKCR9319	06/30/2028	03/05/2024 / lwona	06/06/2023 / lwona	W3035

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	A12244 / Stearic acid, 98%, 100 g	U23E020	02/26/2029	02/26/2024 / lwona	02/26/2024 / lwona	W3082

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

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

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	PC05050-1 / EDTA, disodium salt, dihydrate 1 lb	2ND0156	07/10/2026	07/26/2024 / lwona	07/26/2024 / lwona	W3132

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	140476 / Test Paper,PH Short Range 9.0/10.0	L23	08/22/2029	08/22/2024 / lwona	08/22/2024 / lwona	W3133

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	JTE494-6 / CHLORAMINE-T BAKER 250GM	10239484	09/09/2029	09/09/2024 / lwona	09/09/2024 / lwona	W3139

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	AL70850-8 / Starch Solution, 4L	4408P62	08/31/2026	10/16/2024 / 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.	01237-10KG / Magnesium Chloride Hexahydrate ACS 10KG	002126-2019-201	11/25/2029	11/25/2024 / lwona	11/25/2024 / lwona	W3152

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	140730 / TEST PAPER,POT.IOD-STRCH,P K100,CS12	14-860	12/02/2029	12/02/2024 / lwona	12/02/2024 / lwona	W3155

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	470112-662 / TEST STRIPES, NITRATE/NITRITE, PK50	436101	04/30/2027	08/05/2025 / lwona	02/26/2025 / lwona	W3182

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	24L0356561	08/31/2027	03/19/2025 / lwona	03/19/2025 / lwona	W3195

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	MKCV1009	09/30/2026	03/19/2025 / lwona	03/19/2025 / lwona	W3196

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	J3246-1 / POTAS PHOSPHATE, MONO, CRYST, ACS, 500G	MKCV6723	10/31/2028	04/11/2025 / lwona	04/11/2025 / lwona	W3198

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	J3568-1 / Sodium Borate, 500 gms	BCCL9613	05/31/2029	04/16/2025 / lwona	04/16/2025 / lwona	W3201

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	EM-BX0035-3 / Barbituric Acid, 100 gms	WXBF3271V	05/16/2029	04/21/2025 / lwona	04/21/2025 / lwona	W3203

CHEMICAL RECEIPT LOG BOOK

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

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 / lwona	05/21/2025 / lwona	W3212

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	RC2543-4 / CYANIDE STD 1000PPM 4OZ	1505H73	11/30/2025	05/21/2025 / lwona	05/21/2025 / lwona	W3214

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	140444 / TEST PAPERS, PH 0-14, .5 SENS, 100PK	10D3242	12/31/2028	06/09/2025 / lwona	06/09/2025 / lwona	W3215

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	J9416-1 / Sodium Hypochlorite 500 ml	2506M51	12/31/2025	07/02/2025 / lwona	07/02/2025 / lwona	W3222

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	LC135457 / Cyanide Standard, 1000 PPM, Second Source	45060288	12/24/2025	07/07/2025 / lwona	07/07/2025 / lwona	W3224

CHEMICAL RECEIPT LOG BOOK

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 / lwona	W3233

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9262-03 / Hexane, Ultra-Resi (cs/4x4L)	25C0362006	04/30/2026	09/15/2025 / JIGNESH	09/12/2025 / JIGNESH	W3240

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	140444 / TEST PAPERS,PH 0-14,.5 SENSI,100PK	10BDH15251	04/30/2029	10/02/2025 / lwona	10/02/2025 / lwona	W3241

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	J0938-7 / Ascorbic Acid, 500 gms	MKCX1143	01/31/2028	10/03/2025 / lwona	10/03/2025 / lwona	W3243



CERTIFICATE OF ANALYSIS

Printed: 12/8/2017

Page 1 of 1

Customer No : 30017
Order Number : 3008126
Catalog : A1561

Customer : PCI SCIENTIFIC
Delivery # : 58495347
Potassium Antimony Tartrate Trihydrate,
Reagent, ACS

Customer PO : 6035343

Lot : 2GH0057

Chemical Formula : $C_8H_4K_2O_{12}Sb_2 \cdot 3H_2O$
CAS# : 28300-74-5

Formula Weight : 667.87

W2306
received
12/11/17
AB

Test

Limit
Min. Max.

Results

ASSAY ($C_8H_4K_2O_{12}Sb_2 \cdot 3HO$)	99.0 - 103.0 %	101.0 %
TITRATABLE ACID OR BASE	-- 0.020 meq/g	<0.020 meq/g
LOSS ON DRYING	-- 2.7 %	<2.7 %
ARSENIC (As)	-- 0.015 %	<0.015 %
APPEARANCE		WHITE POWDER
DATE OF MANUFACTURE		29-DEC-2015

All pharmaceutical ingredients are tested using current edition of applicable pharmacopeia.

Read and understand label and MSDS/SDS before handling any chemical. All Spectrum's chemicals are for manufacturing, processing, repacking or research purposes by experienced personnel only. The customer must ensure to provide its users adequate hazardous material training and appropriate protective gears before handling our chemicals.

Certificate of Analysis Results Certified By:

Product No.: 13450
Product: Potassium dichromate, ACS, 99.0% min
Lot No.: T15F019

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

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Ammonium Molybdate, 4-Hydrate, Crystal
BAKER ANALYZED® A.C.S. Reagent

(ammonium heptamolybdate, tetrahydrate)



Material No.: 0716-01
Batch No.: 0000234410
Manufactured Date: 2019/02/13
Retest Date: 2026/02/11
Revision No: 1

Certificate of Analysis

Meets ACS Reagent Chemical Requirements,

Test	Specification	Result
Assay (as MoO ₃)	81.0 – 83.0 %	81.4
ACS – Insoluble Matter	<= 0.005 %	< 0.001
Chloride (Cl)	<= 0.002 %	< 0.002
Nitrate (NO ₃)	Passes Test	PT
Arsenate, Phosphate and Silicate (as SiO ₂)	<= 0.001 %	< 0.001
ACS – Phosphate (PO ₄)	<= 5 ppm	< 5
Sulfate (SO ₄)	<= 0.02 %	< 0.02
Heavy Metals (as Pb)	<= 0.001 %	< 0.001
Magnesium (Mg)	<= 0.005 %	< 0.001
Potassium (K)	<= 0.01 %	< 0.01
Sodium (Na)	<= 0.01 %	<0.001

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

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

James Ethier
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

Phenolphthalein, Powder
BAKER ANALYZED® A.C.S. Reagent



Material No.: 2870-01
Batch No.: 0000235350
Manufactured Date: 2018/06/06
Retest Date: 2025/06/04
Revision No: 1

Certificate of Analysis

Meets ACS Reagent Chemical Requirements,

Test	Specification	Result
ACS – Clarity of Solution	Passes Test	PT
Visual Transition Interval – pH...8.0 (Colorless)	Passes Test	PT
Visual Transition Interval – pH...10.0 (Red)	Passes Test	PT

For Laboratory, Research or Manufacturing Use

Country of Origin: CN
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



Certificate Of Analysis

Item Number	P1060	Lot Number	2HD0179
Item	Phenol, Loose Crystal, Reagent, ACS		
CAS Number	108-95-2		
Molecular Formula	C ₆ H ₆ O	Molecular Weight	94.11

Test	Specification		Result
	min	max	
ASSAY (C ₆ H ₅ OH)	99.0 %		100.02 %
FREEZING POINT (DRY)	40.5 C		40.5°C
CLARITY OF SOLUTION	TO PASS TEST		PASSES TEST
RESIDUE AFTER EVAPORATION		0.05 %	<0.05 %
WATER		0.5 %	0.0087 %
DATE OF MANUFACTURE			06-MAR-2018

Spectrum Chemical Mfg Corp
755 Jersey Avenue
New Brunswick 08901 NJ



Certificate Of Analysis Results Certified by

Ibad Tirmizi
Director of Quality
Spectrum Chemical Mfg. Corp.

All pharmaceutical ingredients are tested using current edition of applicable pharmacopeia.

Read and understand label and SDS before handling any chemicals. All Spectrum's chemicals are for manufacturing, processing, repacking or research purposes by experienced personnel only. It is the customer's responsibility to provide adequate hazardous material training and ensure that appropriate Personal Protective Equipment (PPE) is used before handling any chemical.

Hexadecane, 99.0%



Material No.: H223-57
Batch No.: 0000266903
Manufactured Date: 2020/05/05
Retest Date: 2027/05/04
Revision No: 1

Certificate of Analysis

Test	Specification	Result
Assay ($\text{CH}_3(\text{CH}_2)_{14}\text{CH}_3$) (by GC)	$\geq 99.0 \%$	99.3
Infrared Spectrum	Passes Test	PT

For Laboratory, Research or Manufacturing Use

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

W2666 Recived on 02/10/2020 by AP

Product No.: 87683


Product: Sodium pentacyanonitrosylferrate(III) dihydrate, ACS,
99.0-102.0%

Lot No.: W12F013


Test	Limits	Results
Assay	99.0 - 102.0 %	99.67 %
Insoluble	0.01 % max	0.0079 %
Chloride	0.02 % max	Not detected
Sulfate	To pass test	Passes test
Aqueous solubility	To pass test	Passes test
Limit on Ferricyanide	To pass test	Passes test
Limit on Ferrocyanide	To pass test	Passes test


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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

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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



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

Product Name: Stearic acid, 98%, Thermo Scientific Chemicals
Catalog Number: A12244.14

CAS Number: 57-11-4
Molecular Formula: C₁₈H₃₆O₂
Molecular Weight: 284.48
InChI Key: QIQXTHQIDYTRH-UHFFFAOYSA-N
SMILES: CCCCCCCCCCCCCCCC(O)=O
Synonym: stearic acid acide stearique hydrofol acid 1855 hydrofol acid 1655 industrene 5016
stearic acid, ion(1-) (8Cl) glycon TP glycon DP acidum stearinicum hydrofol acid 150

Product Specification

Appearance (Color): White
Form: Crystals or powder or crystalline powder or flakes or waxy solid
Assay (Silylated GC): ≥97.5%
Melting Point (clear melt): 67.0-74.0°C

Date Of Print: 11/30/2023

Product Specifications are subject to amendment and may change over time. Data contained is accurate as of the date printed.



CERTIFICATE OF ANALYSIS

Product Name ISOPROPYL ALCOHOL, 99%
Grade Meets ACS/USP/NF Monographs
Catalog # 231000099, zp231000099
Lot # C20F23007
Date of Manufacture: 06/23/20 **W2788 Received on 12/30/2020 by AP**
Recommended Retest Date: Five Years from Date of Manufacture

TEST	MONO GRAPH	SPECIFICATION	RESULT
Assay (corrected for water)	USP	99.0% min	99.92%
Assay (corrected for water)	ACS	99.5% min	
Solubility in water	ACS ⁺	To Pass Test	Pass
Appearance	ACS ⁺	Clear, colorless liquid	Pass
Color, APHA	ACS	10 max	1
Limit of Nonvolatile Residue	USP ⁺	NMT 2.5 mg (0.005%)	0.1 mg
Residue after Evaporation	ACS ⁺	0.001% max	< 0.001%
Specific Gravity	USP	0.783 - 0.787 @25°C	0.783
Identification A - Infrared Absorption	USP	To Pass Test	Pass
Identification B	USP	To Pass Test	Pass
Refractive Index @ 20°C	USP	1.376-1.378	1.377
Acidity	USP ⁺	NMT 0.70 ml of 0.020N NaOH is required	0.30 mL
Titration Acid or Base	ACS ⁺	0.0001 meq/g max	0.0001 meq/g
Carbonyl Compounds	ACS	Propionaldehyde 0.002% max	< 0.002%
		Acetone 0.002% max	None Detected
Limit of Volatile Impurities	USP	Diethyl Ether NMT 0.1%	< 0.1%
		Acetone NMT 0.1%	None Detected
		Diisopropyl Ether NMT 0.1%	< 0.1%
		n-Propyl Alcohol NMT 0.1%	< 0.1%
		2-Butanol NMT 0.1%	< 0.1%
		Total NMT 1.0%	< 0.1%
Water, wt%	ACS	NMT 0.2%	0.05%
Water Determination	USP	NMT 0.5%	

⁺This test is performed quarterly

Certification and Compliance Statements

This lot of Isopropyl Alcohol complies with all of the current requirements listed in the United States Pharmacopeia, American Chemical Society monographs and the National Formulary.

No chemicals whatsoever are used as solvents at any point in the manufacture, processing or packaging of Isopropyl Alcohol. Only Class 2 and Class 3 residual solvents may appear as impurities / related substances / low level contaminants in IPA. Concentration of Class 2 Option 1 and Class 3 residual solvents is below limits in the current USP/NF General Chapter <467>.

This product is not derived, nor does it come in contact with, any materials derived from bovine or other animal sources.

This product is for further commercial manufacturing, laboratory or research use, and may be used as an excipient or a process solvent for pharmaceutical purposes. It is not intended for use as an active ingredient in drug manufacturing nor as a medical device or disinfectant. Appropriate/legal use of this product is the responsibility of the user.

Approved by: D. Simoncelli, Quality Control Chemist

Date of Approval: 06/23/2020



W3009
rec. 2/27/2023 12

Product Name:

Hexadecane - ReagentPlus®, 99%

Certificate of Analysis

Product Number:

H6703

Batch Number:

SHBP8192

 $\text{CH}_3(\text{CH}_2)_{14}\text{CH}_3$

Brand:

SIAL

CAS Number:

544-76-3

MDL Number:

MFCD00008998

Formula:

C16H34

Formula Weight:

226.44 g/mol

Quality Release Date:

04 AUG 2022

Test	Specification	Result
Appearance (Color)	Colorless or White	Colorless
Appearance (Form)	Liquid or Solid	Liquid
Infrared Spectrum	Conforms to Structure	Conforms
Refractive index at 20 ° C	1.432 - 1.436	1.435
Purity (GC)	≥ 98.5 %	99.3 %
Color Test	≤ 20 APHA	< 5 APHA


Larry Coers, Director

Quality Control

Sheboygan Falls, WI US

Sigma-Aldrich warrants, that at the time of the quality release or subsequent retest date this product conformed to the information contained in this publication. The current Specification sheet may be available at Sigma-Aldrich.com. For further inquiries, please contact Technical Service. Purchaser must determine the suitability of the product for its particular use. See reverse side of invoice or packing slip for additional terms and conditions of sale.



W3019
rec 4/3/23

3050 Spruce Street, Saint Louis, MO 63103, USA

Website: www.sigmaaldrich.comEmail USA: techserv@sial.comOutside USA: eurtechserv@sial.com

Certificate of Analysis

Product Name:

Pyridine - anhydrous, 99.8%

Product Number:

270970

Batch Number:

SHBQ2113

Brand:

SIAL

CAS Number:

110-86-1

MDL Number:

MFCD00011732

Formula:

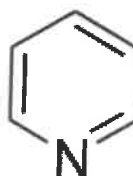
C₅H₅N

Formula Weight:

79.10 g/mol

Quality Release Date:

15 DEC 2022



Test	Specification	Result
Appearance (Color)	Colorless	Colorless
Appearance (Form)	Liquid	Liquid
Infrared Spectrum	Conforms to Structure	Conforms
Purity (GC)	≥ 99.75 %	99.99 %
Water (by Karl Fischer)	≤ 0.003 %	0.002 %
Residue on Evaporation	≤ 0.0005 %	< 0.0001 %


Larry Coers, Director
Quality Control
Sheboygan Falls, WI US

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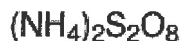
W 3035
rec. 6/6/23 12

Product Name:


Certificate of Analysis

Ammonium persulfate - ACS reagent, $\geq 98.0\%$

Product Number: 248614
Batch Number: MKCR9319
Brand: SIGALD
CAS Number: 7727-54-0
MDL Number: MFCD00003390
Formula Weight: 228.20 g/mol
Quality Release Date: 13 OCT 2022



Test	Specification	Result
Appearance (Color)	White to Off White	White
Appearance (Form)	Powder or Crystals or Granules or Chunks	Crystals
ICP Major Analysis	Confirmed	Confirmed
Confirms Sulfur Component		
Titration by KMNO ₄	$\geq 98.0 \%$	100.0 %
Residue on ignition (Ash)	$\leq 0.05 \%$	$< 0.05 \%$
Insoluble Matter	$\leq 0.005 \%$	0.002 %
c = 10 %; In Water		
Chloride and Chlorate (as Cl)	$\leq 0.001 \%$	$< 0.001 \%$
Iron (Fe)	$\leq 0.001 \%$	$< 0.001 \%$
Heavy Metal	$\leq 0.005 \%$	$< 0.001 \%$
as Lead		
Manganese (Mn)	$\leq 0.5 \text{ ppm}$	$< 0.1 \text{ ppm}$
Titrateable Acid (meq/g)	≤ 0.04	< 0.04
Meets ACS Requirements	Current ACS Specification	Conforms


Larry Coers, Director
Quality Control
Milwaukee, WI US

Sigma-Aldrich warrants, that at the time of the quality release or subsequent retest date this product conformed to the information contained in this publication. The current Specification sheet may be available at Sigma-Aldrich.com. For further inquiries, please contact Technical Service. Purchaser must determine the suitability of the product for its particular use. See reverse side of invoice or packing slip for additional terms and conditions of sale.





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

Jerusa 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.



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

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

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

Jerusa 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.



**PRODUCTOS
QUÍMICOS
MONTERREY, S.A. DE C.V.**

MIRADOR 201, COL. MIRADOR
MONTERREY, N.L. MÉXICO
CP 64070
TEL +52 81 13 52 67 67
www.pqm.com.mx

CERTIFICATE OF ANALYSIS

PRODUCT :	SODIUM SULFATE CRYSTALS ANHYDROUS		
QUALITY :	ACS (CODE RMB3375)	FORMULA :	Na ₂ SO ₄
SPECIFICATION NUMBER:	6399	RELEASE DATE:	MAY/23/2024
LOT NUMBER :	417203		

TEST	SPECIFICATIONS	LOT VALUES
Assay (Na ₂ SO ₄)	Min. 99.0%	99.8 %
pH of a 5% solution at 25°C	5.2 - 9.2	6.2
Insoluble matter	Max. 0.01%	0.001 %
Loss on ignition	Max. 0.5%	0.1 %
Chloride (Cl)	Max. 0.001%	<0.001 %
Nitrogen compounds (as N)	Max. 5 ppm	<5 ppm
Phosphate (PO ₄)	Max. 0.001%	<0.001 %
Heavy metals (as Pb)	Max. 5 ppm	<5 ppm
Iron (Fe)	Max. 0.001%	<0.001 %
Calcium (Ca)	Max. 0.01%	0.001 %
Magnesium (Mg)	Max. 0.005%	0.001 %
Potassium (K)	Max. 0.008%	0.001 %
Extraction-concentration suitability	Passes test	Passes test
Appearance	Passes test	Passes test
Identification	Passes test	Passes test
Solubility and foreign matter	Passes test	Passes test
Retained on US Standard No. 10 sieve	Max. 1%	0.2 %
Retained on US Standard No. 60 sieve	Min. 94%	96.2 %
Through US Standard No. 60 sieve	Max. 5%	3.5 %
Through US Standard No. 100 sieve	Max. 10%	0.1 %

COMMENTS

QC: PhC Irma Belmares

If you need further details, please call our factory or contact our local distributor.

RE-02-01, Ed. 3

E 3875

Acetone
BAKER RESI-ANALYZED® Reagent
For Organic Residue Analysis

avantor™



Material No.: 9254-03

Batch No.: 24H1462005

Manufactured Date: 2024-05-24

Expiration Date: 2027-05-24

Revision No.: 0

Certificate of Analysis

Test	Specification	Result
Assay ((CH ₃) ₂ CO) (by GC, corrected for water)	>= 99.4 %	99.8 %
Color (APHA)	<= 10	5
Residue after Evaporation	<= 1.0 ppm	0.2 ppm
Substances Reducing Permanganate	Passes Test	Passes Test
Titration Acid (µeq/g)	<= 0.3	0.2
Titration Base (µeq/g)	<= 0.6	<0.1
Water (H ₂ O)	<= 0.5 %	0.2 %
FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)	<= 5	<1
ECD Sensitive Impurities (as Heptachlor Epoxide) Single Peak (pg/mL)	<= 10	1

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

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

E3972

Jamie Croak
Director Quality Operations, Bioscience Production

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

Avantor Performance Materials LLC

Acetone
BAKER RESI-ANALYZED® Reagent
For Organic Residue Analysis

 **avantors**™



Material No.: 9254-03

Batch No.: 24L1062001

Manufactured Date: 2024-10-04

Expiration Date: 2027-10-04

Revision No.: 0

Certificate of Analysis

Test	Specification	Result
Assay ((CH ₃) ₂ CO) (by GC, corrected for water)	>= 99.4 %	99.7 %
Color (APHA)	<= 10	5
Residue after Evaporation	<= 1.0 ppm	0.3 ppm
Substances Reducing Permanganate	Passes Test	Passes Test
Titration Acid (µeq/g)	<= 0.3	0.1
Titration Base (µeq/g)	<= 0.6	<0.1
Water (H ₂ O)	<= 0.5 %	0.3 %
FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)	<= 5	<1
ECD Sensitive Impurities (as Heptachlor Epoxide) Single Peak (pg/mL)	<= 10	1

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

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

E 3975



Jamie Croak
Director Quality Operations, Bioscience Production

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

Avantor Performance Materials LLC



R: 02/20/20
53

Instructions for QATS Reference Material: *Inorganic ICV Solutions*

For ICP-MS use: dilute the ICV1 concentrate 50-fold with 1% (v/v) nitric acid; pipet 2 mL of the concentrate into a 100 mL volumetric flask and dilute to volume with 1% (v/v) nitric acid.

ICV5-0415

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

ICV6-0400

For the analysis of cyanide: dilute the ICV6 concentrate 100-fold with Type II water; pipet 1 mL of the concentrate into a 100 mL volumetric flask and dilute to volume with Type II water. Distill this solution along with the samples before analysis. The cyanide concentrate is prepared from $K_3Fe(CN)_6$, Type II water, and 0.1 % sodium hydroxide, and will decompose rapidly if exposed to light.

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

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

ICV1-1014		
Element	Concentration ($\mu\text{g/L}$) (after 10-fold dilution)	Concentration ($\mu\text{g/L}$) (after 50-fold dilution)
Al	2520	504
Sb	1010	202
As	997	199
Ba	518	104
Be	514	103
Cd	514	103
Ca	10000	2000
Cr	517	103
Co	521	104
Cu	505	101
Fe	10100	2020
Pb	1030	206
Mg	5990	1198
Mn	524	105
Ni	525	105
K	9940	1988
Se	1030	206
Ag	252	50
Na	10100	2020
Tl	1040	208
V	504	101
Zn	1010	202

ICV5-0415		ICV6-0400	
Element	Concentration ($\mu\text{g/L}$) (after 100-fold dilution)	Analyte	Concentration ($\mu\text{g/L}$) (after 100-fold dilution)
Hg	4.0	CN ⁻	99

W3011
W3012
W3013
W3014
W3015

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

avantor™



M 6041-4b
MS

Material No.: 9673-33
Batch No.: 23D2462010
Manufactured Date: 2023-03-22
Retest Date: 2028-03-20
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
ACS – Assay (H ₂ SO ₄)	95.0 – 98.0 %	96.1 %
Appearance	Passes Test	Passes Test
ACS – Color (APHA)	≤ 10	5
ACS – Residue after Ignition	≤ 3 ppm	< 1 ppm
ACS – Substances Reducing Permanganate (as SO ₂)	≤ 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™**



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


Jamie Ethier
Vice President Global Quality



Certificate of Analysis

Product information

Product	pH-Fix 0.3-2.3
REF	92180
LOT	80A0441
Expiration date:	29.02.2028
Date of examination:	23.01.2024
Gradation:	pH 0.3-0.7-1.0-1.3-1.6-1.9-2.3

Confirmation

Hereby we confirm, that the above mentioned product has successfully passed our quality control system in accordance with ISO 9001 and meets the specific quality criteria.

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



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

 **avantor™**



M6151

R → 11/15/25

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

Certificate of Analysis

Test	Specification	Result
ACS – Assay (as HCl) (by acid–base titrn)	36.5 – 38.0 %	37.9 %
ACS – Color (APHA)	≤ 10	5
ACS – Residue after Ignition	≤ 3 ppm	< 1 ppm
ACS – Specific Gravity at 60°/60°F	1.185 – 1.192	1.191
ACS – Bromide (Br)	≤ 0.005 %	< 0.005 %
ACS – Extractable Organic Substances	≤ 5 ppm	< 1 ppm
ACS – Free Chlorine (as Cl ₂)	≤ 0.5 ppm	< 0.5 ppm
Phosphate (PO ₄)	≤ 0.05 ppm	< 0.03 ppm
Sulfate (SO ₄)	≤ 0.5 ppm	< 0.3 ppm
Sulfite (SO ₃)	≤ 0.8 ppm	0.3 ppm
Ammonium (NH ₄)	≤ 3 ppm	< 1 ppm
Trace Impurities – Arsenic (As)	≤ 0.010 ppm	< 0.003 ppm
Trace Impurities – Aluminum (Al)	≤ 10.0 ppb	1.3 ppb
Arsenic and Antimony (as As)	≤ 5.0 ppb	< 3.0 ppb
Trace Impurities – Barium (Ba)	≤ 1.0 ppb	0.2 ppb
Trace Impurities – Beryllium (Be)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities – Bismuth (Bi)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Boron (B)	≤ 20.0 ppb	< 5.0 ppb
Trace Impurities – Cadmium (Cd)	≤ 1.0 ppb	< 0.3 ppb
Trace Impurities – Calcium (Ca)	≤ 50.0 ppb	163.0 ppb
Trace Impurities – Chromium (Cr)	≤ 1.0 ppb	0.7 ppb
Trace Impurities – Cobalt (Co)	≤ 1.0 ppb	< 0.3 ppb
Trace Impurities – Copper (Cu)	≤ 1.0 ppb	< 0.1 ppb
Trace Impurities – Gallium (Ga)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities – Germanium (Ge)	≤ 3.0 ppb	< 2.0 ppb
Trace Impurities – Gold (Au)	≤ 4.0 ppb	0.6 ppb
Heavy Metals (as Pb)	≤ 100 ppb	< 50 ppb
Trace Impurities – Iron (Fe)	≤ 15 ppb	6 ppb

>>> Continued on page 2 >>>

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

 **avantorsm**



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

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

>>> Continued on page 3 >>>

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

 **avantor**™

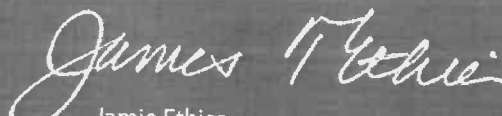


Material No.: 9530-33
Batch No.: 22G2862015

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

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


Jamie Ethier
Vice President Global Quality

Sodium Phosphate, Monobasic, Monohydrate,
Crystal
BAKER ANALYZED® A.C.S. Reagent

(sodium dihydrogen phosphate, monohydrate)



Material No.: 3818-05
Batch No.: 0000225799
Manufactured Date: 2018/12/05
Retest Date: 2025/12/03
Revision No: 1

Certificate of Analysis

Meets ACS Reagent Chemical Requirements,

Test	Specification	Result
Assay ($\text{NaH}_2\text{PO}_4 \cdot \text{H}_2\text{O}$)	98.0 – 102.0 %	99.5
pH of 5% Solution at 25°C	4.1 – 4.5	4.3
Insoluble Matter	≤ 0.01 %	< 0.01
Chloride (Cl)	≤ 5 ppm	< 5
ACS – Sulfate (SO_4)	≤ 0.003 %	< 0.003
Calcium (Ca)	≤ 0.005 %	< 0.005
Potassium (K)	≤ 0.01 %	< 0.01
Heavy Metals (as Pb)	≤ 0.001 %	< 0.001
Trace Impurities – Iron (Fe)	≤ 0.001 %	< 0.001

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

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


Jamie Ethier
Vice President Global Quality

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

W 2979

Rec: 12/09/22

exp. 12/09/27

Product Name:

1,5-Diphenylcarbazide - ACS reagent

Product Number:

259225

Batch Number:

MKCR6636

Brand:

SIAL

CAS Number:

140-22-7

MDL Number:

MFCD00003013

Formula:

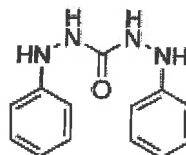
C₁₃H₁₄N₄O

Formula Weight:

242.28 g/mol


Quality Release Date:

02 JUN 2022



Certificate of Analysis

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



Larry Coers, Director
Quality Control
Milwaukee, WI US

Sigma-Aldrich warrants, that at the time of the quality release or subsequent retest date this product conformed to the information contained in this publication. The current Specification sheet may be available at Sigma-Aldrich.com. For further inquiries, please contact Technical Service. Purchaser must determine the suitability of the product for its particular use. See reverse side of invoice or packing slip for additional terms and conditions of sale.



Certificate of analysis

W3082 Received on 2/26/2026 by IZ

Product No.: A12244
Product: Stearic acid, 98%
Lot No.: U23E020

Appearance White flakes
Assay 98.7 %

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

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ThermoFisher
S C I E N T I F I C



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."

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

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

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

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

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.

Item Number	ED150	Lot Number	2ND0156
Item	Edetate Disodium, Dihydrate, USP	CAS Number	6381-92-6
Molecular Formula	$C_{10}H_{14}N_2Na_2O_8 \cdot 2H_2O$	Molecular Weight	372.24

TEST	SPECIFICATION		RESULT
	MIN	MAX	
ASSAY (DRIED BASIS)	99.0	101.0 %	99.5 %
pH OF A 5% SOLUTION @ 25°C	4.0	6.0	4.6
LOSS ON DRYING	8.7	11.4 %	8.90 %
CALCIUM (Ca)	NO PRECIPITATE IS FORMED		NO PRECIPITATE IS FORMED
ELEMENTAL IMPURITIES:			.
NICKEL (Ni)	AS REPORTED		<0.3 ppm
CHROMIUM (Cr)	AS REPORTED		<0.3 ppm
NITRILOTRIACETIC ACID[n[(HOCOCH ₂) ₃ N]		0.1 %	<0.10 %
IDENTIFICATION A	MATCHES REFERENCE		MATCHES REFERENCE
IDENTIFICATION B	RED COLOR IS DISCHARGED, LEAVING A YELLOWISH SOLUTION		RED COLOR IS DISCHARGED, LEAVING A YELLOWISH SOLUTION
IDENTIFICATION C	MEETS THE REQUIREMENTS FOR SODIUM		MEETS THE REQUIREMENTS FOR SODIUM
CERTIFIED HALAL			CERTIFIED HALAL
EXPIRATION DATE			10-JUL-2026
DATE OF MANUFACTURE			11-JUL-2023
APPEARANCE			WHITE CRYSTALLINE POWDER
RESIDUAL SOLVENTS		AS REPORTED	NO RESIDUAL SOLVENTS PRESENT
MONOGRAPH EDITION			USP 2024

Certificate of Analysis Results Entered By:

CACEVEDO
Charmian Acevedo
22-MAY-24 08:12:30

Certificate of Analysis Results Approved By:

GHERRERA
Genaro Herrera
22-MAY-24 12:32:01

Spectrum Chemical Mfg Corp
755 Jersey Avenue
New Brunswick 08901 NJ



All pharmaceutical ingredients are tested using current edition of applicable pharmacopeia.

Read and understand label and SDS before handling any chemicals. All Spectrum's chemicals are for manufacturing, processing, repacking or research purposes by experienced personnel only. It is the customer's responsibility to provide adequate hazardous material training and ensure that appropriate Personal Protective Equipment (PPE) is used before handling any chemical.

The Elemental Impurities standards implemented by USP and other Pharmaceutical Compendia reflect a growing understanding of the toxicology of trace levels of elemental impurities that can remain in drug substances originating from either raw materials or manufacturing processes. Identifying and quantifying impurities can be critical to predicting the best possible patient outcomes. Elemental Impurities has been a requirement of all products meeting USP/NF, EP and BP monographs since January 1, 2018. More information can be found in USP sections <232> Elemental Impurities – Limits and <233> Elemental Impurities – Procedures. Data for drug substances furnished by Spectrum Chemical Mfg. Corp can be used to ensure that patient daily exposures by oral administration to the selected elements are not exceeded in the formulation of pharmaceutical products.

W3139 Received on 9/9/24 by IZ

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

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

Order our products online thermofisher.com/chemicals

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

Products are processed under ISO 9001:2015 quality management systems and samples are tested for conformance to the noted specifications. Certain data may have been supplied by third parties. We disclaim the implied warranties of merchantability and fitness for a particular purpose, and the accuracy of third party data or information associated with the product. Products are for research and development use only. Products are not for direct administration to humans or animals. It is the responsibility of the final formulator or end user to determine suitability, and to qualify and/or validate each product for its intended use.



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.

Chem-Impex International, Inc.

Tel: (630) 766-2112**E-mail:** sales@chemimpex.com**Shipping and Correspondence:**

935 Dillon Drive

Wood Dale, IL 60191

Fax: (630) 766-2218**Web site:** www.chemimpex.com**Manufacturing site:**

825 Dillon Drive

Wood Dale, IL 60191

Certificate of Analysis

Catalogue Number	01237
Lot Number	002126-2019-201
Product	Magnesium chloride hexahydrate

Magnesium chloride•6H₂O

CAS Number	7791-18-6
Molecular Formula	MgCl ₂ •6H ₂ O

Molecular Weight	203.3
-------------------------	-------

Appearance	White crystals
Solubility	167 g in 100 mL water
Melting Point	~ 115 °C
Heavy Metals	4.393 ppm
Anion	Nitrate (NO ₃) : < 0.001% Phosphate (PO ₄) : < 5 ppm Sulfate (SO ₄) : < 0.002%
Cation	Ammonium (NH ₄) : < 0.002% Barium (Ba) : 0.005% Calcium (Ca) : 0.01% Iron (Fe) : 4.5 ppm Manganese (Mn) : 0.624 ppm Potassium (K) : 0.004% Sodium (Na) : 0.000003% Strontium (Sr) : 0.005%
Insoluble material	0.0021%
Assay by titration	100.83%
Grade	ACS reagent
Storage	Store at RT

Certificate of Analysis

Catalog Number: 01237

Lot Number: 002126-2019-201

Remarks

See material safety data sheet for additional information

For laboratory use only

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

A handwritten signature in black ink, appearing to read 'Bala Kumar', with a stylized flourish at the end.

Bala Kumar
Quality Control Manager

Certificate of Analysis



Material	BDH9208-500G
Material Description	BDH AMMONIUM CHLORIDE ACS 500G
Grade	U S P REAGENT (ACS GRADE)
Batch	24L0356561
Reassay Date	08/31/2027
CAS Number	12125-02-9
Molecular Formula	NH ₄ Cl
Molecular Mass	53.49
Date of Manufacture	08/01/2024
Storage	Room Temperature

Characteristics	Specifications	Measured Values
Appearance	White granular powder	White granular powder
Calcium	<= 0.001 %	0.001 %
Heavy Metals (as Pb)	<= 0.0005 %	<0.0002 %
Insolubles	<= 0.005 %	0.001 %
Iron	<= 0.0002 %	<0.0002 %
Magnesium	<= 0.0005 %	0.0001 %
pH (5%, Water) @25C	4.5 - 5.5	4.8
Phosphate	<= 0.0002 %	<0.0002 %
Purity	>= 99.5 %	99.8 %
Residue on Ignition	<= 0.01 %	0.003 %
Sulfate	<= 0.002 %	<0.002 %
Extra Description:	Meets Reagent Specifications for testing USP/NF monographs	

Internal ID #: 710

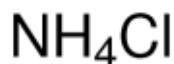
Signature	Additional Information
<p>We certify that this batch conforms to the specifications listed above.</p> <p>This document has been electronically produced and is valid without a signature.</p> <p>Leona Edwardson, Quality Control Sr. Manager - Solon VWR Chemicals, LLC. 28600 Fountain Parkway, Solon OH 44139 USA</p>	<p>Analysis may have been rounded to significant digits in specification limits</p> <p>Product meets analytical specifications of the grades listed.</p>

W3196 Received on 03/19/2025 by IZ

Certificate of Analysis

Product Name:

Ammonium chloride - ACS reagent, ≥99.5%



Product Number: 213330
Batch Number: MKCV1009
Brand: SIGALD
CAS Number: 12125-02-9
MDL Number: MFCD00011420
Formula: H4CIN
Formula Weight: 53.49 g/mol
Quality Release Date: 23 OCT 2023
Recommended Retest Date: SEP 2026

Test	Specification	Result
Appearance (Color)	White	White
Appearance (Form)	Powder or Crystals or Chunk(s)	Crystals
Titration by AgNO ₃	≥ 99.5 %	100.2 %
pH	4.5 - 5.5	4.9
@ 25 Deg c (5% Solution)		
Insoluble Matter	≤ 0.005 %	0.001 %
10%, H ₂ O		
Residue on ignition (Ash)	≤ 0.01 %	< 0.01 %
Calcium (Ca)	≤ 0.001 %	< 0.001 %
Magnesium (Mg)	≤ 5 ppm	1 ppm
Heavy Metals	≤ 5 ppm	< 1 ppm
by ICP		
Iron (Fe)	≤ 2 ppm	< 1 ppm
Phosphate (PO ₄)	≤ 2 ppm	< 2 ppm
Sulfate (SO ₄)	≤ 0.002 %	< 0.002 %
Meets ACS Requirements	Current ACS Specification	Conforms
Recommended Retest Period	-----	-----
3 Years		



Larry Coers, Director

Sigma-Aldrich warrants, that at the time of the quality release or subsequent retest date this product conformed to the information contained in this publication. The current Specification sheet may be available at Sigma-Aldrich.com. For further inquiries, please contact Technical Service. Purchaser must determine the suitability of the product for its particular use. See reverse side of invoice or packing slip for additional terms and conditions of sale.



Certificate of Analysis

Product Number: 213330
Batch Number: MKCV1009

Quality Control
Milwaukee, WI US

Sigma-Aldrich warrants, that at the time of the quality release or subsequent retest date this product conformed to the information contained in this publication. The current Specification sheet may be available at Sigma-Aldrich.com. For further inquiries, please contact Technical Service. Purchaser must determine the suitability of the product for its particular use. See reverse side of invoice or packing slip for additional terms and conditions of sale.



W3198 Received on 4/11/2025 by IZ

3050 Spruce Street, Saint Louis, MO 63103, USA

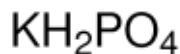
Website: www.sigmaaldrich.comEmail USA: techserv@sial.comOutside USA: eurtechserv@sial.com

Certificate of Analysis

Product Name:

Potassium phosphate monobasic - ACS reagent, ≥99.0%

Product Number: P0662
Batch Number: MKCW6723
Brand: SIGALD
CAS Number: 7778-77-0
MDL Number: MFCD00011401
Formula: H₂KO₄P
Formula Weight: 136.09 g/mol
Quality Release Date: 16 OCT 2024
Recommended Retest Date: OCT 2028



Test	Specification	Result
Appearance (Color)	White	White
Appearance (Form)	Powder or Crystals	Crystals
Assay	≥ 99.0 %	99.8 %
Insoluble Matter	≤ 0.01 %	< 0.01 %
Loss on Drying	≤ 0.2 %	< 0.1 %
At 105°C		
pH	4.1 - 4.5	4.5
(c = 5%, 25 deg C)		
Chloride Content	≤ 0.001 %	< 0.001 %
Sulfate (SO ₄)	≤ 0.003 %	< 0.003 %
Heavy Metals	≤ 0.001 %	< 0.001 %
by ICP		
Iron (Fe)	≤ 0.002 %	< 0.001 %
Sodium (Na)	≤ 0.005 %	< 0.001 %
Recommended Retest Period	-----	-----
4 Years		



Larry Coers, Director
Quality Control
Milwaukee, WI US

Sigma-Aldrich warrants, that at the time of the quality release or subsequent retest date this product conformed to the information contained in this publication. The current Specification sheet may be available at Sigma-Aldrich.com. For further inquiries, please contact Technical Service. Purchaser must determine the suitability of the product for its particular use. See reverse side of invoice or packing slip for additional terms and conditions of sale.



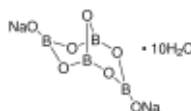
W3201 Received on 4/16/25 by IZ

Certificate of Analysis

Product Name:

Sodium tetraborate decahydrate - ACS reagent, ≥99.5%

Product Number: S9640
Batch Number: BCCL9613
Brand: SIGALD
CAS Number: 1303-96-4
Formula: B₄Na₂O₇ · 10H₂O
Formula Weight: 381,37 g/mol
Quality Release Date: 05 JUL 2024
Recommended Retest Date: MAY 2029



Test	Specification	Result
Appearance (Color)	White	White
Appearance (Form)	Powder or Crystals	Powder
Titration with NaOH	99.5 - 105.0 %	100.7 %
pH	9.15 - 9.20	9.20
0.01 m Solution at 25 Deg C		
Meets ACS Requirements	Corresponds to Requirements	Corresponds
ACS Specifications	Corresponds to Requirements	Corresponds
Insoluble Matter ≤ 0.005% / Heavy		
Metals (As Pb) ≤ 0.001%		
Calcium (Ca)	≤ 50 mg/kg	< 50 mg/kg
Iron (Fe)	≤ 5 mg/kg	< 5 mg/kg
Total Sulfur	≤ 50 mg/kg	< 50 mg/kg
as SO ₄ (ICP)		
Chloride (Cl)	≤ 10 mg/kg	< 10 mg/kg
Phosphate (PO ₄)	≤ 10 mg/kg	< 10 mg/kg

Dr. Reinhold Schwenninger
Quality Assurance
Buchs, Switzerland CH

Sigma-Aldrich warrants, that at the time of the quality release or subsequent retest date this product conformed to the information contained in this publication. The current Specification sheet may be available at Sigma-Aldrich.com. For further inquiries, please contact Technical Service. Purchaser must determine the suitability of the product for its particular use. See reverse side of invoice or packing slip for additional terms and conditions of sale.

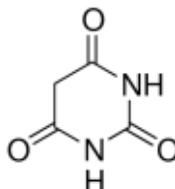


Certificate of Analysis

Product Name:

Barbituric acid - ReagentPlus®, 99%

Product Number: 185698
Batch Number: WXBFB3271V
Brand: SIAL
CAS Number: 67-52-7
Formula: C₄H₄N₂O₃
Formula Weight: 128.09 g/mol
Quality Release Date: 16 MAY 2024



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



Kang Chen
Quality Manager
Wuxi, China CN

Sigma-Aldrich warrants, that at the time of the quality release or subsequent retest date this product conformed to the information contained in this publication. The current Specification sheet may be available at Sigma-Aldrich.com. For further inquiries, please contact Technical Service. Purchaser must determine the suitability of the product for its particular use. See reverse side of invoice or packing slip for additional terms and conditions of sale.

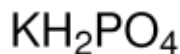


Certificate of Analysis

Product Name:

Potassium phosphate monobasic - ACS reagent, ≥99.0%

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



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



Larry Coers, Director
Quality Control
Milwaukee, WI US

Sigma-Aldrich warrants, that at the time of the quality release or subsequent retest date this product conformed to the information contained in this publication. The current Specification sheet may be available at Sigma-Aldrich.com. For further inquiries, please contact Technical Service. Purchaser must determine the suitability of the product for its particular use. See reverse side of invoice or packing slip for additional terms and conditions of sale.



N3212 Received on 5/21/25 by 12



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: _____

Quality Control Department

Date: 09/13/2024

POLYSEED.Ref.1.19

Revised Jan 24

Certificate of Analysis

Cyanide Standard, 1000 ppm CN⁻

Lot Number: 1505H73

Product Number: 2543

Manufacture Date: MAY 08, 2025

Expiration Date: NOV 2025

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

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

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

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

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

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

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

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



Ernest Mahan (05/08/2025)
Plant Manager

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

Certificate of Analysis

Sodium Hypochlorite Solution, 5% available Chlorine

Lot Number: 2506M51**Product Number:** 7495.5**Manufacture Date:** JUN 18, 2025**Expiration Date:** DEC 2025

This solution is subject to slow decomposition upon exposure to air. Keep container tightly capped. Refrigeration may improve stability.
When used in the Phenate method for Ammonia, APHA recommends replacing this solution about every 2 months.

Name	CAS#	Grade
Water	7732-18-5	Commercial
Sodium Hypochlorite	7681-52-9	Commercial

Test	Specification	Result	NIST SRM#
Appearance	Colorless to greenish-yellow liquid	Passed	
Assay (vs. Sodium Thiosulfate/Starch)	4.75-5.25 % (w/w) Cl ₂	5.17 % (w/w) Cl ₂	136

Specification	Reference
Sodium Hypochlorite, 5%	APHA (4500-NH3 F)
Sodium Hypochlorite	ASTM (D 4785)

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)
7495.5-1	4 L black poly	6 months
7495.5-16	500 mL amber poly	6 months
7495.5-32	1 L amber poly	6 months

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

Jose Pena (06/18/2025)
Operations Manager

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Part of TCP Analytical Group

Jackson's Pointe Commerce Park- Building 1000
1010 Jackson's Pointe Court, Zelienople, PA 16063

Certificate of Analysis

Cyanide Standard 1000 ppm (1ml = 1mg CN)

Product Code: **LC13545**

Manufacture Date: June 25, 2025

Lot Number: **45060288**

Expiration Date: December 24, 2025

Test	Specification	Result
Appearance (clarity)	clear solution	clear solution
Appearance (color)	colorless	colorless
Concentration (CN)	0.990 - 1.010mg/mL	1.000mg/mL
Concentration (CN)	990 - 1,010ppm	1,000ppm
Traceable to NIST SRM	Report	999b

Intended Use - Product is intended for use in manufacturing procedures and laboratory procedures and protocols.

Storage Information - Unless noted on the product label, store the product under normal lab conditions in its tightly closed, original container. Do not pipet directly from the container or return unused portions to the container.

Instructions for Handling and Use - Please refer to the associated product label and Safety Data Sheet (SDS) for information regarding safety and handling of this product.

Preparation - All products are manufactured and tested according to established, documented procedures and methodology. Production documentation records manufacturing data, raw material traceability and testing history on a per lot basis. Balances, thermometers, and glassware are calibrated before first use and on a regular schedule with references traceable to NIST

The suffix of the product code may differ from what is on your product label. The suffix will designate the size and be associated with a numeric digit(s). Visit LabChem.com for more information

Suffix	1	2	3/3S/36/36S	4/4C	5	6	7	8	9	20	44	200	246	486
Size	500mL org	1L or 1kg	2.5L/2.5L Coated/6x2.5L/6x2.5L Coated	4L	20L	10L	125mL	25g	100g	20x20mL	4x4L	200L	24x6mL	48x6mL

Michael Monteleone

Michael Monteleone
Chemistry Supervisor - Quality Control
20250703 15:30:45ahoffman-0-0

ISO9001:2015 Registration #0306-01



An ISO 9001 Certified Company

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

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

n-Hexane 95%
ULTRA RESI-ANALYZED
For Organic Residue Analysis

 **avantorsTM**



W3240
JP
Op4tel. 07/15/2025

Material No.: 9262-03
Batch No.: 25C0362006
Manufactured Date: 2025-01-29
Expiration Date: 2026-04-30
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)	≤ 5	1
ECD Sensitive Impurities (as HeptachlorEpoxide) Single Peak (pg/mL)	≤ 10	6
ECD-Sensitive Impurities (as EthyleneDibromide) - Single Impurity Peak (ng/mL)	≤ 5	4
Assay (Total Saturated C ₆ Isomers) (by GC, corrected for water)	$\geq 99.5 \%$	100.0 %
Assay (as n-Hexane) (by GC, corrected for water)	$\geq 95 \%$	100 %
Color (APHA)	≤ 10	10
Residue after Evaporation	≤ 1.0 ppm	0.2 ppm
Substances Darkened by H ₂ SO ₄	Passes Test	Passes Test
Water (by KF, coulometric)	$\leq 0.05 \%$	$< 0.01 \%$

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

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



Jamie Croak
Director Quality Operations, Bioscience Production

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

Avantor Performance Materials LLC

W3243 Received on 10/3/25 by IZ

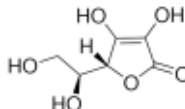
Website: www.sigmaaldrich.comEmail USA: techserv@sial.comOutside USA: eurtechserv@sial.com

Certificate of Analysis

Product Name:

L-Ascorbic acid - ACS reagent, ≥99%

Product Number: 255564
Batch Number: MKCX1143
Brand: SIAL
CAS Number: 50-81-7
MDL Number: MFCD00064328
Formula: C₆H₈O₆
Formula Weight: 176.12 g/mol
Quality Release Date: 17 JAN 2025
Recommended Retest Date: JAN 2028



Test	Specification	Result
Appearance (Color)	White	White
Appearance (Form)	Powder or Crystals or Granules or Chunks	Powder
Infrared Spectrum	Conforms to Structure	Conforms
Optical Rotation (+); c = 10%; Water	20.5 - 21.5 deg	21.0 deg
Titration by Iodine	≥ 99.0 %	100.0 %
Residue on Ignition	≤ 0.10 %	0.02 %
Iron (Fe)	≤ 0.001 %	< 0.001 %
Heavy Metals by ICP-OES	≤ 0.002 %	0.001 %
Recommended Retest Period 3 Years	-----	-----
Meets ACS Requirements	Current ACS Specification	Conforms

Larry Coers, Director
Quality Control
Milwaukee, WI US

Sigma-Aldrich warrants, that at the time of the quality release or subsequent retest date this product conformed to the information contained in this publication. The current Specification sheet may be available at Sigma-Aldrich.com. For further inquiries, please contact Technical Service. Purchaser must determine the suitability of the product for its particular use. See reverse side of invoice or packing slip for additional terms and conditions of sale.





SHIPPING DOCUMENTS

CLIENT INFORMATION

REPORT TO BE SENT TO:

COMPANY: Dal-Tile LLC - Dickson Plant
ADDRESS: 187 Warren G. Medley Drive
CITY Dickson STATE: TN ZIP: 37055
ATTENTION: Michel Gil
PHONE: 214-309-4003 FAX:

CLIENT PROJECT INFORMATION

PROJECT NAME: White Water Sampling
PROJECT NO.: EM-2025-1026 LOCATION: Nashville, TN
PROJECT MANAGER: James Engler
e-mail: jane.engler@alliance-tg.com
PHONE: 601-415-6413 FAX:

CLIENT BILLING INFORMATION

BILL TO: ATG-Dynalene AEM PO#:
ADDRESS: 400 Texas 146
CITY Baytown STATE: TX ZIP: 77520
ATTENTION: PHONE:

ANALYSIS

DATA TURNAROUND INFORMATION

FAX (RUSH) _____ DAYS*
HARDCOPY (DATA PACKAGE): _____ DAYS*
EDD: _____ DAYS*

*TO BE APPROVED BY CHEMTECH

STANDARD HARDCOPY TURNAROUND TIME IS 10 BUSINESS

DATA DELIVERABLE INFORMATION

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

1. 10/25/25
2. 10/25/25
3. 10/25/25
4. 10/25/25
5. 10/25/25
6. 10/25/25
7. 10/25/25
8. 10/25/25
9. 10/25/25

ALLIANCE SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE		SAMPLE COLLECTION		# OF BOTTLES	PRESERVATIVES									COMMENTS	
			COMP	GRAB	DATE	TIME		B	C	E	F	C	E	E	C		← Specify Preservatives A-HCl D-NaOH B-HNO3 E-ICE C-H2SO4 F-OTHER	
1.	Monthly Cyanide	WW		X	9/29	2:10PM	1			X							10/25/25	9.11
2.	Additional Cyanide	WW		X	9/30	2:47	3			X							10/25/25	9.11
3.	Oil & Grease	WW		X	9/30	3:05	1		X								10/25/25	9.11
4.	Mercury	WW	X		9/30		1	X										
5.	Hexavalent Chromium	WW	X		9/30		1			X							10/25/25	9.11
6.	Ammonia Conc'd Sample	WW	X		9/30	3:20PM	1					X					10/25/25	9.11
7.	Free Cyanide Sample	WW	X		9/30	3:10PM	1						X					
8.	BOOS Conc'd Sample	WW	X		9/30	3:10PM	1								X			
9.	Total Phosphorus	WW	X		9/30		1									X		
10.	True Blank						1											

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

RELINQUISHED BY SAMPLER: 1. <u>James Engler</u>	DATE/TIME: <u>10/25/25</u>	RECEIVED BY: <u>1. Fred Bell 9/25/25</u>	Conditions of bottles or coolers at receipt: <input type="checkbox"/> COMPLIANT <input type="checkbox"/> NON COMPLIANT <input type="checkbox"/> COOLER TEMP <u>3.2°C</u> °C
RELINQUISHED BY SAMPLER: 2. <u>UPS</u>	DATE/TIME: <u>10-1-25</u> <u>1025</u>	RECEIVED BY: <u>[Signature]</u>	Comments: _____
RELINQUISHED BY SAMPLER: 3.	DATE/TIME:	RECEIVED BY:	Page _____ of

CLIENT: ☐ Hand Delivered ☐ Other

Shipment Complete
☐ YES ☐ NO

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