

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

LAB CHRONICLE

OrderID:	Q2461	OrderDate:	6/30/2025 8:45:48 AM
Client:	ATG-GREENVILLE AEC	Project:	AEC-2025-0013-CSC 4086Shenectady
Contact:	Daniel Maalouf	Location:	A52,VOA Lab

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q2461-01	SW-3	Water			06/26/25 13:10			06/26/25
			COD	SM5220 D			07/01/25 13:23	
			Oil and Grease	1664A			07/02/25 09:00	



SAMPLE DATA

Report of Analysis

Client:	ATG-GREENVILLE AEC	Date Collected:	06/26/25 13:10
Project:	AEC-2025-0013-CSC 4086Shenectady	Date Received:	06/26/25
Client Sample ID:	SW-3	SDG No.:	Q2461
Lab Sample ID:	Q2461-01	Matrix:	Water
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
COD	240	D	5	7.50	50.0	mg/L		07/01/25 13:23	SM 5220 D-11
Oil and Grease	5.80		1	0.29	5.00	mg/L		07/02/25 09:00	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



QC RESULT SUMMARY

Initial and Continuing Calibration Verification

Client: ATG-GREENVILLE AEC

SDG No.: Q2461

Project: AEC-2025-0013-CSC 4086Shenectady

RunNo.: LB136335

Analyte		Units	Result	True Value	% Recovery	Acceptance Window (%R)	Analysis Date
Sample ID: COD	ICV	mg/L	50.962	50	102	95-105	05/28/2025
Sample ID: COD	CCV1	mg/L	50.962	50	102	95-105	07/01/2025
Sample ID: COD	CCV2	mg/L	49.946	50	100	95-105	07/01/2025

Initial and Continuing Calibration Blank Summary

Client: ATG-GREENVILLE AEC

SDG No.: Q2461

Project: AEC-2025-0013-CSC 4086Shenectady

RunNo.: LB136335

Analyte		Units	Result	Acceptance Limits	Conc Qual	MDL	RDL	Analysis Date
Sample ID:	ICB							
COD		mg/L	< 5.0000	5.0000	U	1.50	10	05/28/2025
Sample ID:	CCB1							
COD		mg/L	< 5.0000	5.0000	U	1.50	10	07/01/2025
Sample ID:	CCB2							
COD		mg/L	< 5.0000	5.0000	U	1.50	10	07/01/2025

Preparation Blank Summary

Client: ATG-GREENVILLE AEC

SDG No.: Q2461

Project: AEC-2025-0013-CSC 4086Shenectady

Analyte	Units	Result	Acceptance Limits	Conc Qual	MDL	RDL	Analysis Date
Sample ID: LB136335BL							
COD	mg/L	< 5.0000	5.0000	U	1.5	10.0	07/01/2025
Sample ID: LB136347BL							
Oil and Grease	mg/L	< 2.5000	2.5000	U	0.29	5.0	07/02/2025

Matrix Spike Summary

Client:	ATG-GREENVILLE AEC	SDG No.:	Q2461
Project:	AEC-2025-0013-CSC 4086Shenectady	Sample ID:	Q2441-01
Client ID:	MH-6272025MS	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	668		648		20.0	1	100		07/02/2025

Matrix Spike Summary

Client:	ATG-GREENVILLE AEC	SDG No.:	Q2461
Project:	AEC-2025-0013-CSC 4086Shenectady	Sample ID:	Q2441-01
Client ID:	MH-6272025MSD	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	668		648		20.0	1	101		07/02/2025

Matrix Spike Summary

Client:	ATG-GREENVILLE AEC	SDG No.:	Q2461
Project:	AEC-2025-0013-CSC 4086Shenectady	Sample ID:	Q2461-01
Client ID:	SW-3MS	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
COD	mg/L	75-125	285		240	D	50.0	5	90		07/01/2025

Matrix Spike Summary

Client:	ATG-GREENVILLE AEC	SDG No.:	Q2461
Project:	AEC-2025-0013-CSC 4086Shenectady	Sample ID:	Q2461-01
Client ID:	SW-3MSD	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
COD	mg/L	75-125	280		240	D	50.0	5	80		07/01/2025

Duplicate Sample Summary

Client:	ATG-GREENVILLE AEC	SDG No.:	Q2461
Project:	AEC-2025-0013-CSC 4086Shenectady	Sample ID:	Q2441-01
Client ID:	MH-6272025MSD	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	668		668		1	0.03		07/02/2025

Duplicate Sample Summary

Client:	ATG-GREENVILLE AEC	SDG No.:	Q2461
Project:	AEC-2025-0013-CSC 4086Shenectady	Sample ID:	Q2461-01
Client ID:	SW-3DUP	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
COD	mg/L	+/-20	240	D	245		5	2.06		07/01/2025

Duplicate Sample Summary

Client: ATG-GREENVILLE AEC	SDG No.: Q2461
Project: AEC-2025-0013-CSC 4086Shenectady	Sample ID: Q2461-01
Client ID: SW-3MSD	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
COD	mg/L	+/-20	285		280		5	1.77		07/01/2025

Laboratory Control Sample Summary

Client: ATG-GREENVILLE AEC

SDG No.: Q2461

Project: AEC-2025-0013-CSC 4086Shenectady

Run No.: LB136335

Analyte	Units	True Value	Result	Conc. Qualifier	% Recovery	Dilution Factor	Acceptance Limit %R	Analysis Date
Sample ID	LB136335BS							
COD	mg/L	50	48.9		98	1	90-110	07/01/2025

Laboratory Control Sample Summary

Client: ATG-GREENVILLE AEC

SDG No.: Q2461

Project: AEC-2025-0013-CSC 4086Shenectady

Run No.: LB136347

Analyte	Units	True Value	Result	Conc. Qualifier	% Recovery	Dilution Factor	Acceptance Limit %R	Analysis Date
Sample ID	LB136347BS							
Oil and Grease	mg/L	20.0	16.9		84	1	78-114	07/02/2025



RAW DATA

Analytical Summary Report

Analysis Method: SM5220 D

ANALYST: Iwona

Parameter: COD

SUPERVISOR REVIEW BY: jignesh

Run Number: LB136335

Reagent/Standard	Lot/Log #
COD calibration std. 150 ppm	WP113238
COD calibration std. 100 ppm	WP113237
COD calibration std. 50 ppm	WP113235
COD calibration std. 10 ppm	WP113234
COD calibration std. 0 ppm	WP113233
COD ICV-LCS std, 50ppm	WP113240
COD calibration std. 75 ppm	WP113236
COD Digestion Vials Low Level 0-150Mg/L	W3129
COD CCV std, 50ppm	WP113753
COD ICV-LCS std, 50ppm	WP113754
RL CHECK	WP113755

Temp In (C): 148	Date In: 07/01/2025	Time In: 09:40
Temp Out (C): 151	Date Out: 07/01/2025	Time Out: 11:40

Intercept: 0.8179

Slope: 0.9847

Regression: 0.9995

Seq	Lab ID	TrueValue (mg/l)	DF	MATRIX	Reading	Result (mg/l)	%D	Anal Date	Anal Time
1	CAL1	0	1	Water	0.000	-0.831		05/28/2025	13:10
2	CAL2	10	1	Water	9.000	8.309	-16.9	05/28/2025	13:10
3	CAL3	50	1	Water	52.000	51.977	4	05/28/2025	13:11
4	CAL4	75	1	Water	77.000	77.366	3.2	05/28/2025	13:11
5	CAL5	100	1	Water	99.000	99.708	-0.3	05/28/2025	13:12
6	CAL6	150	1	Water	147.000	148.453	-1	05/28/2025	13:12

Analytical Summary Report

Analysis Method: SM5220 D

ANALYST: Iwona

Parameter: COD

SUPERVISOR REVIEW BY: jignesh

Run Number: LB136335

Seq	Lab ID	True Value (mg/l)	Initial Weight (g)	Final Vol (ml)	DF	MATRIX	Reading	Result	AnalDate	AnalTime
1	ICV	50	NA	NA	1	Water	51.000	50.962	05/28/2025	13:13
2	ICB		NA	NA	1	Water	0.000	-0.831	05/28/2025	13:13
3	CCV1	50	NA	NA	1	Water	51.000	50.962	07/01/2025	13:20
4	CCB1		NA	NA	1	Water	1.000	0.185	07/01/2025	13:20
5	RL Check	10	NA	NA	1	Water	11.000	10.340	07/01/2025	13:21
6	LB136335BL		NA	NA	1	Water	1.000	0.185	07/01/2025	13:21
7	LB136335BS	50	NA	NA	1	Water	49.000	48.931	07/01/2025	13:22
8	Q2460-01		NA	NA	10	Water	92.000	92.599	07/01/2025	13:22
9	Q2461-01		NA	NA	5	Water	48.000	47.915	07/01/2025	13:23
10	Q2461-01DUP		NA	NA	5	Water	49.000	48.931	07/01/2025	13:23
11	Q2461-01MS	50	NA	NA	5	Water	57.000	57.055	07/01/2025	13:24
12	Q2461-01MSD	50	NA	NA	5	Water	56.000	56.040	07/01/2025	13:24
13	CCV2	50	NA	NA	1	Water	50.000	49.946	07/01/2025	13:25
14	CCB2		NA	NA	1	Water	1.000	0.185	07/01/2025	13:25

WORKLIST(Hardcopy Internal Chain)

LB 136335

WorkList Name : COD-070125 WorkList ID : 190477 Department : Wet-Chemistry Date : 07-01-2025 09:19:31

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q2460-01	SW-1	Water	COD	Conc H2SO4 to pH < 2	ATGG01	A32	06/26/2025	SM5220 D
Q2461-01	SW-3	Water	COD	Conc H2SO4 to pH < 2	ATGG01	A52	06/26/2025	SM5220 D

Date/Time 07/01/25 09:20
Raw Sample Received by: 12(51)
Raw Sample Relinquished by: 286607

Date/Time 07/01/25 10:10
Raw Sample Received by: 286607
Raw Sample Relinquished by: 12(51)

Extraction and Analytical Summary Report

Analysis Method: 1664A
Test: Oil and Grease
Run Number: LB136347
Analysis Date: 07/02/2025
BalanceID: WC SC-6
OvenID: EXT OVEN-3

ANALYST: jignesh
REVIEWED BY: Iwona
Extraction Date: 07/02/2025
Extraction IN Time: 08:05
Extraction OUT Time: 08:25
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	LB136347BL	LB136347BL	WATER	1.3	1000	100	2.7453	2.7453	0	2.7454	2.7454	0.0001	0.1
2	LB136347BS	LB136347BS	WATER	1.3	1000	100	2.9303	2.9303	0	2.9472	2.9472	0.0169	16.9
3	Q2441-01	MH-6272025	WATER	1.6	1000	100	3.0371	3.0371	0	3.6849	3.6849	0.6478	647.8
4	Q2441-02	Q2441-01MS	WATER	1.6	1000	100	2.7413	2.7413	0	3.4091	3.4091	0.6678	667.8
5	Q2441-03	Q2441-01MSD	WATER	1.6	1000	100	2.9633	2.9633	0	3.6313	3.6313	0.6680	668
6	Q2460-01	SW-1	WATER	1.6	1000	100	3.0642	3.0642	0	3.0688	3.0688	0.0046	4.6
7	Q2461-01	SW-3	WATER	1.6	1000	100	3.0060	3.0060	0	3.0118	3.0118	0.0058	5.8
8	Q2470-01	SW-1	WATER	1.3	1000	100	3.0099	3.0099	0	3.0175	3.0175	0.0076	7.6
9	Q2471-01	SW-1	WATER	1.3	1000	100	3.0313	3.0313	0	3.0331	3.0331	0.0018	1.8

Out Time2: 12:00

WORKLIST(Hardcopy Internal Chain)

JB 136347

WorkList Name : OIL & GREASE Q2476

WorkList ID : 190496

Department : Wet-Chemistry

Date : 07-02-2025 07:41:42

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q2441-01	A MH-6272025	Water	Oil and Grease	Conc H2SO4 to pH < 2	EURO03	D41	06/27/2025	1664A
Q2441-02	Q2441-01MS	Water	Oil and Grease	Conc H2SO4 to pH < 2	EURO03	D41	06/27/2025	1664A
Q2441-03	Q2441-01MSD	Water	Oil and Grease	Conc H2SO4 to pH < 2	EURO03	D41	06/27/2025	1664A
Q2460-01	E SW-1	Water	Oil and Grease	Conc H2SO4 to pH < 2	ATGG01	A32	06/26/2025	1664A
Q2461-01	E SW-3	Water	Oil and Grease	Conc H2SO4 to pH < 2	ATGG01	A52	06/26/2025	1664A
Q2470-01	C SW-1	Water	Oil and Grease	Conc H2SO4 to pH < 2	ATGG01	A52	06/27/2025	1664A
Q2471-01	C SW-1	Water	Oil and Grease	Conc H2SO4 to pH < 2	ATGG01	A33	07/27/2025	1664A

Date/Time 07/02/25 08:00

Raw Sample Received by: [Signature]

Raw Sample Relinquished by: [Signature]

Date/Time 07/02/25 13:30

Raw Sample Received by: [Signature]

Raw Sample Relinquished by: [Signature]

Instrument ID: SPECTROPHOTOMETER-2

Daily Analysis Runlog For Sequence/QC Batch ID # LB136335

Review By	Iwona	Review On	7/1/2025 2:19:39 PM
Supervise By	jignesh	Supervise On	7/1/2025 2:28:15 PM
SubDirectory	LB136335	Test	COD
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	WP113238,WP113237,WP113235,WP113234,WP113233,WP113240,WP113236,W3129,WP113753,WP113754,WP1		

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	CAL1	CAL1	CAL	05/28/25 13:10		Iwona	OK
2	CAL2	CAL2	CAL	05/28/25 13:10		Iwona	OK
3	CAL3	CAL3	CAL	05/28/25 13:11		Iwona	OK
4	CAL4	CAL4	CAL	05/28/25 13:11		Iwona	OK
5	CAL5	CAL5	CAL	05/28/25 13:12		Iwona	OK
6	CAL6	CAL6	CAL	05/28/25 13:12		Iwona	OK
7	ICV	ICV	ICV	05/28/25 13:13		Iwona	OK
8	ICB	ICB	ICB	05/28/25 13:13		Iwona	OK
9	CCV1	CCV1	CCV	07/01/25 13:20		Iwona	OK
10	CCB1	CCB1	CCB	07/01/25 13:20		Iwona	OK
11	RL Check	RL Check	RL	07/01/25 13:21		Iwona	OK
12	LB136335BL	LB136335BL	MB	07/01/25 13:21		Iwona	OK
13	LB136335BS	LB136335BS	LCS	07/01/25 13:22		Iwona	OK
14	Q2460-01	SW-1	SAM	07/01/25 13:22		Iwona	OK
15	Q2461-01	SW-3	SAM	07/01/25 13:23		Iwona	OK
16	Q2461-01DUP	SW-3DUP	DUP	07/01/25 13:23		Iwona	OK
17	Q2461-01MS	SW-3MS	MS	07/01/25 13:24		Iwona	OK
18	Q2461-01MSD	SW-3MSD	MSD	07/01/25 13:24		Iwona	OK

Instrument ID: SPECTROPHOTOMETER-2

Daily Analysis Runlog For Sequence/QC Batch ID # LB136335

Review By	Iwona	Review On	7/1/2025 2:19:39 PM
Supervise By	jignesh	Supervise On	7/1/2025 2:28:15 PM
SubDirectory	LB136335	Test	COD
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	WP113238,WP113237,WP113235,WP113234,WP113233,WP113240,WP113236,W3129,WP113753,WP113754,WP1		

19	CCV2	CCV2	CCV	07/01/25 13:25		Iwona	OK
20	CCB2	CCB2	CCB	07/01/25 13:25		Iwona	OK

Instrument ID: WC SC-3

Daily Analysis Runlog For Sequence/QC Batch ID # LB136347

Review By	jignesh	Review On	7/2/2025 9:11:01 AM
Supervise By	Iwona	Supervise On	7/2/2025 11:12:01 AM
SubDirectory	LB136347	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	W3204,M6069,EP2624,WP112782,NA,NA,WP112783,NA,WO112784		

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	LB136347BL	LB136347BL	MB	07/02/25 09:00		jignesh	OK
2	LB136347BS	LB136347BS	LCS	07/02/25 09:00		jignesh	OK
3	Q2441-01	MH-6272025	SAM	07/02/25 09:00		jignesh	OK
4	Q2441-02	Q2441-01MS	MS	07/02/25 09:00		jignesh	OK
5	Q2441-03	Q2441-01MSD	MSD	07/02/25 09:00		jignesh	OK
6	Q2460-01	SW-1	SAM	07/02/25 09:00		jignesh	OK
7	Q2461-01	SW-3	SAM	07/02/25 09:00		jignesh	OK
8	Q2470-01	SW-1	SAM	07/02/25 09:00		jignesh	OK
9	Q2471-01	SW-1	SAM	07/02/25 09:00		jignesh	OK

Prep Standard - Chemical Standard Summary

Order ID : Q2461

Test : COD,Oil and Grease

Prepbatch ID :

Sequence ID/Qc Batch ID: LB136335, LB136347,

Standard ID :

EP2624, WP112782, WP112783, WP113231, WP113232, WP113233, WP113234, WP113235, WP113236, WP113237, WP113238, WP113240, WP113751, WP113752, WP113753, WP113754, WP113755,

Chemical ID :

E3551, E3917, M6069, M6151, W2784, W2817, W2871, W3112, W3129, W3169, W3204, W3219, WO112784,

Extractions 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>
3923	Baked Sodium Sulfate	EP2624	06/26/2025	12/04/2025	RUPESHKUMAR SHAH	Extraction_SC ALE_2 (EX-SC-2)	None	Riteshkumar Patel 06/26/2025

FROM 4000.00000gram of E3551 = 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>
229	1:1 HCL	WP112782	04/22/2025	08/18/2025	Jignesh Parikh	None	None	Iwona Zarych 04/22/2025

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	WP112783	04/22/2025	10/03/2025	Jignesh Parikh	WETCHEM_SCALE_8 (WCS-7)	None	Iwona Zarych 04/22/2025
<u>FROM</u>	1000.00000ml of E3917 + 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>
2456	COD Stock std, 1000ppm	WP113231	05/28/2025	06/04/2025	Iwona Zarych	WETCHEM_SCALE_5 (WC-5)	None	Jignesh Parikh 05/28/2025
<u>FROM</u>	0.08500gram of W2784 + 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>
2457	COD Stock std-SS, 1000ppm	WP113232	05/28/2025	06/04/2025	Iwona Zarych	WETCHEM_S CALE_5 (WC SC-5)	None	Jignesh Parikh 05/28/2025
<u>FROM</u>	0.08500gram of W3169 + 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>
139	COD calibration std. 0 ppm	WP113233	05/28/2025	06/04/2025	Iwona Zarych	None	None	Jignesh Parikh 05/28/2025
<u>FROM</u> 10.00000ml of W3112 = 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>
138	COD calibration std. 10 ppm	WP113234	05/28/2025	06/04/2025	Iwona Zarych	None	WETCHEM_FIPETTE_3 (WC)	Jignesh Parikh 05/28/2025

FROM 9.90000ml of W3112 + 0.10000ml of WP113231 = Final Quantity: 10.000 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>
137	COD calibration std. 50 ppm	WP113235	05/28/2025	06/04/2025	Iwona Zarych	None	WETCHEM_FIPETTE_3 (WC)	Jignesh Parikh 05/28/2025

FROM 9.50000ml of W3112 + 0.50000ml of WP113231 = Final Quantity: 10.000 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>
4161	COD calibration std. 75 ppm	WP113236	05/28/2025	06/04/2025	Iwona Zarych	None	WETCHEM_PIPETTE_3 (WC)	Jignesh Parikh 05/28/2025
<u>FROM</u>	9.25000ml of W3112 + 0.75000ml of WP113231 = Final Quantity: 10.000 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>
136	COD calibration std. 100 ppm	WP113237	05/28/2025	06/04/2025	Iwona Zarych	None	WETCHEM_PIPETTE_3 (WC)	Jignesh Parikh 05/28/2025
<u>FROM</u>	9.00000ml of W3112 + 1.00000ml of WP113231 = Final Quantity: 10.000 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>
135	COD calibration std. 150 ppm	WP113238	05/28/2025	06/04/2025	Iwona Zarych	None	WETCHEM_PIPETTE_3 (WC)	Jignesh Parikh 05/28/2025
<u>FROM</u>	8.50000ml of W3112 + 1.50000ml of WP113231 = Final Quantity: 10.000 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>
2459	COD ICV-LCS std, 50ppm	WP113240	05/28/2025	06/04/2025	Iwona Zarych	None	WETCHEM_PIPETTE_3 (WC)	Jignesh Parikh 05/28/2025
<u>FROM</u>	9.50000ml of W3112 + 0.50000ml of WP113232 = Final Quantity: 10.000 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>
2456	COD Stock std, 1000ppm	WP113751	06/27/2025	07/04/2025	Iwona Zarych	WETCHEM_S CALE_5 (WC SC-5)	None	Jignesh Parikh 06/27/2025
<u>FROM</u>	0.08500gram of W3219 + 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>
2457	COD Stock std-SS, 1000ppm	WP113752	06/27/2025	07/04/2025	Iwona Zarych	WETCHEM_S CALE_5 (WC SC-5)	None	Jignesh Parikh 06/27/2025
<u>FROM</u>	0.08500gram of W3169 + 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>
2458	COD CCV std, 50ppm	WP113753	06/27/2025	07/04/2025	Iwona Zarych	None	WETCHEM_PIPETTE_3 (WC)	Jignesh Parikh 06/27/2025
<u>FROM</u>	9.50000ml of W3112 + 0.50000ml of WP113751 = Final Quantity: 10.000 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>
2459	COD ICV-LCS std, 50ppm	WP113754	06/27/2025	07/04/2025	Iwona Zarych	None	WETCHEM_PIPETTE_3 (WC)	Jignesh Parikh 06/27/2025
<u>FROM</u> 9.50000ml of W3112 + 0.50000ml of WP113752 = 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>
4162	RL CHECK	WP113755	06/27/2025	07/04/2025	Iwona Zarych	None	WETCHEM_F IPETTE_3 (WC)	Jignesh Parikh 06/27/2025
<u>FROM</u> 9.90000ml of W3112 + 0.10000ml of WP113751 = Final Quantity: 10.000 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	313201	12/04/2025	01/03/2024 / Rajesh	07/20/2023 / Rajesh	E3551

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)	24H2762008	10/03/2025	04/03/2025 / Rajesh	03/31/2025 / Rajesh	E3917

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	08/18/2025	02/18/2025 / Sagar	01/15/2025 / Sagar	M6151

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	P243-500 / Potassium Hydrogen Phthalate, 500 gms	201089	06/30/2025	12/23/2020 / apatel	12/16/2020 / apatel	W2784

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 #
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 #
Environmental Express LTD	B1010 / COD Digestion Vials Low Level 0-150Mg/L	13821	10/31/2027	06/16/2025 / lwona	07/25/2024 / lwona	W3129

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

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)	25c0362005	04/30/2026	04/22/2025 / jignesh	04/18/2025 / jignesh	W3204

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

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

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

ThermoFisher
SCIENTIFIC

Certificate of Analysis

1 Reagent Lane

Fair Lawn, NJ 07410

201.796.7100 tel

201.796.1329 fax

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

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

Catalog Number	P243	Quality Test / Release Date	06/19/2020
Lot Number	201089		
Description	POTASSIUM HYDROGEN PHTHALATE, ACIDIMETRIC STANDARD, A.C.S.		
Country of Origin	Spain	Suggested Retest Date	Jun/2025
Chemical Origin	Organic - non animal		
BSE/TSE Comment	No animal products are used as starting raw material ingredients, or used in processing, including lubricants, processing aids, or any other material that might migrate to the finished product.		

N/A			
Result Name	Units	Specifications	Test Value
APPEARANCE		REPORT	WHITE CRYSTALS
ASSAY POTASSIUM HYDROGEN PHTHALATE	%	Inclusive Between 99.95 - 100.05	100.03
CHLORINE COMPOUNDS	%	<= 0.003	<0.003
HEAVY METALS (as Pb)	ppm	<= 5	<5
IDENTIFICATION	PASS/FAIL	= PASS TEST	PASS TEST
INSOLUBLE MATTER	%	<= 0.005	<0.005
IRON (Fe)	ppm	<= 5	<5
PH OF 0.05M SOLUTION		Inclusive Between 4.00 - 4.02	4.00
SODIUM (Na)	%	<= 0.005	<0.005
SULFUR COMPOUNDS	%	<= 0.002	<0.002%
TRACEABLE TO NIST	SOD CARBONATE	= LOT 351a	351a
TRACEABLE TO NIST KHP STD	POT. ACID PHTHALATE	= LOT 84L	84L



Julian Burton - Quality Control Manager – Fair Lawn

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

*Based on suggested storage condition.



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

MIRADOR 201, COL. MIRADOR
MONTERREY, N.L. MEXICO
CP 64070
TEL +52 81 13 52 57 57
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:	ABR/21/2023
LOT NUMBER :	313201		

TEST	SPECIFICATIONS	LOT VALUES
Assay (Na ₂ SO ₄)	Min. 99.0%	99.7 %
pH of a 5% solution at 25°C	5.2 - 9.2	6.1
Insoluble matter	Max. 0.01%	0.005 %
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%	0.002 %
Magnesium (Mg)	Max. 0.005%	0.001 %
Potassium (K)	Max. 0.008%	0.003 %
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%	0.1 %
Retained on US Standard No. 60 sieve	Min. 94%	97.3 %
Through US Standard No. 60 sieve	Max. 5%	2.5 %
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.

Recd. by R3 on 7/24/23 E 3551

RC-02-01, Ed. 3

Acetone

BAKER RESI-ANALYZED® Reagent
For Organic Residue Analysis

avantor™



Material No.: 9254-03

Batch No.: 24H2762008

Manufactured Date: 2024-04-18

Expiration Date: 2027-04-18

Revision No.: 0

Certificate of Analysis

Test	Specification	Result
Assay ((CH ₃) ₂ CO) (by GC, corrected for water)	>= 99.4 %	100.0 %
Color (APHA)	<= 10	5
Residue after Evaporation	<= 1.0 ppm	0.0 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 %	<0.1 %
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

Recd by RP on 03/31/25

E3917

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



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**™

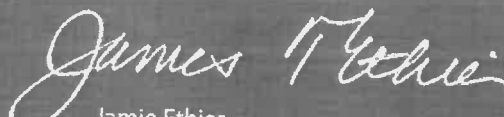


Material No.: 9530-33
Batch No.: 22G2862015

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

W3127 rec. 7/25/24 12
W3128 exp. 10/31/27
W3129

ENVIRONMENTAL EXPRESS
Charleston, SC USA
www.envexp.com
(800) 343-5319

October 27, 2022

CERTIFICATE OF ANALYSIS

Environmental Express certifies that the following COD Reagent Vials have been rigorously checked against NIST Traceable standards and also compared for conformance to another major brand name product. Environmental Express COD Vial performance is evaluated using bench top spectrophotometers. Acceptance guidelines are strict and ensure dependable, quality results.

Environmental Express further certifies that the COD products listed below are recognized by the United States Environmental Protection Agency (USEPA) as equivalent to an approved Water Pollutant Testing Procedure for COD (Federal Register, Vol. 45, No. 78, Monday, April 20th, 1980, page 26811) and as such can be used for National Pollution Discharge Elimination System (NPDES) reporting.

<u>Cat. No.</u>	<u>Lot No.</u>	<u>Product Description</u>
B1010	13821	COD Reagent Vials, 0 - 150 ppm



Material	BDH9260-500G
Material Description	BDH POTASS HYDRGN PHTHLTE 500G
Grade	ACS GRADE
Batch	24H0956262
Reassay Date	04/28/2026
CAS Number	877-24-7
Molecular Formula	HOCC6H4COOK
Molecular Mass	204.22
Date of Manufacture	04/29/2023
Storage	Room Temperature

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

Internal ID #: 322

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

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

avantor™



W3204
084K: 09/22/2025
38

Material No.: 9262-03
Batch No.: 25C0362005
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	5
Assay (Total Saturated C ₆ Isomers) (by GC, corrected for water)	>= 99.5 %	100.0 %
Assay (as n-Hexane) (by GC, corrected for water)	>= 95 %	100 %
Color (APHA)	<= 10	10
Residue after Evaporation	<= 1.0 ppm	0.1 ppm
Substances Darkened by H ₂ SO ₄	Passes Test	Passes Test
Water (by KF, coulometric)	<= 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

J. Croak

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

Certificate Of Analysis



Date of Release: 4/8/2025

Name: **Potassium Hydrogen Phthalate**

ACS

Item No: **PX1476 All Sizes**

Lot / Batch No: **2025040493**

Country of Origin: **USA**

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

Joe Schoellkopf

Quality Control Manager

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

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

EMD Millipore Corporation

400 Summit Drive
Burlington, MA 01803
U.S.A.

Form number: 00005624CA, Rev. 2.0



SHIPPING DOCUMENTS



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

CHAIN OF CUSTODY RECORD

Alliance Project Number: AEC-2025-0013

Q 2461

COC Number:

CLIENT INFORMATION

COMPANY: Durham School Services
ADDRESS: 500 Sterling Ave
CITY: Shenectady STATE: NY ZIP:
ATTENTION: daniel.maalouf@alliancetg.com
PHONE: FAX:

PROJECT INFORMATION

PROJECT NAME: CSC 4086 Shenectady
PROJECT #: AEC-2025-0013 LOCATION: Shenectady
PROJECT MANAGER:
E-MAIL:
PHONE: 864-704-7984 FAX:

BILLING INFORMATION

BILL TO: candice.caviness@alliancetg.com PO#
ADDRESS:
CITY: STATE: ZIP:
ATTENTION: PHONE:

DATA TURNAROUND INFORMATION

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

DATA DELIVERABLE INFORMATION

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

ANALYSIS

OG	COD	BTEX							
1	2	3	4	5	6	7	8	9	

PRESERVATIVES

COMMENTS

CHEMTECH SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE		SAMPLE COLLECTION		# of Bottles										<-- Specify Preservatives A-HCl B-HNO3 C-H2SO4 D-NaOH E-ICE F-Other
			COMP	GRAB	DATE	TIME		1	2	3	4	5	6	7	8	9	
1.	SW-3	SW		X	6/26/25	13:10	5	1	1	3							Shipped via Fedex
2.																	
3.																	
4.																	
5.																	
6.																	
7.																	
8.																	
9.																	
10.																	

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

RELINQUISHED BY SAMPLER	DATE/TIME 6/26/25 14:59	RECEIVED BY 1.	Conditions of bottles or coolers at receipt: ☐ Compliant ☐ Non Compliant ☐ Cooler Temp 33°C MeOH extraction requires an additional 4oz. Jar for percent solid Comments:
RELINQUISHED BY	DATE/TIME	RECEIVED BY	
RELINQUISHED BY	DATE/TIME	RECEIVED FOR LAB BY	
3.		3.	Page _____ of _____
SHIPPED VIA: CLIENT: ☐ Hand Delivered ☐ Overnight ALLIANCE: ☐ Picked Up ☐ Overnight			Shipment Complete ☐ YES ☐ NO

WHITE - ALLIANCE COPY FOR RETURN TO CLIENT YELLOW - ALLIANCE COPY PINK - SAMPLER COPY

Laboratory Certification

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

LOGIN REPORT/SAMPLE TRANSFER

Order ID : Q2461	ATGG01	Order Date : 6/30/2025 8:45:48 AM	Project Mgr :
Client Name : ATG-GREENVILLE AEC		Project Name : AEC-2025-0013-CSC 4086	Report Type : Level 1
Client Contact : Daniel Maalouf		Receive DateTime : 6/26/2025 2:59:00 PM	EDD Type : Excel NY
Invoice Name : ATG-GREENVILLE AEC		Purchase Order :	Hard Copy Date :
Invoice Contact : Daniel Maalouf			Date Signoff :

LAB ID	CLIENT ID	MATRIX	SAMPLE DATE	SAMPLE TIME	TEST	TEST GROUP	METHOD	FAX DATE	DUE DATES
Q2461-01	SW-3	Water	06/26/2025	13:10	VOC-BTEX		8260-Low		5 Bus. Days

Relinquished By :

Date / Time :


6/30/25 9:30

Received By :

Date / Time :


06/30/25 9:30 Rg #4

Storage Area : VOA Refridgerator Room