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

Prep Standard - Chemical Standard Summary

Order ID : Q2552

Test : VOCGC Group 1

Prepbatch ID : PB169164,

Sequence ID/Qc Batch ID: PQ080825,

Standard ID :
PP24775,PP24777,PP24778,PP24779,PP24780,PP24792,PP24793,PP24794,PP24795,PP24796,PP24797,

Chemical ID :
E3962,M4459,P12214,P13235,P13240,P13891,V14625,W3112,

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Fax : 908 789 8922

Pest/Pcb STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
2263	EDB-DBCP 2 PPM Stock Solution	PP24775	08/05/2025	01/29/2026	Yogesh Patel	None	None	Abdul Mirza 08/19/2025

FROM 0.01000ml of P13235 + 0.01000ml of P13891 + 9.98000ml of V14625 = Final Quantity: 10.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
2517	EDB-DBCP 100 PPB Working Solution	PP24777	08/05/2025	01/29/2026	Yogesh Patel	None	None	Abdul Mirza 08/19/2025

FROM 9.50000ml of V14625 + 0.50000ml of PP24775 = Final Quantity: 10.000 ml

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Pest/Pcb STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
2264	EDB-DBCP 2 PPM Stock Solution 2nd Source	PP24778	08/05/2025	01/29/2026	Yogesh Patel	None	None	Abdul Mirza 08/19/2025

FROM 0.10000ml of P12214 + 9.90000ml of V14625 = Final Quantity: 10.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
2518	EDB-DBCP 100 PPB Working Sol. 2nd Source	PP24779	08/05/2025	01/29/2026	Yogesh Patel	None	None	Abdul Mirza 08/19/2025

FROM 9.50000ml of V14625 + 0.50000ml of PP24778 = Final Quantity: 10.000 ml

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Pest/Pcb STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
2267	DBCM 2 PPM Stock Solution	PP24780	08/05/2025	01/29/2026	Yogesh Patel	None	None	Abdul Mirza 08/19/2025

FROM 0.01000ml of P13240 + 9.99000ml of V14625 = Final Quantity: 10.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
2269	M8011-504.1 0.5 PPB STD	PP24792	08/08/2025	01/29/2026	Yogesh Patel	None	None	Abdul Mirza 08/19/2025

FROM 35.00000ml of W3112 + 0.17500ml of PP24777 = Final Quantity: 35.000 ml

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Pest/Pcb STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
2270	M8011-504.1 0.25 PPB STD	PP24793	08/08/2025	01/29/2026	Yogesh Patel	None	None	Abdul Mirza 08/19/2025

FROM 35.00000ml of W3112 + 0.08750ml of PP24777 = Final Quantity: 35.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
2271	M8011-504.1 0.1 PPB STD	PP24794	08/08/2025	01/29/2026	Yogesh Patel	None	None	Abdul Mirza 08/19/2025

FROM 35.00000ml of W3112 + 0.03500ml of PP24777 = Final Quantity: 35.000 ml

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Pest/Pcb STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
2272	M8011-504.1 0.05 PPB STD	PP24795	08/08/2025	01/29/2026	Yogesh Patel	None	None	Abdul Mirza 08/19/2025

FROM 35.00000ml of W3112 + 0.01750ml of PP24777 = Final Quantity: 35.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
2273	M8011-504.1 0.025 PPB STD	PP24796	08/08/2025	01/29/2026	Yogesh Patel	None	None	Abdul Mirza 08/19/2025

FROM 35.00000ml of W3112 + 0.00880ml of PP24777 = Final Quantity: 35.000 ml

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Fax : 908 789 8922

Pest/Pcb STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
2274	M8011-504.1 0.1 PPB ICV STD	PP24797	08/08/2025	01/29/2026	Yogesh Patel	None	None	Abdul Mirza 08/19/2025

FROM 35.00000ml of W3112 + 0.03500ml of PP24779 = Final Quantity: 35.000 ml

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

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9262-03 / Hexane, Ultra-Resi (cs/4x4L)	25C0362005	04/30/2026	08/05/2025 / RUPESH	07/30/2025 / RUPESH	E3962

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-3624-05 / Sodium Chloride, Crystal (cs/4x2.5kg)	0000237721	04/13/2026	10/03/2022 / Ankita	10/30/2019 / AMANDEEP	M4459

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30239 / 504.1 Calibration Mix (3 components)	A0170154	01/29/2026	07/30/2024 / Ankita	11/28/2022 / Ankita	P12214

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30272 / 1,2-Dibromoethane Standard, 2000 ug/ml	A0183330	03/31/2027	08/05/2025 / yogesh	02/02/2024 / Ankita	P13235

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30271 / Dibromochloromethane Standard, 2,000 ug/ml	A0204416	06/30/2029	08/05/2025 / yogesh	02/02/2024 / Ankita	P13240

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30270 / 1,2-Dibromo-3-Chloropropane Standard, 2,000 ug/ml	A0217030	02/05/2026	08/05/2025 / yogesh	02/03/2025 / Ankita	P13891

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA9077-02 / Methanol, Purge/Trap (cs=6x1L)	23I0762004	01/29/2026	07/29/2025 / SAM	11/26/2024 / SAM	V14625

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

Methanol
ULTRA RESI-ANALYZED
For Purge and Trap Analysis

avantor™ | J.T.Baker®

Material No.: 9077-02
Batch No.: 2310762004
Manufactured Date: 2023-08-11
Expiration Date: 2026-08-10
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
Assay (CH_3OH) (by GC, corrected for water)	≥ 99.9 %	100.0 %
Residue after Evaporation	≤ 1.0 ppm	0.5 ppm
Titrable Acid (µeq/g)	≤ 0.3	0.2
Titrable Base (µeq/g)	≤ 0.10	0.01
Water (by KF, coulometric)	≤ 0.08 %	< 0.01 %
Volatile Organic Trace Analysis – Below EPA 8260B CRQL	Conforms	Conforms

For Laboratory,Research,or Manufacturing Use
Performance Tested for Use in EPA Methods
500 Series for Drinking Water
600 Series for Wastewater
846 for Solid Waste

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

Ken Koehnlein
Sr. Manager, Quality Assurance

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

avantor™ | J.T.Baker®

From M4452 to M4459

Received on : 10/30/2019
Received by : AK

Material No.: 3624-05
Batch No.: 0000237721
Manufactured Date: 2019/04/15
Retest Date: 2026/04/13
Revision No: 1

Certificate of Analysis

Meets ACS Reagent Chemical Requirements,

Test	Specification	Result
Assay (NaCl) (by Ag titrn)	>= 99.0 %	100.3
pH of 5% Solution at 25°C	5.0 - 9.0	6.0
ACS - Insoluble Matter	<= 0.005 %	< 0.001
Iodide (I)	<= 0.002 %	< 0.002
Bromide (Br)	<= 0.01 %	< 0.01
Chlorate and Nitrate (as NO_3)	<= 0.003 %	< 0.001
ACS - Phosphate (PO_4)	<= 5 ppm	< 5
Sulfate (SO_4)	<= 0.004 %	< 0.004
Barium (Ba)	Passes Test	PT
ACS - Heavy Metals (as Pb)	<= 5 ppm	< 5
Iron (Fe)	<= 2 ppm	< 2
Calcium (Ca)	<= 0.002 %	< 0.001
Magnesium (Mg)	<= 0.001 %	< 0.001
Potassium (K)	<= 0.005 %	0.002

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

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

avantor™ | J.T.Baker

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) (byGC, corrected for water)	>= 99.5 %	100.0 %
Assay (as n-Hexane) (by GC, correctedfor water)	>= 95 %	100 %
Color (APHA)	<= 10	10
Residue after Evaporation	<= 1.0 ppm	0.1 ppm
Substances Darkened by H_2SO_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

Recieved on 7/30/25

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

E3962

JCroak

Jamie Croak
Director Quality Operations, Bioscience Production

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

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30272 **Lot No.:** A0183330

Description : 1,2-Dibromoethane Standard

1,2-Dibromoethane 2000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : March 31, 2027 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	1,2-Dibromoethane (EDB) **CAS #** 106-93-4 (Lot BCBZ7221) **Purity** 99%	2,016.0 µg/mL	+/- 18.7477 µg/mL +/- 113.9782 µg/mL +/- 116.6017 µg/mL	Gravimetric Unstressed Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

P13233
↓
P13237

AJ
02/02/24

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

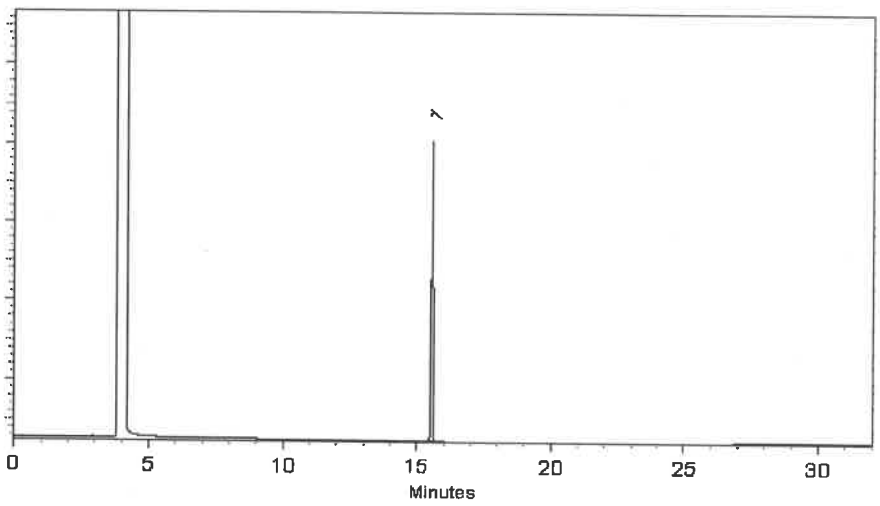
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Jess Hoy - Operations Tech I

Date Mixed: 25-Mar-2022 **Balance:** 1127510105

Amanda Miller - Operations Tech-ARM QC

Date Passed: 30-Mar-2022

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

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chromatographic plus

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Reference Material Producer
Certificate #3222.01

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ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30271 **Lot No.:** A0204416

Description : Dibromochloromethane Standard

Dibromochloromethane 2000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : June 30, 2029 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	dibromochloromethane	124-48-1	MKCQ4517	99%	2,000.0 µg/mL	+/- 113.2852

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

P13238 + P13242 AJ 02/02/24

Quality Confirmation Test

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

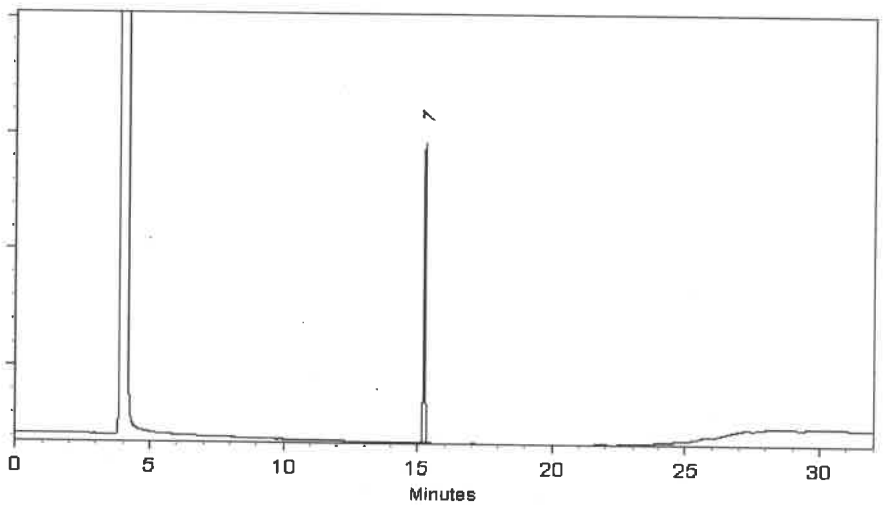
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Daniel Wasson - Operations Tech I **Date Mixed:** 13-Nov-2023 **Balance Serial #** 1127510105

Jennifer Pollino - Operations Tech III - ARM QC **Date Passed:** 16-Nov-2023

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

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Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30270 **Lot No.:** A0217030

Description : 1,2-Dibromo-3-chloropropane Standard

1,2-Dibromo-3-Chloropropane 2000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : September 30, 2029 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1,2-Dibromo-3-chloropropane	96-12-8	FBL01	98%	2,018.8 µg/mL	+/- 114.3500

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

P13890
↓
P13892

AJ
02/03/2025

Quality Confirmation Test

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

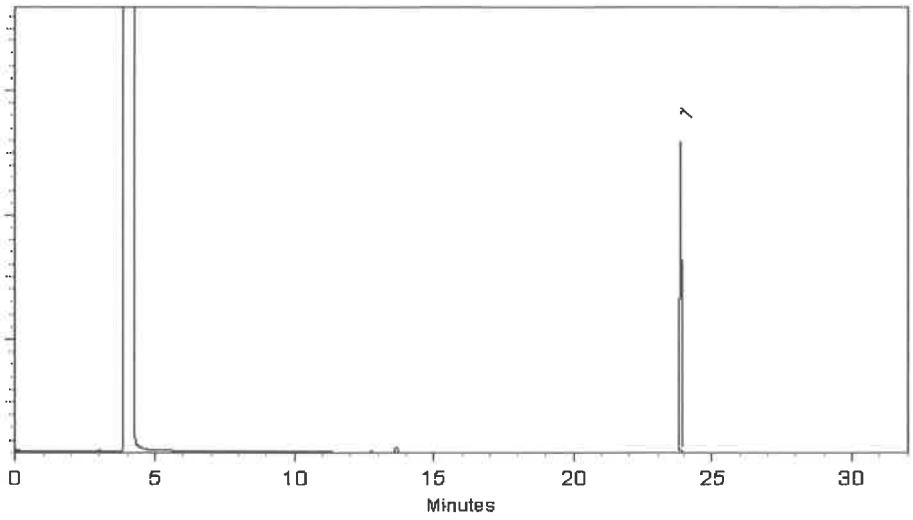
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Russ Bookhamer - Operations Technician I

Date Mixed: 25-Sep-2024 **Balance Serial #** 1121472889

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 27-Sep-2024

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397