

## Prep Standard - Chemical Standard Summary

**Order ID :** Q1172

**Test :** VOCGC Group 1

**Prepbatch ID :** PB166329,

**Sequence ID/Qc Batch ID:** PQ013025,

**Standard ID :**

PP24133,PP24134,PP24135,PP24136,PP24142,PP24143,PP24144,PP24145,PP24146,PP24147,PP24149,PP24155,  
PP24156,

**Chemical ID :**

E3872,M5884,P10225,P12215,P13234,V14624,W3112,

## Pest/Pcb 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> |
|------------------|-------------------------------|-------------------------|------------------|------------------------|--------------------|----------------|------------------|----------------------|
| 2263             | EDB-DBCP 2 PPM Stock Solution | <a href="#">PP24133</a> | 01/28/2025       | 07/13/2025             | Ankita Jodhani     | None           | None             | Yogesh Patel         |
|                  |                               |                         |                  |                        |                    |                |                  | 01/29/2025           |

**FROM** 0.01000ml of P10225 + 0.01000ml of P13234 + 9.98000ml of V14624 = 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> |
|------------------|---------------------------------------------|-------------------------|------------------|------------------------|--------------------|----------------|------------------|----------------------|
| 2264             | EDB-DBCP 2 PPM Stock Solution<br>2nd Source | <a href="#">PP24134</a> | 01/28/2025       | 07/13/2025             | Ankita Jodhani     | None           | None             | Yogesh Patel         |
|                  |                                             |                         |                  |                        |                    |                |                  | 01/29/2025           |

**FROM** 0.10000ml of P12215 + 9.90000ml of V14624 = Final Quantity: 10.000 ml

## Pest/Pcb 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> |
|------------------|-----------------------------------|-------------------------|------------------|------------------------|--------------------|----------------|------------------|----------------------|
| 2517             | EDB-DBCP 100 PPB Working Solution | <a href="#">PP24135</a> | 01/28/2025       | 07/13/2025             | Ankita Jodhani     | None           | None             | Yogesh Patel         |
|                  |                                   |                         |                  |                        |                    |                |                  | 01/29/2025           |

**FROM** 9.50000ml of V14624 + 0.50000ml of PP24133 = 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> |
|------------------|------------------------------------------|-------------------------|------------------|------------------------|--------------------|----------------|------------------|----------------------|
| 2518             | EDB-DBCP 100 PPB Working Sol. 2nd Source | <a href="#">PP24136</a> | 01/28/2025       | 07/13/2025             | Ankita Jodhani     | None           | None             | Yogesh Patel         |
|                  |                                          |                         |                  |                        |                    |                |                  | 01/29/2025           |

**FROM** 9.50000ml of V14624 + 0.50000ml of PP24134 = Final Quantity: 10.000 ml

## Pest/Pcb 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> |
|------------------|-------------------------|-------------------------|------------------|------------------------|--------------------|----------------|------------------|----------------------|
| 2269             | M8011-504.1 0.5 PPB STD | <a href="#">PP24142</a> | 01/30/2025       | 03/01/2025             | Ankita Jodhani     | None           | None             | Yogesh Patel         |
|                  |                         |                         |                  |                        |                    |                |                  | 01/31/2025           |

**FROM** 35.00000ml of W3112 + 0.17500ml of PP24135 = Final Quantity: 35.000 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> |
|------------------|--------------------------|-------------------------|------------------|------------------------|--------------------|----------------|------------------|----------------------|
| 2270             | M8011-504.1 0.25 PPB STD | <a href="#">PP24143</a> | 01/30/2025       | 03/01/2025             | Ankita Jodhani     | None           | None             | Yogesh Patel         |
|                  |                          |                         |                  |                        |                    |                |                  | 01/31/2025           |

**FROM** 35.00000ml of W3112 + 0.08750ml of PP24135 = Final Quantity: 35.000 ml

## Pest/Pcb 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> |
|------------------|-------------------------|-------------------------|------------------|------------------------|--------------------|----------------|------------------|----------------------|
| 2271             | M8011-504.1 0.1 PPB STD | <a href="#">PP24144</a> | 01/30/2025       | 03/01/2025             | Ankita Jodhani     | None           | None             | Yogesh Patel         |
|                  |                         |                         |                  |                        |                    |                |                  | 01/31/2025           |

**FROM** 35.00000ml of W3112 + 0.03500ml of PP24135 = Final Quantity: 35.000 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> |
|------------------|--------------------------|-------------------------|------------------|------------------------|--------------------|----------------|------------------|----------------------|
| 2272             | M8011-504.1 0.05 PPB STD | <a href="#">PP24145</a> | 01/30/2025       | 03/01/2025             | Ankita Jodhani     | None           | None             | Yogesh Patel         |
|                  |                          |                         |                  |                        |                    |                |                  | 01/31/2025           |

**FROM** 35.00000ml of W3112 + 0.17500ml of PP24135 = Final Quantity: 35.000 ml

## Pest/Pcb 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> |
|------------------|---------------------------|-------------------------|------------------|------------------------|--------------------|----------------|------------------|----------------------|
| 2273             | M8011-504.1 0.025 PPB STD | <a href="#">PP24146</a> | 01/30/2025       | 03/01/2025             | Ankita Jodhani     | None           | None             | Yogesh Patel         |
|                  |                           |                         |                  |                        |                    |                |                  | 01/31/2025           |

**FROM** 35.00000ml of W3112 + 0.00880ml of PP24135 = Final Quantity: 35.000 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> |
|------------------|-----------------------------|-------------------------|------------------|------------------------|--------------------|----------------|------------------|----------------------|
| 2274             | M8011-504.1 0.1 PPB ICV STD | <a href="#">PP24147</a> | 01/30/2025       | 03/01/2025             | Ankita Jodhani     | None           | None             | Yogesh Patel         |
|                  |                             |                         |                  |                        |                    |                |                  | 01/31/2025           |

**FROM** 35.00000ml of W3112 + 0.03500ml of PP24136 = Final Quantity: 35.000 ml

## Pest/Pcb 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> |
|------------------|-------------------------|-------------------------|------------------|------------------------|--------------------|----------------|------------------|----------------------|
| 2519             | M8011-504.1 0.1 PPB CCC | <a href="#">PP24149</a> | 01/30/2025       | 01/31/2025             | Ankita Jodhani     | None           | None             | Yogesh Patel         |
|                  |                         |                         |                  |                        |                    |                |                  | 01/31/2025           |

**FROM** 35.00000ml of W3112 + 0.03500ml of PP24135 = Final Quantity: 35.000 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> |
|------------------|------------------------------|-------------------------|------------------|------------------------|--------------------|----------------|------------------|----------------------|
| 2275             | M8011-504.1 0.25 PPB LCS STD | <a href="#">PP24155</a> | 01/30/2025       | 01/31/2025             | Ankita Jodhani     | None           | None             | Yogesh Patel         |
|                  |                              |                         |                  |                        |                    |                |                  | 01/31/2025           |

**FROM** 35.00000ml of W3112 + 0.08750ml of PP24136 = Final Quantity: 35.000 ml

## Pest/Pcb 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> |
|------------------|------------------------------------------------------------------------|-------------------------|------------------|------------------------|--------------------|----------------|------------------|----------------------|
| 2275             | M8011-504.1 0.25 PPB LCS STD                                           | <a href="#">PP24156</a> | 01/30/2025       | 01/31/2025             | Ankita Jodhani     | None           | None             | Yogesh Patel         |
| 01/31/2025       |                                                                        |                         |                  |                        |                    |                |                  |                      |
| <u>FROM</u>      | 35.00000ml of W3112 + 0.08750ml of PP24136 = Final Quantity: 35.000 ml |                         |                  |                        |                    |                |                  |                      |



## 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) | 24G1962003 | 07/29/2025      | 01/29/2025 / Rajesh     | 01/29/2025 / Rajesh         | E3872          |

| Supplier         | ItemCode / ItemName                                | Lot #      | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|------------------|----------------------------------------------------|------------|-----------------|-------------------------|-----------------------------|----------------|
| Seidler Chemical | BA-3624-05 / Sodium Chloride, Crystal (cs/4x2.5kg) | 0000281938 | 07/06/2026      | 04/30/2024 / mohan      | 04/25/2024 / mohan          | M5884          |

| Supplier | ItemCode / ItemName                                       | Lot #    | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|----------|-----------------------------------------------------------|----------|-----------------|-------------------------|-----------------------------|----------------|
| Restek   | 30270 / 1,2-Dibromo-3-Chloropropene Standard, 2,000 ug/ml | A0164665 | 07/28/2025      | 01/28/2025 / Ankita     | 01/19/2021 / Abdul          | P10225         |

| 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 | 07/28/2025      | 01/28/2025 / Ankita     | 11/28/2022 / Ankita         | P12215         |

| 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 | 07/28/2025      | 01/28/2025 / Ankita     | 02/02/2024 / Ankita         | P13234         |

| 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 | 07/13/2025      | 01/13/2025 / SAM        | 11/26/2024 / SAM            | V14624         |

**CHEMICAL RECEIPT LOG BOOK**

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

Methanol  
ULTRA RESI-ANALYZED  
For Purge and Trap Analysis



Material No.: 9077-02  
Batch No.: 23I0762004  
Manufactured Date: 2023-08-11  
Expiration Date: 2026-08-10  
Revision No.: 0

## Certificate of Analysis

| Test                                                    | Specification | Result   |
|---------------------------------------------------------|---------------|----------|
| Assay (CH <sub>3</sub> OH) (by GC, corrected for water) | ≥ 99.9 %      | 100.0 %  |
| Residue after Evaporation                               | ≤ 1.0 ppm     | 0.5 ppm  |
| Titration Acid (μeq/g)                                  | ≤ 0.3         | 0.2      |
| Titration 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

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

Avantor™



Material No.: 9262-03  
Batch No.: 24G1962003  
Manufactured Date: 2024-05-23  
Expiration Date: 2025-08-22  
Revision No.: 0

## Certificate of Analysis

| Test                                                                            | Specification | Result      |
|---------------------------------------------------------------------------------|---------------|-------------|
| FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)            | ≤ 5           | 3           |
| ECD Sensitive Impurities (as Heptachlor Epoxide) Single Peak (pg/mL)            | ≤ 10          | 1           |
| ECD-Sensitive Impurities (as Ethylene Dibromide) - Single Impurity Peak (ng/mL) | ≤ 5           | 1           |
| Assay (Total Saturated C <sub>8</sub> Isomers) (by GC, corrected for water)     | ≥ 99.5 %      | 99.7 %      |
| Assay (as n-Hexane) (by GC, corrected for water)                                | ≥ 95 %        | 98 %        |
| Color (APHA)                                                                    | ≤ 10          | 5           |
| Residue after Evaporation                                                       | ≤ 1.0 ppm     | 0.1 ppm     |
| Substances Darkened by H <sub>2</sub> SO <sub>4</sub>                           | 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: USA  
Packaging Site: Phillipsburg Mfg Ctr & DC

Recd by RP on 1/29/25

E 3872

Jamie Croak  
Director Quality Operations, Bioscience Production

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



MS824  
MB

Material No.: 3624-01

Batch No.: 0000281938

Manufactured Date: 2021-06-07

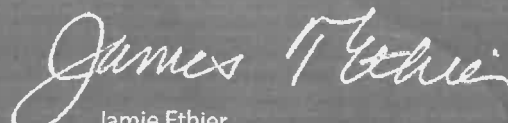
Retest Date: 2026-06-07

Revision No.: 1

## Certificate of Analysis

| Test                                       | Specification        | Result      |
|--------------------------------------------|----------------------|-------------|
| Assay (NaCl) (by Ag titrn)                 | $\geq 99.0 \%$       | 100.0 %     |
| pH of 5% Solution at 25°C                  | 5.0 - 9.0            | 6.3         |
| Insoluble Matter                           | $\leq 0.005 \%$      | 0.003 %     |
| Iodide (I)                                 | $\leq 0.002 \%$      | < 0.002 %   |
| Bromide (Br)                               | $\leq 0.01 \%$       | < 0.01 %    |
| Chlorate and Nitrate (as NO <sub>3</sub> ) | $\leq 0.003 \%$      | < 0.001 %   |
| ACS - Phosphate (PO <sub>4</sub> )         | $\leq 5 \text{ ppm}$ | < 5 ppm     |
| Sulfate (SO <sub>4</sub> )                 | $\leq 0.004 \%$      | < 0.004 %   |
| Barium (Ba)                                | Passes Test          | Passes Test |
| ACS - Heavy Metals (as Pb)                 | $\leq 5 \text{ ppm}$ | < 5 ppm     |
| Iron (Fe)                                  | $\leq 2 \text{ ppm}$ | < 1 ppm     |
| Calcium (Ca)                               | $\leq 0.002 \%$      | < 0.001 %   |
| Magnesium (Mg)                             | $\leq 0.001 \%$      | < 0.001 %   |
| Potassium (K)                              | $\leq 0.005 \%$      | 0.001 %     |

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

  
Jamie Ethier  
Vice President Global Quality

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

Avantor Performance Materials, LLC

100 Mansford Rd, Suite 200, Radnor, PA 19087. U.S.A. Phone 610.386.1700



CERTIFIED REFERENCE MATERIAL

110 Benner Circle  
Bellefonte, PA 16823-8812  
Tel: (800)356-1688  
Fax: (814)353-1309

www.restek.com

## 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.: 30270 Lot No.: A0164665  
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, 2025 Storage: 0°C or colder  
Ship: Ambient

### CERTIFIED VALUES

| Elution Order | Compound                                                               | Grav. Conc.<br>(weight/volume) | Expanded Uncertainty<br>(95% C.L.; K=2)                                                       |
|---------------|------------------------------------------------------------------------|--------------------------------|-----------------------------------------------------------------------------------------------|
| 1             | 1,2-Dibromo-3-chloropropane<br>CAS # 96-12-8 (Lot FBL01)<br>Purity 97% | 2,009.8 µg/mL                  | +/- 18.6904 µg/mL Gravimetric<br>+/- 113.6299 µg/mL Unstressed<br>+/- 116.2454 µg/mL Stressed |

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

P10222  
↓  
P10225  
AR  
01/19/2020

**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:**

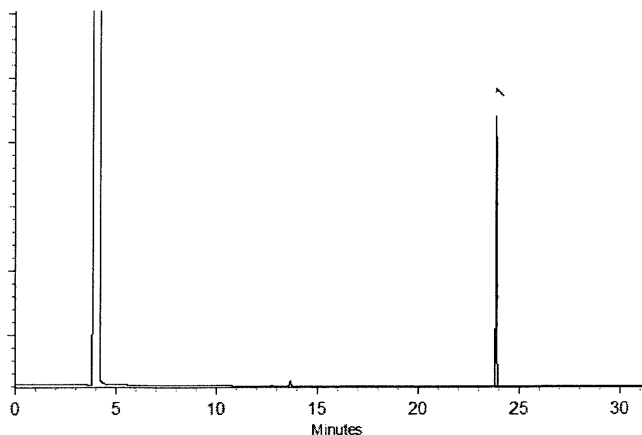
200°C

**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.

  
Jeremy Johnson - Mfg. Supervisor

Date Mixed: 22-Sep-2020

Balance: B251644995

  
Justine Albertson - Operations Tech-ARM QC

Date Passed: 24-Sep-2020

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



# CERTIFIED REFERENCE MATERIAL

110 Benner Circle  
Bellefonte, PA 16823-8812  
Tel: (800)356-1688  
Fax: (814)353-1309

www.restek.com

## 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. :** 30239 **Lot No.:** A0170154

**Description :** 504.1 Calibration Mix

504.1 Calibration Std 200µg/mL, P&T Methanol, 1mL/ampul

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

**Expiration Date :** March 31, 2026 **Storage:** 0°C or colder

**Ship:** Ambient

P12211  
↓  
P12215  
AJ  
11/28/22

### CERTIFIED VALUES

| Elution Order | Compound                                                                | Grav. Conc. (weight/volume) | Expanded Uncertainty (95% C.L.; K=2)                                                       |
|---------------|-------------------------------------------------------------------------|-----------------------------|--------------------------------------------------------------------------------------------|
| 1             | 1,2-Dibromoethane (EDB)<br>CAS # 106-93-4 (Lot BCBP2268V)<br>Purity 99% | 200.5 µg/mL                 | +/- 1.4217 µg/mL Gravimetric<br>+/- 11.2713 µg/mL Unstressed<br>+/- 11.5336 µg/mL Stressed |
| 2             | 1,2,3-Trichloropropane<br>CAS # 96-18-4 (Lot BCBH8722V)<br>Purity 99%   | 200.0 µg/mL                 | +/- 1.4182 µg/mL Gravimetric<br>+/- 11.2431 µg/mL Unstressed<br>+/- 11.5049 µg/mL Stressed |
| 3             | 1,2-Dibromo-3-chloropropane<br>CAS # 96-12-8 (Lot FBL01)<br>Purity 97%  | 199.8 µg/mL                 | +/- 1.4169 µg/mL Gravimetric<br>+/- 11.2330 µg/mL Unstressed<br>+/- 11.4945 µg/mL Stressed |

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



**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:**

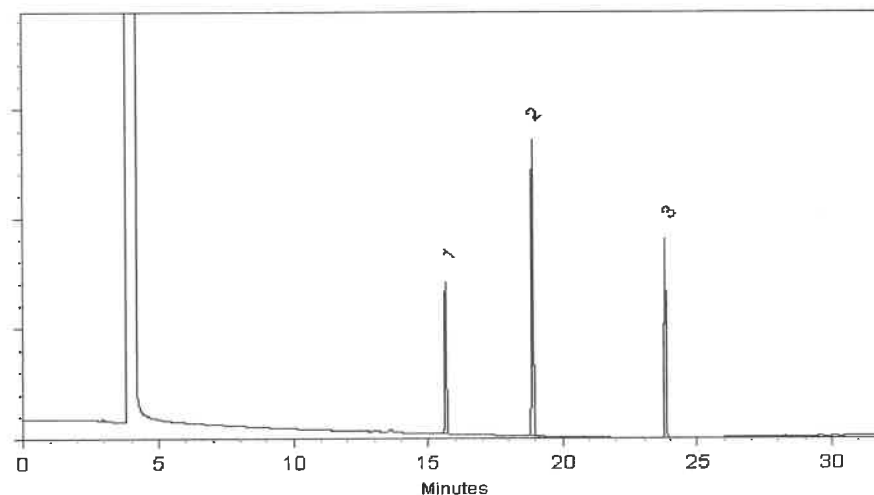
200°C

**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.

  
Erik Strommer - Operations Tech I

Date Mixed: 15-Mar-2021

Balance: B251644995

  
Alexis Shelow - Operations Tech I

Date Passed: 16-Mar-2021

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



# CERTIFIED REFERENCE MATERIAL

110 Benner Circle  
Bellefonte, PA 16823-8812  
Tel: (800)356-1688  
Fax: (814)353-1309

[www.restek.com](http://www.restek.com)

## 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.<br>(weight/volume) | Expanded Uncertainty<br>(95% C.L.; K=2) |
|---------------|-------------------------|--------------------------------|-----------------------------------------|
| 1             | 1,2-Dibromoethane (EDB) | +/- 18.7477                    | µg/mL Gravimetric                       |
| CAS #         | 106-93-4                | +/- 113.9782                   | µg/mL Unstressed                        |
| Purity        | 99%                     | +/- 116.6017                   | µg/mL Stressed                          |
|               | (Lot BCBZ7221)          |                                |                                         |

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)

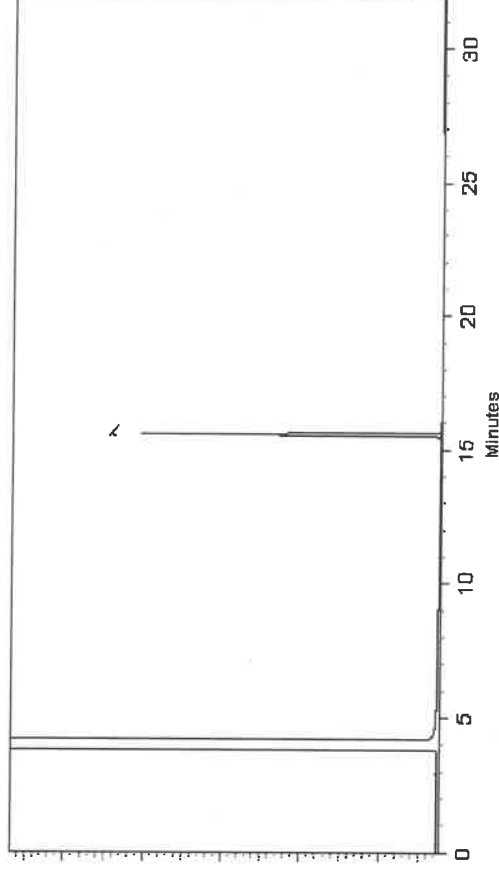
**Carrier Gas:**  
hydrogen-constant pressure 11.0 psi.

**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