

## Prep Standard - Chemical Standard Summary

**Order ID :** Q1206

**Test :** Pesticide-TCL

**Prepbatch ID :** PB166334,

**Sequence ID/Qc Batch ID:** pl013025,pl020425,

**Standard ID :**

EP2579,EP2580,PP23673,PP23674,PP23675,PP23676,PP23677,PP23678,PP23679,PP23680,PP23681,PP23682,PP  
23683,PP23686,PP23687,PP23690,PP23693,PP23695,PP23698,PP23733,PP23793,PP24091,PP24095,PP24123,

**Chemical ID :**

E2865,E3551,E3792,E3805,E3806,E3843,E3846,E3847,E3868,P11146,P11896,P13036,P13039,P13245,P13349,P133  
50,P13353,P13359,P13402,

## 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>
230	1:1ACETONE/HEXANE	<a href="#">EP2579</a>	01/06/2025	06/16/2025	Rajesh Parikh	None	None	RUPESHKUMAR SHAH 01/06/2025

**FROM** 8000.00000ml of E3846 + 8000.00000ml of E3847 = Final Quantity: 8000.000 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>
3923	Baked Sodium Sulfate	<a href="#">EP2580</a>	01/17/2025	07/01/2025	Rajesh Parikh	Extraction_SC ALE_2 (EX-SC-2)	None	RUPESHKUMAR SHAH 01/17/2025

**FROM** 4000.00000gram of E3551 = Final Quantity: 4000.000 gram

## 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>
84	Pest/PCB Surrogate Stock 20 PPM	<a href="#">PP23673</a>	09/21/2024	03/11/2025	Abdul Mirza	None	None	Ankita Jodhani
								10/01/2024

**FROM** 1.00000ml of P13349 + 9.00000ml of E3792 = 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>
3629	20 PPM PEST stock Solution 1st source(RESTEK)	<a href="#">PP23674</a>	09/21/2024	03/11/2025	Abdul Mirza	None	None	Ankita Jodhani
								10/01/2024

**FROM** 1.00000ml of P13036 + 9.00000ml of E3792 = Final Quantity: 10.000 ml



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

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

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

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

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



<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>
3663	20 PPM MIREX Stock STD (Secondary source)	<a href="#">PP23677</a>	09/21/2024	03/11/2025	Abdul Mirza	None	None	Ankita Jodhani  10/01/2024

<b><u>FROM</u></b>	0.20000ml of P11146 + 9.80000ml of E3792 = 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>
3630	100/100 PPB PEST Working std.1st Source(RESTEK)	<a href="#">PP23678</a>	09/21/2024	03/11/2025	Abdul Mirza	None	None	Ankita Jodhani 10/01/2024

<b><u>FROM</u></b>	98.50000ml of E3792 + 0.50000ml of PP23673 + 0.50000ml of PP23674 + 0.50000ml of PP23676 = 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>
80	100/100 PPB Pesticide Working Solution 2nd Source	<a href="#">PP23679</a>	09/21/2024	03/11/2025	Abdul Mirza	None	None	Ankita Jodhani 10/01/2024
<b><u>FROM</u></b> 98.50000ml of E3792 + 0.50000ml of PP23673 + 0.50000ml of PP23675 + 0.50000ml of PP23677 = 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>
386	1000/100 PPB Chlordane STD (Restek)	<a href="#">PP23680</a>	09/21/2024	03/11/2025	Abdul Mirza	None	None	Ankita Jodhani 10/01/2024
<u>FROM</u>	0.10000ml of P11896 + 99.40000ml of E3792 + 0.50000ml of PP23673 = Final Quantity: 100.000 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>
3746	1000/100 ppb Chlordane STD-RESTEK 2ND SOURCE	<a href="#">PP23681</a>	09/21/2024	03/11/2025	Abdul Mirza	None	None	Ankita Jodhani
								10/01/2024

**FROM** 0.10000ml of P11896 + 99.40000ml of E3792 + 0.50000ml of PP23673 = 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>
383	1000/100 PPB Toxaphene STD (Restek)	<a href="#">PP23682</a>	09/21/2024	03/11/2025	Abdul Mirza	None	None	Ankita Jodhani
								10/01/2024

**FROM** 0.10000ml of P13359 + 99.40000ml of E3792 + 0.50000ml of PP23673 = Final Quantity: 100.000 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>
3669	1000/100 PPB TOXAPHENE STD 2nd source (RESTEK)	<a href="#">PP23683</a>	09/21/2024	03/11/2025	Abdul Mirza	None	None	Ankita Jodhani
								10/01/2024

**FROM** 0.10000ml of P13402 + 99.40000ml of E3792 + 0.50000ml of PP23673 = 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>
3632	50 PPB ICAL PEST STD(RESTEK)	<a href="#">PP23686</a>	09/21/2024	03/11/2025	Abdul Mirza	None	None	Ankita Jodhani
								10/01/2024

**FROM** 0.50000ml of E3792 + 0.50000ml of PP23678 = Final Quantity: 1.000 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>
3988	50 PPB PEST ICV STD(RESTEK)	<a href="#">PP23687</a>	09/21/2024	03/11/2025	Abdul Mirza	None	None	Ankita Jodhani
								10/01/2024

**FROM** 0.50000ml of E3792 + 0.50000ml of PP23679 = Final Quantity: 1.000 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>
529	CHLOR 500 PPB STD	<a href="#">PP23690</a>	09/21/2024	03/11/2025	Abdul Mirza	None	None	Ankita Jodhani
								10/01/2024

**FROM** 0.50000ml of E3792 + 0.50000ml of PP23680 = Final Quantity: 1.000 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>
532	CHLOR 500 PPB ICV STD	<a href="#">PP23693</a>	09/21/2024	03/11/2025	Abdul Mirza	None	None	Ankita Jodhani
								10/01/2024

**FROM** 0.50000ml of E3792 + 0.50000ml of PP23681 = Final Quantity: 1.000 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>
534	TOX 500 PPB STD	<a href="#">PP23695</a>	09/21/2024	03/11/2025	Abdul Mirza	None	None	Ankita Jodhani
								10/01/2024

**FROM** 0.50000ml of E3792 + 0.50000ml of PP23682 = Final Quantity: 1.000 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>
3670	TOX 500 PPB ICV std ( RESTEK)	<a href="#">PP23698</a>	09/21/2024	03/11/2025	Abdul Mirza	None	None	Ankita Jodhani
								10/01/2024

**FROM** 0.50000ml of E3792 + 0.50000ml of PP23683 = Final Quantity: 1.000 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>
84	Pest/PCB Surrogate Stock 20 PPM	<a href="#">PP23733</a>	10/03/2024	03/30/2025	Ankita Jodhani	None	None	Yogesh Patel
								10/03/2024

**FROM** 1.00000ml of P13350 + 9.00000ml of E3805 = 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>
518	Pest/PCB I.BLK 20 PPB	<a href="#">PP23793</a>	10/03/2024	03/30/2025	Ankita Jodhani	None	None	Yogesh Patel
								10/03/2024

**FROM** 99.90000ml of E3805 + 0.10000ml of PP23733 = 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>
79	500 PPB Pesticide Spike Solution	<a href="#">PP24091</a>	12/17/2024	03/11/2025	Abdul Mirza	None	None	Ankita Jodhani
								12/18/2024

**FROM** 95.00000ml of E3843 + 2.50000ml of PP23675 + 2.50000ml of PP23677 = Final Quantity: 100.000 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>
4027	Pesticide resolution Check Mixture 8081	<a href="#">PP24095</a>	12/23/2024	06/16/2025	Abdul Mirza	None	None	Ankita Jodhani
								12/30/2024

**FROM** 1.00000ml of P13245 + 99.00000ml of E3847 = 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>
465	200 PPB Pest/PCB Surrogate Spike	<a href="#">PP24123</a>	01/20/2025	06/26/2025	Abdul Mirza	None	None	Ankita Jodhani
								01/20/2025

**FROM** 1.00000ml of P13353 + 999.00000ml of E3846 = Final Quantity: 1000.000 ml

## CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-3382-05 / Sand, Purified (cs/4x2.5kg)	0000243821	06/30/2025	04/30/2020 / RAJESH	04/28/2020 / RAJESH	E2865

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	07/01/2025	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-9262-03 / Hexane, Ultra-Resi (cs/4x4L)	24C1862008	03/11/2025	09/12/2024 / Rajesh	09/11/2024 / Rajesh	E3792

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)	24C1862008	03/30/2025	09/30/2024 / Rajesh	09/25/2024 / Rajesh	E3805

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Agela Technologies Inc.	FS0006 / Cleanert Florisil cartridge	M06518	03/25/2025	10/01/2024 / Rajesh	09/25/2024 / Rajesh	E3806

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	06/05/2025	12/05/2024 / Rajesh	12/05/2024 / Rajesh	E3843

## CHEMICAL RECEIPT LOG BOOK

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	06/26/2025	12/26/2024 / Rajesh	12/13/2024 / Rajesh	E3846

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	06/16/2025	12/16/2024 / Rajesh	12/13/2024 / Rajesh	E3847

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	07/17/2025	01/17/2025 / Rajesh	01/02/2025 / Rajesh	E3868

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	79136 / Mirex, 1000 ug/ml	102821	03/21/2025	09/21/2024 / Abdul	10/29/2021 / Abdul	P11146

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	32021 / Chlordane Std.	A0181737	03/21/2025	09/21/2024 / Abdul	06/17/2022 / Abdul	P11896

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	32291 / Pesticide Mix, CLP method, organochlorine Std AB#1, 200ug/mL, hexane/toluene, 1mL/ampul	A0200423	03/21/2025	09/21/2024 / Abdul	12/26/2023 / Abdul	P13036

## CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	32291 / Pesticide Mix, CLP method, organochlorine Std AB#1, 200ug/mL, hexane/toluene, 1mL/ampul	A0199099	03/21/2025	09/21/2024 / Abdul	12/26/2023 / Abdul	P13039

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	19161 / 8081 pesticide resolution check mixture	013124	06/23/2025	12/23/2024 / Abdul	02/09/2024 / Abdul	P13245

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	32000 / Pesticide Mix, CLP method, Pesticide Surrogate Mix, 200ug/mL, Acetone, 1mL	A0206810	03/21/2025	09/21/2024 / Abdul	04/22/2024 / Abdul	P13349

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	32000 / Pesticide Mix, CLP method, Pesticide Surrogate Mix, 200ug/mL, Acetone, 1mL	A0206810	04/03/2025	10/03/2024 / Ankita	04/22/2024 / Abdul	P13350

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	32000 / Pesticide Mix, CLP method, Pesticide Surrogate Mix, 200ug/mL, Acetone, 1mL	A0206810	07/20/2025	01/20/2025 / Abdul	04/22/2024 / Abdul	P13353

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	32005 / Toxaphene Standard	A0203830	03/21/2025	09/21/2024 / Abdul	05/03/2024 / Abdul	P13359



### **CHEMICAL RECEIPT LOG BOOK**

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	32005 / Toxaphene Standard	A0203038	03/21/2025	09/21/2024 / Abdul	05/15/2024 / Abdul	P13402

Sand  
Purified  
Washed and Ignited



Material No.: 3382-05  
Batch No.: 0000243821  
Manufactured Date: 2018/04/09  
Retest Date: 2025/04/07  
Revision No: 1

## Certificate of Analysis

Test	Specification	Result
Substances Soluble in HCl	$\leq 0.16\%$	0.01

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

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

E 2865

  
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



**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 <sub>2</sub> SO <sub>4</sub>
SPECIFICATION NUMBER :	6399	RELEASE DATE:	ABR/21/2023
LOT NUMBER :	313201		

TEST	SPECIFICATIONS	LOT VALUES
Assay (Na <sub>2</sub> SO <sub>4</sub> )	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 <sub>4</sub> )	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

Hexanes (95% n-hexane)  
BAKER RESI-ANALYZED® Reagent  
For Organic Residue Analysis

Avantor™



Material No.: 9262-03  
Batch No.: 24C1862008  
Manufactured Date: 2024-01-30  
Expiration Date: 2025-04-30  
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 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>6</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	0.4 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 09/11/24

E 3192

Jamie Croak  
Director Quality Operations, Bioscience Production

Hexanes (95% n-hexane)  
BAKER RESI-ANALYZED® Reagent  
For Organic Residue Analysis

Avantor™



Material No.: 9262-03  
Batch No.: 24C1862008  
Manufactured Date: 2024-01-30  
Expiration Date: 2025-04-30  
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 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>6</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	0.4 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 9/25/24

E 3805

Jamie Croak  
Director Quality Operations, Bioscience Production

**Cleanert Florisil**

1g/6ml 30/pkg

固相萃取产品

LOT#: M06518

MFG#: F04074



Made in China

**CAT# FS0006**

 Agela Technologies

E 3806



Acetone  
BAKER RESI-ANALYZED® Reagent  
For Organic Residue Analysis



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 <sub>3</sub> ) <sub>2</sub> 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 <sub>2</sub> 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 12/5/24

E 3843

Jamie Croak  
Director Quality Operations, Bioscience Production

Acetone  
BAKER RESI-ANALYZED® Reagent  
For Organic Residue Analysis

 **avantors™**



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 <sub>3</sub> ) <sub>2</sub> 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 <sub>2</sub> 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

Rec'd by RP On 12/13/24

E 3846



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



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)	$\leq 5$	3
ECD Sensitive Impurities (as Heptachlor Epoxide) Single Peak (pg/mL)	$\leq 10$	1
ECD-Sensitive Impurities (as Ethylene Dibromide) - Single Impurity Peak (ng/mL)	$\leq 5$	1
Assay (Total Saturated C <sub>6</sub> Isomers) (by GC, corrected for water)	$\geq 99.5 \%$	99.7 %
Assay (as n-Hexane) (by GC, corrected for water)	$\geq 95 \%$	98 %
Color (APHA)	$\leq 10$	5
Residue after Evaporation	$\leq 1.0$ ppm	0.1 ppm
Substances Darkened by H <sub>2</sub> SO <sub>4</sub>	Passes Test	Passes Test
Water (by KF, coulometric)	$\leq 0.05 \%$	< 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 12/13/24

E3847



Jamie Croak  
Director Quality Operations, Bioscience Production

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

Rec'd by RP on 01/03/25

E3868

J. Croak

Jamie Croak  
Director Quality Operations, Bioscience Production



# 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.: 32021 Lot No.: A0181737  
Description: Chlordane Standard  
Chlordane Standard 1000µg/mL, Hexane, 1mL/ampul  
Container Size: 2 mL Pkg Amt: > 1 mL  
Expiration Date: May 31, 2028 Storage: 10°C or colder  
Ship: Ambient

### CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)
1	Chlordane CAS # 57-74-9 (Lot 978545) Purity ----%	1,006.0 µg/mL	+/- 5.9753 µg/mL Gravimetric +/- 31.8975 µg/mL Unstressed +/- 41.6615 µg/mL Stressed

Solvent: Hexane  
CAS # 110-54-3  
Purity 99%

#### Tech Tips:

CAS #57-74-9 nomenclature is based on EPA method 8081B.

P 11892  
↓  
P 11896  
5

06/17/2022

**Column:**  
30m x .25mm x .2um  
Rtx-CLP II (cat.# 11323)

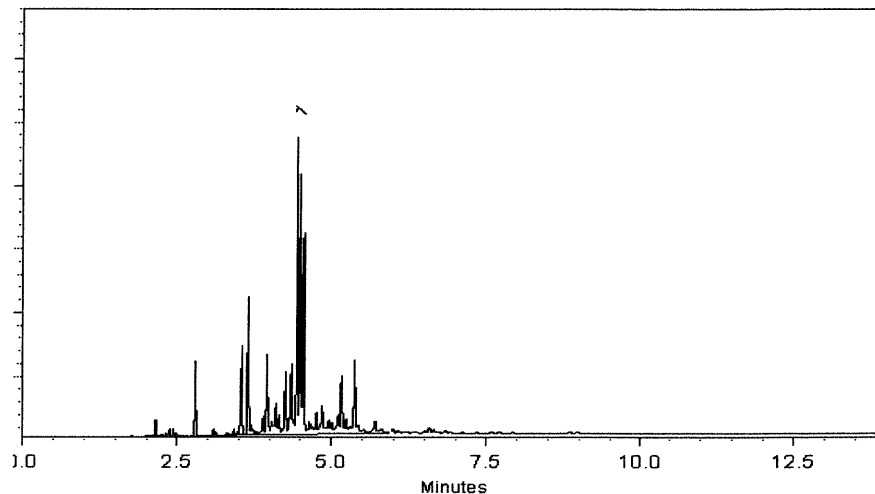
**Carrier Gas:**  
helium-constant pressure 20 psi.

**Temp. Program:**  
200°C to 300°C  
@ 25°C/min. ( hold 10 min.)

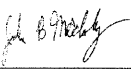
**Inj. Temp:**  
250°C

**Det. Temp:**  
300°C

**Det. Type:**  
ECD



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.

  
Josh McCloskey - Operations Technician I

**Date Mixed:** 11-Feb-2022


**Balance:** B442140311

  
Marlene Cowan - Operations Tech I

**Date Passed:** 24-Feb-2022

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

P 11892 / (5)  
↓  
P 11896 / 1

  
06/17/2022



110 Benner Circle  
Bellefonte, PA 16823-8812  
Tel: 1-814-353-1300  
Fax: 1-814-353-1309

www.restek.com

## CERTIFIED REFERENCE MATERIAL

# Certificate of Analysis

chromatographic plus



### 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. : 32291 Lot No.: A0199099

Description : Organochlorine Pesticide Mix AB #1

Organochlorine Pesticide Mix AB #1 200µg/mL, Hexane/Toluene(50:50), 1mL/ampul

Container Size : 2 mL Pkg Amt: > 1 mL

Expiration Date : June 30, 2027 Storage: 10°C or colder

Ship: Ambient

P130397 5  
↓  
P13043 1  
✓  
12-26-2023

### CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	alpha-BHC	319-84-6	14434500	99%	200.0 µg/mL	+/- 8.9732
2	gamma-BHC (Lindane)	58-89-9	14184400	98%	200.1 µg/mL	+/- 8.9762
3	beta-BHC	319-85-7	BCCC6425	99%	200.3 µg/mL	+/- 8.9844
4	delta-BHC	319-86-8	14450800	98%	200.0 µg/mL	+/- 8.9740
5	Heptachlor	76-44-8	813251	99%	200.1 µg/mL	+/- 8.9754
6	Aldrin	309-00-2	14389400	98%	200.0 µg/mL	+/- 8.9718
7	Heptachlor epoxide (isomer B)	1024-57-3	14448800	99%	200.1 µg/mL	+/- 8.9754
8	trans-Chlordane	5103-74-2	32943	98%	199.9 µg/mL	+/- 8.9696
9	cis-Chlordane	5103-71-9	31766	98%	200.1 µg/mL	+/- 8.9762
10	Endosulfan I	959-98-8	BCCF4060	99%	200.1 µg/mL	+/- 8.9754
11	4,4'-DDE	72-55-9	GHYQG	99%	200.1 µg/mL	+/- 8.9777
12	Dieldrin	60-57-1	11129900	98%	200.0 µg/mL	+/- 8.9718
13	Endrin	72-20-8	14123200	98%	199.9 µg/mL	+/- 8.9696
14	4,4'-DDD	72-54-8	HAN02	99%	200.1 µg/mL	+/- 8.9777
15	Endosulfan II	33213-65-9	14374700	99%	200.0 µg/mL	+/- 8.9732
16	4,4'-DDT	50-29-3	230410JLMA	98%	200.0 µg/mL	+/- 8.9718

17	Endrin aldehyde	7421-93-4	30720	98%	200.1	µg/mL	+/- 8.9784
18	Endosulfan sulfate	1031-07-8	BCCH9010	99%	200.0	µg/mL	+/- 8.9732
19	Methoxychlor	72-43-5	13668200	99%	200.1	µg/mL	+/- 8.9777
20	Endrin ketone	53494-70-5	1-ABS-16-7	98%	200.0	µg/mL	+/- 8.9740

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

**Solvent:** Hexane/Toluene (50:50)  
**CAS #** 110-54-3/108-88-3  
**Purity** 99%

P13039  
 ↓  
 P13043  
 5  
 1  
 JAW  
 12/26/23

## Quality Confirmation Test

**Column:**  
 30m x .25mm x .2um  
 Rtx-CLP II (cat.# 11323)

**Carrier Gas:**  
 helium-constant pressure 20 psi.

**Temp. Program:**  
 150°C to 300°C  
 @ 4°C/min. (hold 5 min.)

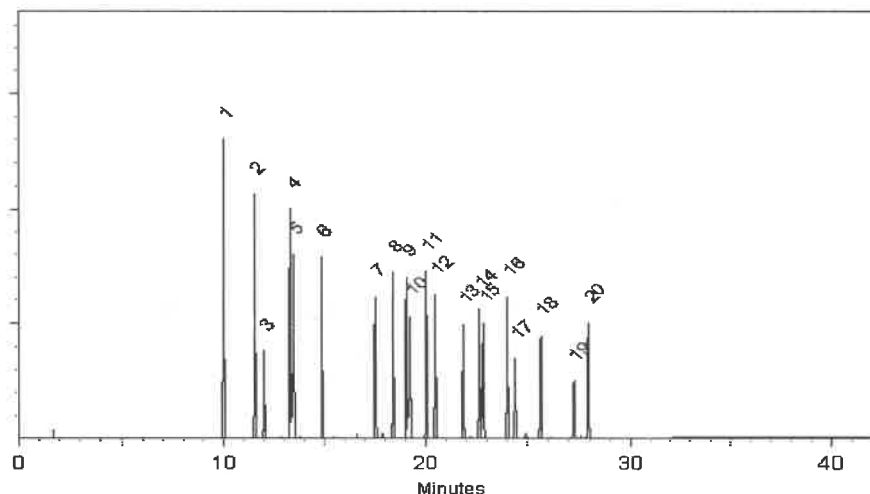
**Inj. Temp:**  
 200°C

**Det. Temp:**  
 300°C

**Det. Type:**  
 ECD

**Split Vent:**  
 Split ratio 50:1

**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.

*Josh McCloskey*  
 Josh McCloskey - Operations Technician I

**Date Mixed:** 19-Jun-2023

**Balance Serial #** 1128360905

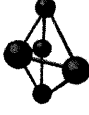
*Jennifer Pollino*  
 Jennifer Pollino - Operations Tech III - ARM QC

**Date Passed:** 23-Jun-2023

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



**Certified Reference Material CRM**



**CERTIFIED WEIGHT REPORT**

**Part Number:**  
**Lot Number:**  
**Description:**

**79136**  
**102821**  
**Mirex**

**Solvent(s):**  
**Lot#**  
**Acetone** **81025**

**Expiration Date:**  
**Recommended Storage:**  
**Nominal Concentration (µg/mL):**  
**NIST Test ID#:**

**102826**  
**Refrigerate (4 °C)**  
**1000**  
**6UTB**

**5E-05** **Balance Uncertainty**  
**0.006** **Flask Uncertainty**

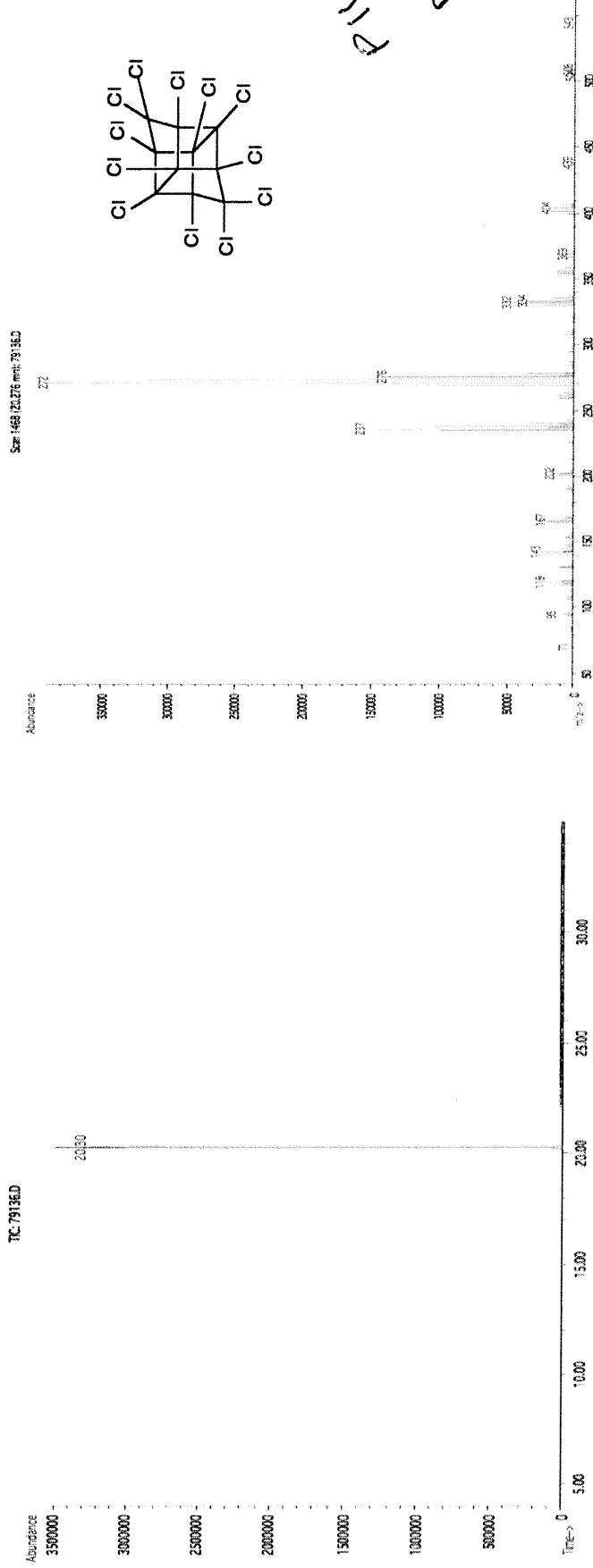
**Weight(s) shown below were combined and diluted to (mL):**

**50.0**

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty	Target Weight (g)	Actual Weight (g)	Actual Conc (µg/mL)	Expanded SDS Information		
									Uncertainty (+/-) (µg/mL)	(Solvent Safety Info. On Attached pg.)	(SHA PEL (TWA) LD50)

1. Mirex	437	9492400	1000	99.4	0.5	0.05034	0.05039	1000.9	10.3	2385-85-5	N/A	orl-rat 306mg/kg
----------	-----	---------	------	------	-----	---------	---------	--------	------	-----------	-----	------------------

**Method GC7MSD-1.M:** Column: SPB-608 (30m X 0.25mm ID X 0.25µm film thickness) Temp 1 = 150°C (4min.), Temp 2 = 290°C (13.5 min.), Rate = 8°C/min., Injector B = 200°C, Detector B = 290°C. Split Ratio = 100:1, Scan Rate = 2. Analysis performed by Candice Warren.



- The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- Standards are certified (+/-) 0.5% of the stated value, unless otherwise stated.
- All Standards, after opening ampule, should be stored with caps tight and under appropriate laboratory conditions.
- Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, DC, (1994).



110 Benner Circle  
Bellefonte, PA 16823-8812  
Tel: 1-814-353-1300  
Fax: 1-814-353-1309

www.restek.com

## CERTIFIED REFERENCE MATERIAL

# Certificate of Analysis

chromatographic plus



### 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. :** 32291 **Lot No.:** A0200423

**Description :** Organochlorine Pesticide Mix AB #1

Organochlorine Pesticide Mix AB #1 200µg/mL, Hexane/Toluene(50:50), 1mL/ampul

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

**Expiration Date :** July 31, 2027 **Storage:** 10°C or colder

**Ship:** Ambient

P 13034  
↓  
P 13038  
✓  
12.26.2023

### CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	alpha-BHC	319-84-6	14434500	99%	200.5 µg/mL	+/- 8.9956
2	gamma-BHC (Lindane)	58-89-9	14184400	98%	199.9 µg/mL	+/- 8.9696
3	beta-BHC	319-85-7	BCCC6425	99%	200.0 µg/mL	+/- 8.9732
4	delta-BHC	319-86-8	14450800	98%	199.9 µg/mL	+/- 8.9696
5	Heptachlor	76-44-8	813251	99%	202.0 µg/mL	+/- 9.0629
6	Aldrin	309-00-2	14389400	98%	200.9 µg/mL	+/- 9.0136
7	Heptachlor epoxide (isomer B)	1024-57-3	14448800	99%	200.0 µg/mL	+/- 8.9732
8	trans-Chlordane	5103-74-2	34616	99%	200.5 µg/mL	+/- 8.9956
9	cis-Chlordane	5103-71-9	31766	98%	201.4 µg/mL	+/- 9.0356
10	Endosulfan I	959-98-8	BCCF4060	99%	200.0 µg/mL	+/- 8.9732
11	4,4'-DDE	72-55-9	GHYQG	99%	201.5 µg/mL	+/- 9.0405
12	Dieldrin	60-57-1	14515000	98%	199.9 µg/mL	+/- 8.9696
13	Endrin	72-20-8	14485300	98%	200.4 µg/mL	+/- 8.9916
14	4,4'-DDD	72-54-8	HAN02	99%	200.5 µg/mL	+/- 8.9956
15	Endosulfan II	33213-65-9	14374700	99%	200.0 µg/mL	+/- 8.9732
16	4,4'-DDT	50-29-3	230410JLMA	98%	201.9 µg/mL	+/- 9.0575



17	Endrin aldehyde	7421-93-4	30720	98%	201.4 µg/mL	+/- 9.0356
18	Endosulfan sulfate	1031-07-8	BCCH9010	99%	200.5 µg/mL	+/- 8.9956
19	Methoxychlor	72-43-5	14563200	98%	200.9 µg/mL	+/- 9.0136
20	Endrin ketone	53494-70-5	14537700	98%	199.9 µg/mL	+/- 8.9696

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

**Solvent:** Hexane/Toluene (50:50)  
**CAS #** 110-54-3/108-88-3  
**Purity** 99%

P13034  
P13038  
1  
5  
12/26/2023

## Quality Confirmation Test

**Column:**  
30m x .25mm x .2µm  
Rtx-CLP II (cat.# 11323)

**Carrier Gas:**  
helium-constant pressure 20 psi.

**Temp. Program:**  
150°C to 300°C  
@ 4°C/min. ( hold 5 min.)

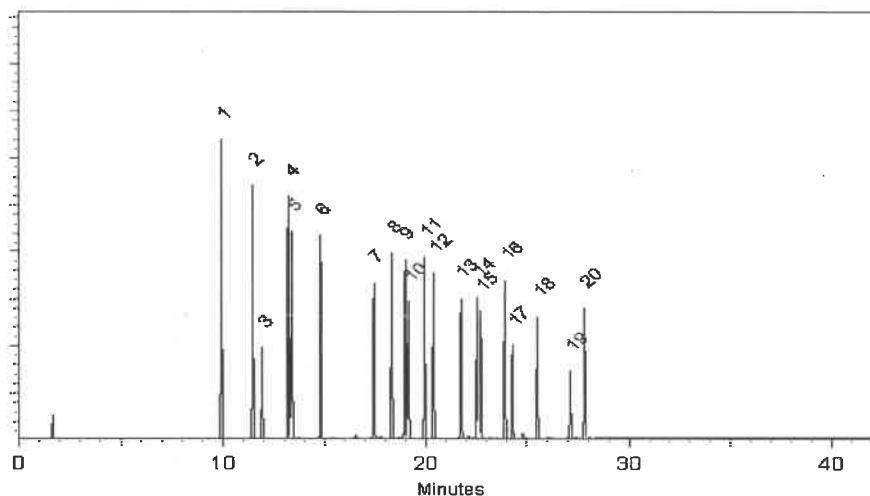
**Inj. Temp:**  
200°C

**Det. Temp:**  
300°C

**Det. Type:**  
ECD

**Split Vent:**  
Split ratio 50:1

**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.

*Sam Moodler*  
Sam Moodler - Operations Tech I

**Date Mixed:** 31-Jul-2023

**Balance Serial #** B442140311

*Jennifer Pollino*  
Jennifer Pollino - Operations Tech III - ARM QC

**Date Passed:** 03-Aug-2023

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



**CERTIFIED WEIGHT REPORT**

Part Number:  
Lot Number:  
Description:

**19161**  
**013124**

CLP Pesticides & PCBs Resolution Check Standard

9 components

Solvent(s):

Lot#

Expiration Date:

013129

Recommended Storage:

Refrigerate (4 °C)

Hexane

273615

(50%)

Nominal Concentration (µg/mL):

Varied

Toluene

28508

(50%)

NIST Test ID#:

6UTB

5E-05

Balance Uncertainty

First Uncertainty

Volume(s) shown below were combined and diluted to (mL):

100.0

Balance Uncertainty

First Uncertainty

Formulated By: <i>Lawrence Barry</i>		013124
Reviewed By: <i>Pedro L. Rentes</i>		013124
DATE		DATE

**SDS Information**

Compound	Part Number	Lot Number	Dil. Factor	Initial Vol. (mL)	Uncertainty (mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty (±) µg/mL	(Solvent Safety Info. On Attached pg.)	CAS#	OSHA PEL (TWA)	LD50
----------	-------------	------------	-------------	-------------------	------------------	-----------------------	---------------------	--------------------------------	--	------	----------------	------

1. trans-Chlordane	19361	013124	0.010	1.00	0.004	101.3	1.0	0.02	5103-74-2	0.5mg/m3 (skin)	or-rat 500mg/kg
2. Endosulfan I	19361	013124	0.010	1.00	0.004	101.3	1.0	0.02	959-98-8	0.1mg/m3 (skin)	or-rat 18mg/kg
3. 4,4'-DDE	19361	013124	0.010	1.00	0.004	201.6	2.0	0.03	72-55-9	N/A	or-rat 880mg/kg
4. Dieldrin	19361	013124	0.010	1.00	0.004	202.8	2.0	0.03	60-57-1	0.25mg/m3 (skin)	or-rat 36300µg/kg
5. Endosulfan sulfate	19361	013124	0.010	1.00	0.004	204.2	2.0	0.03	1031-07-8	N/A	or-rat 18mg/kg
6. Endrin ketone	19361	013124	0.010	1.00	0.004	202.6	2.0	0.03	53494-70-5	N/A	N/A
7. 4,4-Methoxychlor	19361	013124	0.010	1.00	0.004	1000.7	10.0	0.09	72-43-5	10mg/m3	or-rat 6000mg/kg
8. 2,4,5,6-Tetrachloro-m-xylene	19361	013124	0.010	1.00	0.004	202.6	2.0	0.03	877-09-8	N/A	N/A
9. Decachlorobiphenyl (209)	19361	013124	0.010	1.00	0.004	202.0	2.0	0.03	2051-24-3	N/A	N/A

1913243  
1913244  
1913245  
1913246  
1913247  
1913248  
1913249  
1913250  
1913251  
1913252  
1913253  
1913254  
1913255  
1913256  
1913257  
1913258  
1913259  
1913260  
1913261  
1913262  
1913263  
1913264  
1913265  
1913266  
1913267  
1913268  
1913269  
1913270  
1913271  
1913272  
1913273  
1913274  
1913275  
1913276  
1913277  
1913278  
1913279  
1913280  
1913281  
1913282  
1913283  
1913284  
1913285  
1913286  
1913287  
1913288  
1913289  
1913290  
1913291  
1913292  
1913293  
1913294  
1913295  
1913296  
1913297  
1913298  
1913299  
1913300  
1913301  
1913302  
1913303  
1913304  
1913305  
1913306  
1913307  
1913308  
1913309  
1913310  
1913311  
1913312  
1913313  
1913314  
1913315  
1913316  
1913317  
1913318  
1913319  
1913320  
1913321  
1913322  
1913323  
1913324  
1913325  
1913326  
1913327  
1913328  
1913329  
1913330  
1913331  
1913332  
1913333  
1913334  
1913335  
1913336  
1913337  
1913338  
1913339  
1913340  
1913341  
1913342  
1913343  
1913344  
1913345  
1913346  
1913347  
1913348  
1913349  
1913350  
1913351  
1913352  
1913353  
1913354  
1913355  
1913356  
1913357  
1913358  
1913359  
1913360  
1913361  
1913362  
1913363  
1913364  
1913365  
1913366  
1913367  
1913368  
1913369  
1913370  
1913371  
1913372  
1913373  
1913374  
1913375  
1913376  
1913377  
1913378  
1913379  
1913380  
1913381  
1913382  
1913383  
1913384  
1913385  
1913386  
1913387  
1913388  
1913389  
1913390  
1913391  
1913392  
1913393  
1913394  
1913395  
1913396  
1913397  
1913398  
1913399  
1913400  
1913401  
1913402  
1913403  
1913404  
1913405  
1913406  
1913407  
1913408  
1913409  
1913410  
1913411  
1913412  
1913413  
1913414  
1913415  
1913416  
1913417  
1913418  
1913419  
1913420  
1913421  
1913422  
1913423  
1913424  
1913425  
1913426  
1913427  
1913428  
1913429  
1913430  
1913431  
1913432  
1913433  
1913434  
1913435  
1913436  
1913437  
1913438  
1913439  
1913440  
1913441  
1913442  
1913443  
1913444  
1913445  
1913446  
1913447  
1913448  
1913449  
1913450  
1913451  
1913452  
1913453  
1913454  
1913455  
1913456  
1913457  
1913458  
1913459  
1913460  
1913461  
1913462  
1913463  
1913464  
1913465  
1913466  
1913467  
1913468  
1913469  
1913470  
1913471  
1913472  
1913473  
1913474  
1913475  
1913476  
1913477  
1913478  
1913479  
1913480  
1913481  
1913482  
1913483  
1913484  
1913485  
1913486  
1913487  
1913488  
1913489  
1913490  
1913491  
1913492  
1913493  
1913494  
1913495  
1913496  
1913497  
1913498  
1913499  
1913500  
1913501  
1913502  
1913503  
1913504  
1913505  
1913506  
1913507  
1913508  
1913509  
1913510  
1913511  
1913512  
1913513  
1913514  
1913515  
1913516  
1913517  
1913518  
1913519  
1913520  
1913521  
1913522  
1913523  
1913524  
1913525  
1913526  
1913527  
1913528  
1913529  
1913530  
1913531  
1913532  
1913533  
1913534  
1913535  
1913536  
1913537  
1913538  
1913539  
1913540  
1913541  
1913542  
1913543  
1913544  
1913545  
1913546  
1913547  
1913548  
1913549  
1913550  
1913551  
1913552  
1913553  
1913554  
1913555  
1913556  
1913557  
1913558  
1913559  
1913560  
1913561  
1913562  
1913563  
1913564  
1913565  
1913566  
1913567  
1913568  
1913569  
1913570  
1913571  
1913572  
1913573  
1913574  
1913575  
1913576  
1913577  
1913578  
1913579  
1913580  
1913581  
1913582  
1913583  
1913584  
1913585  
1913586  
1913587  
1913588  
1913589  
1913590  
1913591  
1913592  
1913593  
1913594  
1913595  
1913596  
1913597  
1913598  
1913599  
1913600  
1913601  
1913602  
1913603  
1913604  
1913605  
1913606  
1913607  
1913608  
1913609  
1913610  
1913611  
1913612  
1913613  
1913614  
1913615  
1913616  
1913617  
1913618  
1913619  
1913620  
1913621  
1913622  
1913623  
1913624  
1913625  
1913626  
1913627  
1913628  
1913629  
1913630  
1913631  
1913632  
1913633  
1913634  
1913635  
1913636  
1913637  
1913638  
1913639  
1913640  
1913641  
1913642  
1913643  
1913644  
1913645  
1913646  
1913647  
1913648  
1913649  
1913650  
1913651  
1913652  
1913653  
1913654  
1913655  
1913656  
1913657  
1913658  
1913659  
1913660  
1913661  
1913662  
1913663  
1913664  
1913665  
1913666  
1913667  
1913668  
1913669  
1913670  
1913671  
1913672  
1913673  
1913674  
1913675  
1913676  
1913677  
1913678  
1913679  
1913680  
1913681  
1913682  
1913683  
1913684  
1913685  
1913686  
1913687  
1913688  
1913689  
1913690  
1913691  
1913692  
1913693  
1913694  
1913695  
1913696  
1913697  
1913698  
1913699  
1913700  
1913701  
1913702  
1913703  
1913704  
1913705  
1913706  
1913707  
1913708  
1913709  
1913710  
1913711  
1913712  
1913713  
1913714  
1913715  
1913716  
1913717  
1913718  
1913719  
1913720  
1913721  
1913722  
1913723  
1913724  
1913725  
1913726  
1913727  
1913728  
1913729  
1913730  
1913731  
1913732  
1913733  
1913734  
1913735  
1913736  
1913737  
1913738  
1913739  
1913740  
1913741  
1913742  
1913743  
1913744  
1913745  
1913746  
1913747  
1913748  
1913749  
1913750  
1913751  
1913752  
1913753  
1913754  
1913755  
1913756  
1913757  
1913758  
1913759  
1913760  
1913761  
1913762  
1913763  
1913764  
1913765  
1913766  
1913767  
1913768  
1913769  
1913770  
1913771  
1913772  
1913773  
1913774  
1913775  
1913776  
1913777  
1913778  
1913779  
1913780  
1913781  
1913782  
1913783  
1913784  
1913785  
1913786  
1913787  
1913788  
1913789  
1913790  
1913791  
1913792  
1913793  
1913794  
1913795  
1913796  
1913797  
1913798  
1913799  
1913800  
1913801  
1913802  
1913803  
1913804  
1913805  
1913806  
1913807  
1913808  
1913809  
1913810  
1913811  
1913812  
1913813  
1913814  
1913815  
1913816  
1913817  
1913818  
1913819  
1913820  
1913821  
1913822  
1913823  
1913824  
1913825  
1913826  
1913827  
1913828  
1913829  
1913830  
1913831  
1913832  
1913833  
1913834  
1913835  
1913836  
1913837  
1913838  
1913839  
1913840  
1913841  
1913842  
1913843  
1913844  
1913845  
1913846  
1913847  
1913848  
1913849  
1913850  
1913851  
1913852  
1913853  
1913854  
1913855  
1913856  
1913857  
1913858  
1913859  
1913860  
1913861  
1913862  
1913863  
1913864  
1913865  
1913866  
1913867  
1913868  
1913869  
1913870  
1913871  
1913872  
1913873  
1913874  
1913875  
1913876  
1913877  
1913878  
1913879  
1913880  
1913881  
1913882  
1913883  
1913884  
1913885  
1913886  
1913887  
1913888  
1913889  
1913890  
1913891  
1913892  
1913893  
1913894  
1913895  
1913896  
1913897  
1913898  
1913899  
1913900  
1913901  
1913902  
1913903  
1913904  
1913905  
1913906  
1913907  
1913908  
1913909  
1913910  
1913911  
1913912  
1913913  
1913914  
1913915  
1913916  
1913917  
1913918  
1913919  
1913920  
1913921  
1913922  
1913923  
1913924  
1913925  
1913926  
1913927  
1913928  
1913929  
1913930  
1913931  
1913932  
1913933  
1913934  
1913935  
1913936  
1913937  
1913938  
1913939  
1913940  
1913941  
1913942  
1913943  
1913944  
1913945  
1913946  
1913947  
1913948  
1913949  
1913950  
1913951  
1913952  
1913953  
1913954  
1913955  
1913956  
1913957  
1913958  
1913959  
1913960  
1913961  
1913962  
1913963  
1913964  
1913965  
1913966  
1913967  
1913968  
1913969  
1913970  
1913971  
1913972  
1913973  
1913974  
1913975  
1913976  
1913977  
1913978  
1913979  
1913980  
1913981  
1913982  
1913983  
1913984  
1913985  
1913986  
1913987  
1913988  
1913989  
1913990  
1913991  
1913992  
1913993  
1913994  
1913995  
1913996  
1913997  
1913998  
1913999  
1914000  
1914001  
1914002  
1914003  
1914004  
1914005  
1914006  
1914007  
1914008  
1914009  
1914010  
1914011  
1914012  
1914013  
1914014  
1914015  
1914016  
1914017  
1914018  
1914019  
1914020  
1914021  
1914022  
1914023  
1914024  
1914025  
1914026  
1914027  
1914028  
1914029  
1914030  
1914031  
1914032  
1914033  
1914034  
1914035  
1914036  
1914037  
1914038  
1914039  
1914040  
1914041  
1914042  
1914043  
1914044  
1914045  
1914046  
1914047  
1914048  
1914049  
1914050  
1914051  
1914052  
1914053  
1914054  
1914055  
1914056  
1914057  
1914058  
1914059  
1914060  
1914061  
1914062  
1914063  
1914064  
1914065  
1914066  
1914067  
1914068  
1914069  
1914070  
1914071  
1914072  
1914073  
1914074  
1914075  
1914076  
1914077  
1914078  
1914079  
1914080  
1914081  
1914082  
1914083  
1914084  
1914085  
1914086  
1914087  
1914088  
1914089  
1914090  
1914091  
1914092  
1914093  
1914094  
1914095  
1914096  
1914097  
1914098  
1914099  
1914100  
1914101  
1914102  
1914103  
1914104  
1914105  
1914106  
1914107  
1914108  
1914109  
1914110  
1914111  
1914112  
1914113  
1914114  
1914115  
1914116  
1914117  
1914118  
1914119  
1914120  
1914121  
1914122  
1914123  
1914124  
1914125  
1914126  
1914127  
1914128  
1914129  
1914130  
1914131  
1914132  
1914133  
1914134  
1914135  
1914136  
1914137  
1914138  
1914139  
1914140  
1914141  
1914142  
1914143  
1914144  
1914145  
1914146  
1914147  
1914148  
1914149  
1914150  
1914151  
1914152  
1914153  
1914154  
1914155  
1914156  
1914157  
1914158  
1914159  
1914160  
1914161  
1914162  
1914163  
1914164  
1914165  
1914166  
1914167  
1914168  
1914169  
1914170  
1914171  
1914172  
1914173  
1914174  
1914175  
1914176  
1914177  
1914178  
1914179  
1914180  
1914181  
1914182  
1914183  
1914184  
1914185  
1914186  
1914187  
1914188  
1914189  
1914190  
1914191  
1914192  
1914193  
1914194  
1914195  
1914196  
1914197  
1914198  
1914199  
1914200  
1914201  
1914202  
1914203  
1914204  
1914205  
1914206  
1914207  
1914208  
1914209  
1914210  
1914211  
1914212  
1914213  
1914214  
1914215  
1914216  
1914217  
1914218  
1914219  
1914220  
1914221  
1914222  
1914223  
1914224  
1914225  
1914226  
1914227  
1914228  
1914229  
1914230  
1914231  
1914232  
1914233  
1914234  
1914235  
1914236  
1914237  
1914238  
1914239  
1914240  
1914241  
1914242  
1914243  
1914244  
1914245  
1914246  
1914247  
1914248  
1914249  
1914250  
1914251  
1914252  
1914253  
1914254  
1914255  
1914256  
1914257  
1914258  
1914259  
1914260  
1914261  
1914262  
1914263  
1914264  
1914265  
1914266  
1914267  
1914268  
1914269  
1914270  
1914271  
1914272  
1914273  
1914274  
191



110 Benner Circle  
Bellefonte, PA 16823-8812  
Tel: 1-814-353-1300  
Fax: 1-814-353-1309

www.restek.com

## CERTIFIED REFERENCE MATERIAL

# Certificate of Analysis

chromatographic plus



### 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. :** 32000 **Lot No.:** A0206810

**Description :** Pesticide Surrogate Mix  
Pesticide Surrogate Mix 200 µg/mL, Acetone, 1mL/ampul

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

**Expiration Date :** April 30, 2030 **Storage:** 10°C or colder

**Handling:** Contains PCBs - sonicate prior to use. **Ship:** Ambient

P13348  
↓  
P13357  
10  
DAUF  
04/25/2024

### CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	2,4,5,6-Tetrachloro-m-xylene	877-09-8	RP220407	99%	200.3 µg/mL	+/- 11.1143
2	Decachlorobiphenyl (BZ# 209)	2051-24-3	30638	99%	200.6 µg/mL	+/- 11.1298

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

**Solvent:** Acetone  
**CAS #** 67-64-1  
**Purity** 99%

### Tech Tips:

Decachlorobiphenyl has poor solubility in most organic solvents. The maximum concentration that can be prepared in acetone, hexane, or isooctane is 200µg/mL. Temperature will affect the solubility as well. Storing solutions at reduced temperatures will cause decachlorobiphenyl to precipitate.

Products containing decachlorobiphenyl must be sonicated for a minimum of 10 minutes prior to opening the ampul. Because each ultrasonic bath operates at a different energy level, 10 minutes is a guideline only. Longer sonication time will not affect product quality.

These precautions apply to working solutions prepared in your laboratory as well. The amount of compound that precipitates depends on concentration AND temperature. If you store your standards at a temperature lower than 4°C (even dilute solutions), allow extra sonication time.

## Quality Confirmation Test

**Column:**

30m x .25mm x .2um  
Rtx-CLP II (cat.# 11323)

**Carrier Gas:**

helium-constant pressure 20 psi.

**Temp. Program:**

200°C to 300°C  
@ 25°C/min. ( hold 10 min.)

**Inj. Temp:**

250°C

**Det. Temp:**

300°C

**Det. Type:**

ECD

**Split Vent:**

10 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.

  
Laith Clemente - Operations Technician I

Date Mixed: 22-Jan-2024

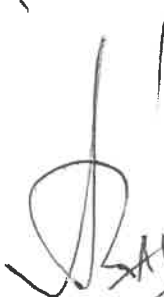
Balance Serial # 1128360905

  
Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 24-Jan-2024

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

P 13348  
↓  
P 13357  
10

  
SAUF  
04/25/2025



110 Benner Circle  
Bellefonte, PA 16823-8812  
Tel: 1-814-353-1300  
Fax: 1-814-353-1309

www.restek.com

## CERTIFIED REFERENCE MATERIAL

# Certificate of Analysis

chromatographic plus



### 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. :** 32000 **Lot No.:** A0206810

**Description :** Pesticide Surrogate Mix  
Pesticide Surrogate Mix 200 µg/mL, Acetone, 1mL/ampul

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

**Expiration Date :** April 30, 2030 **Storage:** 10°C or colder

**Handling:** Contains PCBs - sonicate prior to use. **Ship:** Ambient

P13348  
↓  
P13357  
10  
BAUF  
04/25/2024

### CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	2,4,5,6-Tetrachloro-m-xylene	877-09-8	RP220407	99%	200.3 µg/mL	+/- 11.1143
2	Decachlorobiphenyl (BZ# 209)	2051-24-3	30638	99%	200.6 µg/mL	+/- 11.1298

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

**Solvent:** Acetone  
**CAS #** 67-64-1  
**Purity** 99%

### Tech Tips:

Decachlorobiphenyl has poor solubility in most organic solvents. The maximum concentration that can be prepared in acetone, hexane, or isooctane is 200µg/mL. Temperature will affect the solubility as well. Storing solutions at reduced temperatures will cause decachlorobiphenyl to precipitate.

Products containing decachlorobiphenyl must be sonicated for a minimum of 10 minutes prior to opening the ampul. Because each ultrasonic bath operates at a different energy level, 10 minutes is a guideline only. Longer sonication time will not affect product quality.

These precautions apply to working solutions prepared in your laboratory as well. The amount of compound that precipitates depends on concentration AND temperature. If you store your standards at a temperature lower than 4°C (even dilute solutions), allow extra sonication time.

# Quality Confirmation Test

**Column:**

30m x .25mm x .2um  
Rtx-CLP II (cat.# 11323)

**Carrier Gas:**

helium-constant pressure 20 psi.

**Temp. Program:**

200°C to 300°C  
@ 25°C/min. ( hold 10 min.)

**Inj. Temp:**

250°C

**Det. Temp:**

300°C

**Det. Type:**

ECD

**Split Vent:**

10 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.

  
Laith Clemente - Operations Technician I

Date Mixed: 22-Jan-2024

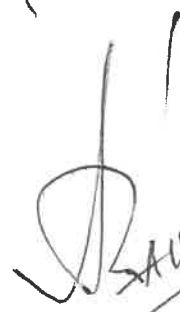
Balance Serial # 1128360905

  
Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 24-Jan-2024

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

P 13348  
↓  
P 13357  
10

  
SAUF  
04/25/2025



110 Benner Circle  
Bellefonte, PA 16823-8812  
Tel: 1-814-353-1300  
Fax: 1-814-353-1309

www.restek.com

## CERTIFIED REFERENCE MATERIAL

# Certificate of Analysis

chromatographic plus



### 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. :** 32000 **Lot No.:** A0206810

**Description :** Pesticide Surrogate Mix  
Pesticide Surrogate Mix 200 µg/mL, Acetone, 1mL/ampul

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

**Expiration Date :** April 30, 2030 **Storage:** 10°C or colder

**Handling:** Contains PCBs - sonicate prior to use. **Ship:** Ambient

P13348  
↓  
P13357  
10  
BAUF  
04/25/2024

### CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	2,4,5,6-Tetrachloro-m-xylene	877-09-8	RP220407	99%	200.3 µg/mL	+/- 11.1143
2	Decachlorobiphenyl (BZ# 209)	2051-24-3	30638	99%	200.6 µg/mL	+/- 11.1298

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

**Solvent:** Acetone  
**CAS #** 67-64-1  
**Purity** 99%

### Tech Tips:

Decachlorobiphenyl has poor solubility in most organic solvents. The maximum concentration that can be prepared in acetone, hexane, or isooctane is 200µg/mL. Temperature will affect the solubility as well. Storing solutions at reduced temperatures will cause decachlorobiphenyl to precipitate.

Products containing decachlorobiphenyl must be sonicated for a minimum of 10 minutes prior to opening the ampul. Because each ultrasonic bath operates at a different energy level, 10 minutes is a guideline only. Longer sonication time will not affect product quality.

These precautions apply to working solutions prepared in your laboratory as well. The amount of compound that precipitates depends on concentration AND temperature. If you store your standards at a temperature lower than 4°C (even dilute solutions), allow extra sonication time.

# Quality Confirmation Test

**Column:**

30m x .25mm x .2um  
Rtx-CLP II (cat.# 11323)

**Carrier Gas:**

helium-constant pressure 20 psi.

**Temp. Program:**

200°C to 300°C  
@ 25°C/min. ( hold 10 min.)

**Inj. Temp:**

250°C

**Det. Temp:**

300°C

**Det. Type:**

ECD

**Split Vent:**

10 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.

  
Laith Clemente - Operations Technician I

Date Mixed: 22-Jan-2024

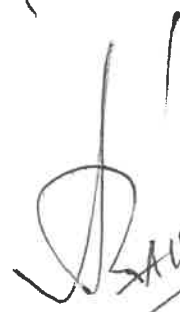
Balance Serial # 1128360905

  
Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 24-Jan-2024

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

P 13348  
↓  
P 13357  
10

  
SAUF  
04/25/2025





110 Benner Circle  
Bellefonte, PA 16823-8812  
Tel: 1-814-353-1300  
Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

# Certificate of Analysis

chromatographic plus



## 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. :** 32005 **Lot No.:** A0203038

**Description :** Toxaphene Standard

Toxaphene Standard 1000 µg/mL, Hexane, 1mL/ampul

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

**Expiration Date :** January 31, 2028 **Storage:** 10°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	Toxaphene	8001-35-2	1051817	----%	1,009.0 µg/mL	+/- 55.9920

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

**Solvent:** Hexane  
**CAS #** 110-54-3  
**Purity** 99%

P 13358  
↓  
P 13369  
(12)

*[Signature]*  
05-06-2024



## Quality Confirmation Test

**Column:**

30m x .25mm x .2um  
Rtx-CLP II (cat.# 11323)

**Carrier Gas:**

helium-constant pressure 20 psi.

**Temp. Program:**

200°C to 300°C  
@ 25°C/min. ( hold 10 min.)

**Inj. Temp:**

250°C

**Det. Temp:**

300°C

**Det. Type:**

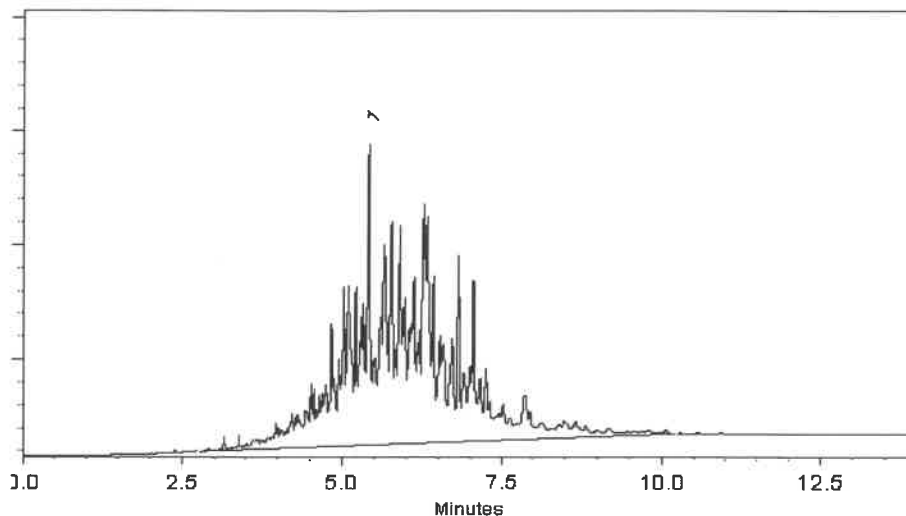
ECD

**Split Vent:**


300 ml/min.

**Inj. Vol**

0.2µl



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.

  
Dakota Parson - Operations Technician I

Date Mixed: 10-Oct-2023


Balance Serial # 1128353505

  
Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 16-Oct-2023

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

P13358  
↓  
P13369  
↓  
(12)

  
05-06-2024





110 Benner Circle  
Bellefonte, PA 16823-8812  
Tel: 1-814-353-1300  
Fax: 1-814-353-1309

www.restek.com

## CERTIFIED REFERENCE MATERIAL

# Certificate of Analysis

chromatographic plus



### 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. :** 32005 **Lot No.:** A0203038

**Description :** Toxaphene Standard  
Toxaphene Standard 1000 µg/mL, Hexane, 1mL/ampul

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

**Expiration Date :** January 31, 2028 **Storage:** 10°C or colder  
**Ship:** Ambient

P13402  
P13406  
5/22/2024

### CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Toxaphene	8001-35-2	1051817	---%	1,009.0 µg/mL	+/- 55.9920

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

**Solvent:** Hexane  
**CAS #** 110-54-3  
**Purity** 99%

## Quality Confirmation Test

**Column:**

30m x .25mm x .2um  
Rtx-CLP II (cat.# 11323)

**Carrier Gas:**

helium-constant pressure 20 psi.

**Temp. Program:**

200°C to 300°C  
@ 25°C/min. ( hold 10 min.)

**Inj. Temp:**

250°C

**Det. Temp:**

300°C

**Det. Type:**

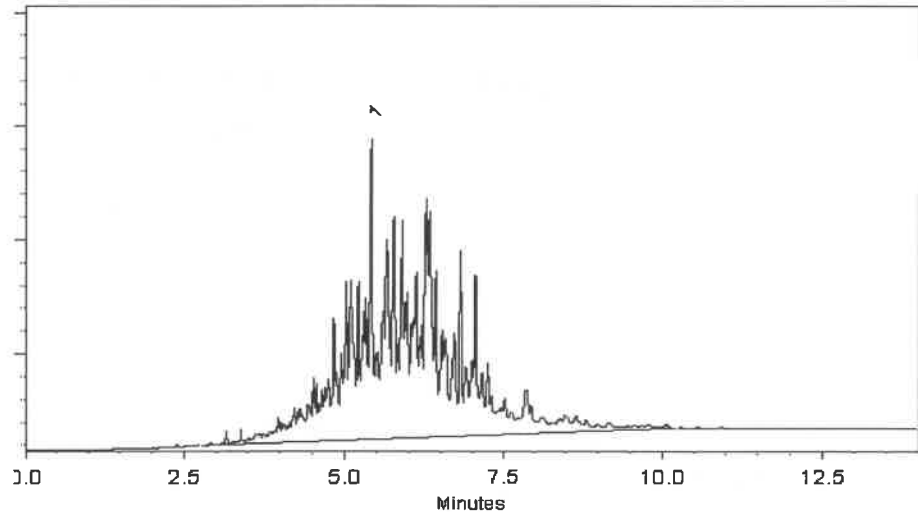
ECD

**Split Vent:**


300 ml/min.

**Inj. Vol**

0.2µl



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.

  
Dakota Parson - Operations Technician I


Date Mixed: 10-Oct-2023

Balance Serial # 1128353505

  
Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 16-Oct-2023

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

P13402  
↓  
P13406 } (5)  
  
5/22/2024