

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

8900, Fax: 908 789 8922

#### **Prep Standard - Chemical Standard Summary**

Order ID	:	Q1883
J	-	

Test: Pesticide-TCL

Prepbatch ID: PB167766,

Sequence ID/Qc Batch ID: pl043025,pl050225,

#### Standard ID:

EP2601, EP2607, PP24080, PP24081, PP24095, PP24255, PP24256, PP24257, PP24258, PP24259, PP24260, PP24261, PP24262, PP24266, PP24266, PP24268, PP24269, PP24270, PP24271, PP24272, PP24273, PP24274, PP24277, PP24278, PP24279, PP24280, PP24281, PP24282, PP24283, PP24284, PP24285, PP24289, PP24433, PP244280, PP24280, PP24281, PP

#### Chemical ID:

E2865,E3551,E3806,E3843,E3847,E3876,E3877,E3914,E3916,E3917,E3928,P12600,P12603,P12611,P13037,P13040,P13195,P13245,P13355,P13356,P13404,P13405,P13785,P13861,P9052,W3177,



Alliance

Fax: 908 789 8922

#### **Extractions STANDARD PREPARATION LOG**

Recipe ID	NAME_	NO.	Prep Date	Expiration Date	Prepared By	<u>ScaleID</u>	<u>PipetteID</u>	Supervised By Riteshkumar Patel
230	1:1ACETONE/HEXANE	EP2601	04/07/2025	10/03/2025	Rajesh Parikh	None	None	
								04/07/2025

Recipe ID	NAME	<u>NO.</u>	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3923	Baked Sodium Sulfate	EP2607	04/25/2025			Extraction SC	None	Riteshkumar Patel
					R SHAH	ALE_2 (FX-SC-2)		04/25/2025

**FROM** 4000.0000gram of E3551 = Final Quantity: 4000.000 gram





#### Pest/Pcb STANDARD PREPARATION LOG

3878   1000 PPB TOXAPHENE SPIKE   PP24080   12/16/2024   06/05/2025   Abdul Mirza   None   None	Recipe <u>ID</u>	NAME	<u>NO.</u>	Prep Date	Expiration Date	Prepared By	<u>ScaleID</u>	<u>PipetteID</u>	Supervised By  Ankita Jodhani
(RESTEK)	3878	1000 PPB TOXAPHENE SPIKE (RESTEK)	PP24080	12/16/2024	06/05/2025	Abdul Mirza	None	None	12/17/2024

Recipe ID	NAME	<u>NO.</u>	Prep Date	Expiration Date	Prepared By	<u>ScaleID</u>	<u>PipetteID</u>	Supervised By  Ankita Jodhani
1501	1000 ppb CHLORDANE SPIKE (RESTEK)	PP24081	12/16/2024	06/16/2025	Abdul Mirza	None	None	12/17/2024

**FROM** 0.10000ml of P12600 = Final Quantity: 100.000 ml





#### Pest/Pcb STANDARD PREPARATION LOG

Recipe ID	NAME	<u>NO.</u>	Prep Date	Expiration Date	Prepared By	<u>ScaleID</u>	<u>PipetteID</u>	Supervised By  Ankita Jodhani
	Pesticide resolution Check Mixture 8081	PP24095	12/23/2024	06/16/2025	Abdul Mirza	None	None	12/30/2024

Recipe ID	NAME	<u>NO.</u>	Prep Date	Expiration Date	Prepared By	<u>ScaleID</u>	<u>PipetteID</u>	Supervised By  Ankita Jodhani
84	Pest/PCB Surrogate Stock 20 PPM	PP24255	03/11/2025	08/12/2025	Abdul Mirza	None	None	03/12/2025

**FROM** 1.00000ml of P13785 + 9.00000ml of E3877 = Final Quantity: 10.000 ml





#### Pest/Pcb STANDARD PREPARATION LOG

Recipe ID	NAME	<u>NO.</u>	Prep Date	Expiration Date	Prepared By	<u>ScaleID</u>	<u>PipetteID</u>	Supervised By  Ankita Jodhani
3629	20 PPM PEST stock Solution 1st source(RESTEK)	PP24256	03/11/2025	08/12/2025	Abdul Mirza	None	None	03/12/2025

FROM	1.00000ml of P13040 + 9.00000ml of E3877 = Final Quantity: 10.000 ml
------	--

Recipe ID	NAME	<u>NO.</u>	Prep Date	Expiration Date	Prepared By	<u>ScaleID</u>	<u>PipetteID</u>	Supervised By  Ankita Jodhani
1472	20 PPM Pest Stock Solution 2nd Source	PP24257	03/11/2025	08/12/2025	Abdul Mirza	None	None	03/12/2025

**FROM** 1.00000ml of P13037 + 9.00000ml of E3877 = Final Quantity: 10.000 ml





#### Pest/Pcb STANDARD PREPARATION LOG

Recipe ID	NAME	<u>NO.</u>	Prep Date	Expiration Date	<u>Prepared</u> <u>By</u>	<u>ScaleID</u>	<u>PipetteID</u>	Supervised By  Ankita Jodhani
1	20 PPM Mirex Stock (Primary Source)	PP24258	03/11/2025	08/12/2025	Abdul Mirza	None	None	03/12/2025

Recipe ID	NAME	<u>NO.</u>	Prep Date	Expiration Date	Prepared By	<u>ScaleID</u>	<u>PipetteID</u>	Supervised By  Ankita Jodhani
3663	20 PPM MIREX Stock STD (Secondary source)	PP24259	03/11/2025	08/12/2025	Abdul Mirza	None	None	03/12/2025

**FROM** 0.20000ml of P13195 + 9.80000ml of E3877 = Final Quantity: 10.000 ml





#### Pest/Pcb STANDARD PREPARATION LOG

3630		ecipe ID	<u>NAME</u>	NO.	Prep Date	Expiration Date	Prepared By	<u>ScaleID</u>	<u>PipetteID</u>	Supervised By  Ankita Jodhani
	3	630		PP24260	03/11/2025	08/12/2025	Abdul Mirza	None	None	03/12/2025

FROM 98.50000ml of E3877 + 0.50000ml of PP24255 + 0.50000ml of PP24256 + 0.50000ml of PP24258 = Final Quantity: 100.000 ml

Recipe ID	<u>NAME</u>	<u>NO.</u>	Prep Date	Expiration Date	<u>Prepared</u> <u>By</u>	<u>ScaleID</u>	<u>PipetteID</u>	Supervised By  Ankita Jodhani
80	100/100 PPB Pesticide Working Solution 2nd Source	PP24261	03/11/2025	08/12/2025	Abdul Mirza	None	None	03/12/2025

**FROM** 98.50000ml of E3877 + 0.50000ml of PP24255 + 0.50000ml of PP24257 + 0.50000ml of PP24259 = Final Quantity: 100.000 ml



Aliance TECHNICAL GROUP

Fax: 908 789 8922

#### Pest/Pcb STANDARD PREPARATION LOG

Recipe ID N	<u>NAME</u>	<u>NO.</u>	Prep Date	Expiration Date	<u>Prepared</u> <u>By</u>	<u>ScaleID</u>	<u>PipetteID</u>	Supervised By  Ankita Jodhani
	1000/100 PPB Chlordane STD (Restek)	<u>PP24262</u>	03/11/2025	08/12/2025	Abdul Mirza	None	None	03/12/2025

Recipe ID	<u>NAME</u>	<u>NO.</u>	Prep Date	Expiration Date	Prepared By	<u>ScaleID</u>	<u>PipetteID</u>	Supervised By  Ankita Jodhani
3746	1000/100 ppb Chlordane STD-RESTEK 2ND SOURCE	PP24266	03/11/2025	08/12/2025	Abdul Mirza	None	None	03/12/2025

FROM 0.10000ml of P12611 + 99.40000ml of E3877 + 0.50000ml of PP24255 = Final Quantity: 100.000 ml



Aliance
TECHNICAL GROUP

Fax: 908 789 8922

#### Pest/Pcb STANDARD PREPARATION LOG

Recipe ID	NAME	<u>NO.</u>	Prep Date	Expiration Date	<u>Prepared</u> <u>By</u>	<u>ScaleID</u>	<u>PipetteID</u>	Supervised By  Ankita Jodhani
383	1000/100 PPB Toxaphene STD (Restek)	PP24267	03/11/2025	08/12/2025	Abdul Mirza	None	None	03/12/2025

FROM	0.10000ml of P13405 + 99.40000ml of E3877 + 0.50000ml of PP24255 = Final Quantity: 100.000 ml
------	---

Recipe ID	NAME.	NO.	Prep Date	Expiration Date	Prepared By	<u>ScaleID</u>	<u>PipetteID</u>	Supervised By  Ankita Jodhani
3669	1000/100 PPB TOXAPHENE STD 2nd source (RESTEK)	PP24268	03/11/2025	08/12/2025	Abdul Mirza	None	None	03/12/2025

FROM 0.10000ml of P13861 + 99.40000ml of E3877 + 0.50000ml of PP24255 = Final Quantity: 100.000 ml





#### Pest/Pcb STANDARD PREPARATION LOG

ID N	IAME	<u>NO.</u>	Prep Date	Expiration Date	<u>Prepared</u> <u>By</u>	<u>ScaleID</u>	<u>PipetteID</u>	Supervised By  Ankita Jodhani
	'5 PPB ICAL PEST STD(RESTEK)	<u>PP24269</u>	03/11/2025	08/12/2025	Abdul Mirza	None	None	03/12/2025

<b>FROM</b>	0.75000ml of E3877 + 0.25000ml of PP24260 = Final	Quantity: 1.000	ml
-------------	---	-----------------	----

Recipe ID	<u>NAME</u>	<u>NO.</u>	Prep Date	Expiration Date	Prepared By	<u>ScaleID</u>	<u>PipetteID</u>	Supervised By  Ankita Jodhani
3632	50 PPB ICAL PEST STD(RESTEK)	PP24270	03/11/2025	08/12/2025	Abdul Mirza	None	None	03/12/2025

**FROM** 0.50000ml of E3877 + 0.50000ml of PP24260 = Final Quantity: 1.000 ml





#### Pest/Pcb STANDARD PREPARATION LOG

Recipe ID	NAME.	NO.	Prep Date	Expiration Date	Prepared By	<u>ScaleID</u>	<u>PipetteID</u>	Supervised By  Ankita Jodhani
3633	25 PPB ICAL PEST STD(RESTEK)	PP24271	03/11/2025	08/12/2025	Abdul Mirza	None	None	03/12/2025

FROM	0.75000ml of E3877 + 0.25000ml of PP24260 = Final Quantity	1.000	ml
------	--	-------	----

Recipe				<b>Expiration</b>	<u>Prepared</u>			Supervised By
<u>ID</u>	<u>NAME</u>	NO.	Prep Date	<u>Date</u>	<u>By</u>	<u>ScaleID</u>	<u>PipetteID</u>	Ankita Jodhani
3634	5 PPB ICAL PEST STD(RESTEK)	<u>PP24272</u>	03/11/2025	08/12/2025	Abdul Mirza	None	None	03/12/2025

**FROM** 0.90000ml of E3877 + 0.10000ml of PP24270 = Final Quantity: 1.000 ml





#### Pest/Pcb STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	<u>ScaleID</u>	<u>PipetteID</u>	Supervised By  Ankita Jodhani
3988	50 PPB PEST ICV STD(RESTEK)	PP24273	03/11/2025	08/12/2025	Abdul Mirza	None	None	03/12/2025
	I	1	<u> </u>					

Recipe				<b>Expiration</b>	<u>Prepared</u>			Supervised By
<u>ID</u>	NAME	<u>NO.</u>	Prep Date	<u>Date</u>	<u>By</u>	<u>ScaleID</u>	<u>PipetteID</u>	Ankita Jodhani
528	CHLOR 750 PPB STD	<u>PP24274</u>	03/11/2025	08/12/2025	Abdul Mirza	None	None	03/12/2025

**FROM** 0.25000ml of E3877 + 0.75000ml of PP24262 = Final Quantity: 1.000 ml





#### Pest/Pcb STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	<u>ScaleID</u>	<u>PipetteID</u>	Supervised By  Ankita Jodhani
529	CHLOR 500 PPB STD	PP24275	03/11/2025	08/12/2025	Abdul Mirza	None	None	03/12/2025
		<u> </u>	<u> </u>					

Recipe				Expiration	Prepared			Supervised By
<u>ID</u> 530	NAME CHLOR 250 PPB STD	NO. PP24277	<b>Prep Date</b> 03/11/2025	<u>Date</u> 08/12/2025	<u>By</u> Abdul Mirza	<u>ScaleID</u> None	PipetteID None	Ankita Jodhani
								03/12/2025

**FROM** 0.75000ml of E3877 + 0.25000ml of PP24262 = Final Quantity: 1.000 ml





#### Pest/Pcb STANDARD PREPARATION LOG

Recipe ID	<u>NAME</u>	NO.	Prep Date	Expiration Date	Prepared By	<u>ScaleID</u>	<u>PipetteID</u>	Supervised By  Ankita Jodhani
3408	CHLOR 50 PPB STD	PP24278	03/11/2025	08/12/2025	Abdul Mirza	None	None	02/42/2025
								03/12/2025

<b>FROM</b>	0.90000ml of E3877 + 0.10000ml of PP24275 = Final Quantity: 1.000 m
-------------	---

Recipe				Expiration	Prepared			Supervised By
<u>ID</u>	<u>NAME</u>	<u>NO.</u>	Prep Date	<u>Date</u>	<u>By</u>	<u>ScaleID</u>	<u>PipetteID</u>	Ankita Jodhani
532	CHLOR 500 PPB ICV STD	PP24279	03/11/2025	08/12/2025	Abdul Mirza	None	None	
								03/12/2025

**FROM** 0.50000ml of E3877 + 0.50000ml of PP24266 = Final Quantity: 1.000 ml





#### Pest/Pcb STANDARD PREPARATION LOG

Recipe ID	NAME	<u>NO.</u>	Prep Date	Expiration Date	Prepared By	<u>ScaleID</u>	<u>PipetteID</u>	Supervised By  Ankita Jodhani
533	TOX 750 PPB STD	PP24280	03/11/2025	08/12/2025	Abdul Mirza	None	None	03/12/2025
								03/12/2023

Recipe				Expiration	Prepared			Supervised By
<u>ID</u>	<u>NAME</u>	NO.	Prep Date	<u>Date</u>	<u>By</u>	<u>ScaleID</u>	<u>PipetteID</u>	Ankita Jodhani
534	TOX 500 PPB STD	PP24281	03/11/2025	08/12/2025	Abdul Mirza	None	None	
								03/12/2025

**FROM** 0.50000ml of E3877 + 0.50000ml of PP24267 = Final Quantity: 1.000 ml





#### Pest/Pcb STANDARD PREPARATION LOG

Recipe ID	NAME	<u>NO.</u>	Prep Date	Expiration Date	Prepared By	<u>ScaleID</u>	<u>PipetteID</u>	Supervised By  Ankita Jodhani
535	TOX 250 PPB STD	PP24282	03/11/2025	08/12/2025	Abdul Mirza	None	None	02/42/2025
								03/12/2025

<b>FROM</b>	0.75000ml of E3877 + 0.25000ml of PP24267	= Final Quantity: 1.000 ml
-------------	---	----------------------------

Recipe ID	NAME	<u>NO.</u>	Prep Date	Expiration Date	Prepared By	<u>ScaleID</u>	<u>PipetteID</u>	Supervised By  Ankita Jodhani
2217	TOX 100 PPB STD	PP24283	03/11/2025	08/12/2025	Abdul Mirza	None	None	03/12/2025

**FROM** 0.90000ml of E3877 + 0.10000ml of PP24267 = Final Quantity: 1.000 ml



Aliance
TECHNICAL GROUP

Fax: 908 789 8922

#### Pest/Pcb STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	<u>ScaleID</u>	<u>PipetteID</u>	Supervised By  Ankita Jodhani
3670	TOX 500 PPB ICV std ( RESTEK)	PP24284	03/11/2025	08/12/2025	Abdul Mirza	None	None	03/12/2025
		1	<u> </u>					

<b>FROM</b>	0.50000ml of E3877 + 0.50000ml of PP24268 = Final Quantity: 1.000 m
-------------	---

Recipe ID	NAME	<u>NO.</u>	Prep Date	Expiration Date	Prepared By	<u>ScaleID</u>	<u>PipetteID</u>	Supervised By
79	500 PPB Pesticide Spike Solution		03/12/2025	08/12/2025	Abdul Mirza	None	None	Ankita Jodhani
								03/12/2025

**FROM** 95.00000ml of E3876 + 2.50000ml of PP24257 + 2.50000ml of PP24259 = Final Quantity: 100.000 ml





#### Pest/Pcb STANDARD PREPARATION LOG

Recipe ID	<u>NAME</u>	<u>NO.</u>	Prep Date	Expiration Date	Prepared By	<u>ScaleID</u>	<u>PipetteID</u>	Supervised By Abdul Mirza
84	Pest/PCB Surrogate Stock 20 PPM	PP24329	03/18/2025	08/22/2025	Yogesh Patel	None	None	04/03/2025

FROM	1.00000ml of P13356 + 9.00000ml of W3177 = Fin	Il Quantity: 10.000 ml
------	--	------------------------

Recipe				Expiration	Prepared			Supervised By
<u>ID</u>	NAME.	<u>NO.</u>	Prep Date	<u>Date</u>	<u>By</u>	<u>ScaleID</u>	<u>PipetteID</u>	Yogesh Patel
518	Pest/PCB I.BLK 20 PPB	PP24433	03/31/2025	08/22/2025	Abdul Mirza	None	None	_
								04/02/2025

**FROM** 99.90000ml of E3914 + 0.10000ml of PP24329 = Final Quantity: 100.000 ml





#### Pest/Pcb STANDARD PREPARATION LOG

Recipe ID 465	NAME 200 PPB Pest/PCB Surrogate Spike	NO. PP24460	Prep Date 04/11/2025	Expiration Date 10/03/2025	Prepared By Abdul Mirza	<u>ScaleID</u> None	PipetteID None	Supervised By Yogesh Patel 04/16/2025
FROM	1.00000ml of P13355 + 999.00000m	l of E3917 :	= Final Quanti	ity: 1000.000 n	nl			



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 #
Agela Technologies Inc.	FS0006 / Cleanert Florisil cartridge	M06518	09/25/2025	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
Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date /	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 /	Chemtech Lot #
Seidler Chemical	BA-9254-03 / Acetone, Ultra Resi (cs/4x4L)	24H2762008	08/25/2025	02/25/2025 /	02/12/2025 / Rajesh	E3876



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)	243570	08/12/2025	02/12/2025 / Rajesh	02/12/2025 / Rajesh	E3877
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)	243570	09/19/2025	03/19/2025 / RUPESH	03/13/2025 / RUPESH	E3914
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)	243570	10/03/2025	04/03/2025 / Rajesh	03/31/2025 / Rajesh	E3916
Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9254-03 / Acetone, Ultra Resi (cs/4x4L)	24H2762008	10/03/2025	04/03/2025 / Rajesh	03/31/2025 / Rajesh	E3917
Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened /	Received Date /	Chemtech Lot #
Supplier Seidler Chemical	ItemCode / ItemName  BA-9262-03 / Hexane, Ultra-Resi (cs/4x4L)	Lot # 25C0362005	1 -	-		
	BA-9262-03 / Hexane,		Date	Opened By 04/18/2025 /	<b>Received By</b> 04/16/2025 /	Lot #



Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	32021 / Chlordane Std.	A0197993	09/11/2025	03/10/2025 / Abdul	07/03/2023 / Abdul	P12603
Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	32021 / Chlordane Std.	A0193299	09/09/2025	03/10/2025 / Abdul	07/03/2023 / Abdul	P12611
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	09/10/2025	03/10/2025 / Abdul	12/26/2023 / Abdul	P13037
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	09/10/2025	03/10/2025 / Abdul	12/26/2023 / Abdul	P13040
Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	79136 / Mirex, 1000 ug/ml	042022	09/10/2025	03/10/2025 / Abdul	01/17/2024 / Abdul	P13195
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	10/11/2025	04/11/2025 / Abdul	04/22/2024 / Abdul	P13355
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	09/18/2025	03/18/2025 / yogesh	04/22/2024 / Abdul	P13356
Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	32005 / Toxaphene Standard	A0203038	06/16/2025	12/16/2024 / Abdul	05/15/2024 / Abdul	P13404
Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	32005 / Toxaphene Standard	A0203038	09/09/2025	03/10/2025 / Abdul	05/15/2024 / Abdul	P13405
Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Supplier Restek	ItemCode / ItemName  32000 / Pesticide Mix, CLP method, Pesticide Surrogate Mix, 200ug/mL, Acetone, 1mL	Lot # A0214495	1 .	-		
	32000 / Pesticide Mix, CLP method, Pesticide Surrogate Mix, 200ug/mL,		Date	Opened By 03/10/2025 /	Received By 11/19/2024 /	Lot #



Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	79136 / Mirex, 1000 ug/ml	112018	09/10/2025	03/10/2025 / Abdul	11/01/2019 / Stephen	P9052

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	08/22/2025	02/03/2025 / jignesh	01/31/2025 / jignesh	W3177



#### **CERTIFIED REFERENCE MATERIAL**









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

www.restek.com

## **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.:

32021

Lot No.: A0193299

Description:

Chlordane Standard

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

Container Size:

2 mL

Pkg Amt:

> 1 mL

**Expiration Date:** 

April 30, 2029

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	Chlordane 10% trans-Chlordane; 9% cis-Chlordane; 81% other isomers	57-74-9	978545	%	1,010.0 μg/mL	+/- 56.0475

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

Solvent:

Hexane

CAS# 110-54-3

Purity

99%

Tech Tips:

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

### **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:

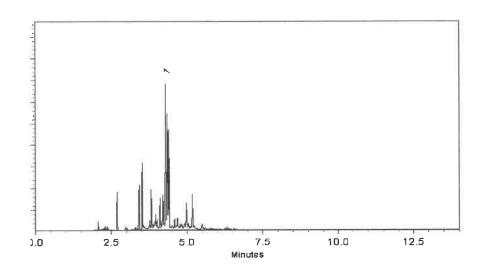
ECD

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.

Brunder - Operations Tech I

Date Mixed:

06-Jan-2023

Balance Serial #

B442140311

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed:

09-Jan-2023

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



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 HCI	<= 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







MIRADOR 201, COL. MIRADOR MONTERREY, N.L. MEXICO CP 64070 TEL +62 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	6.4
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 foreing 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%	25%
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 Ri on 7/4/3 E 3551

RE-02-01, Del

**Cleanert Florisil** 

1g/6ml 30/pkg

固相萃取产品

LOT#:M06518

 Made in China

MFG# F04074



**CAT# FS0006** 

Agela Technologies

£ 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 forwater)	>= 99.4 %	100.0 %
Color (APHA)	<= 10	5
Residue after Evaporation	<= 1.0 ppm	0.0 ppm
Substances Reducing Permanganate	Passes Test	Passes Test
Titrable Acid (µeq/g)	<= 0.3	0.2
Titrable 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 HeptachlorEpoxide) Single Peak (pg/mL)	<= 10	1

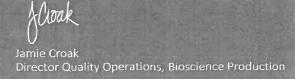
For Laboratory, Research, or Manufacturing Use
MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD

**Country of Origin: United States** 

Packaging Site: Phillipsburg Mfg Ctr & DC

Recd. 54 RP on 12/5/24

E 3843



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





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	Donali
FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)		Result
ECD Sensitive Impurities (as Heptachlor Epoxide) Single Peak (pg/mL)	≤ 5	3
ECD-Sensitive impurities (as Ethylene Dibromide) – Single impurity Peak (ng/ml.)	≤ 10	1
	≤ 5	1
Assay (Total Saturated Collsomers) (by GC, corrected for water)	≥ 99.5 %	00 704
Assay (as n-Hexane) (by GC, corrected for water)	≥ 95 %	99.7 %
Color (APHA)		98 %
Residue after Evaporation	≤ 10	5
ubstances Darkened by H2SO4	≤ 1.0 ppm	0.1 ppm
	Passes Test	Passes Test
Vater (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 12/13/24

Hoak

Jamie Croak
Director Quality Operations, Bioscience Production



### Certificate of Analysis

1 Reagent Lane Fair Lawn, NJ 07410 201.796.7100 tel 201.796.1329 fax

Thermo Fisher Scientific's Quality System has been found to conform to Quality Management System Standard ISO9001:2015 by SAI Global Certificate Number CERT – 0120633

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

Catalog Number	H303	Quality Test / Release Date	11/07/2024
Lot Number	243570		
Description	HEXANES - OPTIMA		
Country of Origin	United States	Suggested Retest Date	Nov/2029
Chemical Origin	Organic - non animal		
BSE/TSE Comment	No animal products are used as starting raw material ingredients, or used in processing, including lubrican processing aids, or any other material that might migrate to the finished product.		

N/A			
Result Name	Units	Specifications	Test Value
APPEARANCE		REPORT	Clear, colorless liquid
ASSAY (N-HEXANE)	%	>= 60	69
ASSAY (SUM C6 HYDROCARBONS)	%	>= 99.9	>99.9
COLOR	APHA	<= 5	<5
DENSITY AT 25 DEGREES C	GM/ML	Inclusive Between 0.653 - 0.673	0.669
EVAPORATION RESIDUE	ppm	<= 1	<1
FLUORESCENCE BACKGROUND	ppb	<= 1	<1
IDENTIFICATION	PASS/FAIL	= PASS TEST	PASS TEST
OPTICAL ABS AT 195 NM	ABS. UNITS	<= 1	0.74
OPTICAL ABS AT 210 NM	ABS. UNITS	<= 0.25	0.17
OPTICAL ABS AT 220 NM	ABS. UNITS	<= 0.07	0.05
OPTICAL ABS AT 254 NM	ABS. UNITS	<= 0.005	0.001
PESTICIDE RESIDUE ANALYSIS	NG/L	<= 10	<10
REFRACTIVE INDEX @ 25 DEG C		Inclusive Between 1.375 - 1.385	1.379
SUITABILITY FOR GC/MS		= PASS TEST	PASS TEST
SULFUR COMPOUNDS	%	<= 0.005	<0.005
THIOPHENE	PASS/FAIL	= PASS TEST	PASS TEST
WATER (H2O)	%	<= 0.01	<0.01
WATER-SOLUBLE TITRABLE ACID	MEQ/G	<= 0.0003	0.0001

Recarby RP S

on 2/12/25

Harout Sahagian - Quality Control Manager - Fair Lawn

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

<sup>\*</sup>Based on suggested storage condition.



### Certificate of Analysis

1 Reagent Lane Fair Lawn, NJ 07410 201.796.7100 tel 201.796.1329 fax

Thermo Fisher Scientific's Quality System has been found to conform to Quality Management System Standard ISO9001:2015 by SAI Global Certificate Number CERT – 0120633

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

Catalog Number	H303	Quality Test / Release Date	11/07/2024
Lot Number	243570		
Description	HEXANES - OPTIMA		
Country of Origin	United States	Suggested Retest Date	Nov/2029
Chemical Origin	Organic - non animal		
BSE/TSE Comment	No animal products are used as s processing aids, or any other mat	tarting raw material ingredients, or used erial that might migrate to the finished p	in processing, including lubricants, roduct.

N/A				
Result Name	Units	Specifications	Test Value	
APPEARANCE		REPORT	Clear, colorless liquid	
ASSAY (N-HEXANE)	%	>= 60	69	
ASSAY (SUM C6 HYDROCARBONS)	%	>= 99.9	>99.9	
COLOR	APHA	<= 5	<5	
DENSITY AT 25 DEGREES C	GM/ML	Inclusive Between 0.653 - 0.673	0.669	
EVAPORATION RESIDUE	ppm	<= 1	<1	
FLUORESCENCE BACKGROUND	ppb	<= 1	<1	
IDENTIFICATION	PASS/FAIL	= PASS TEST	PASS TEST	
OPTICAL ABS AT 195 NM	ABS. UNITS	<= 1	0.74	
OPTICAL ABS AT 210 NM	ABS. UNITS	<= 0.25	0.17	
OPTICAL ABS AT 220 NM	ABS. UNITS	<= 0.07	0.05	
OPTICAL ABS AT 254 NM	ABS. UNITS	<= 0.005	0.001	
PESTICIDE RESIDUE ANALYSIS	NG/L	<= 10	<10	
REFRACTIVE INDEX @ 25 DEG C		Inclusive Between 1.375 - 1.385	1.379	
SUITABILITY FOR GC/MS		= PASS TEST	PASS TEST	
SULFUR COMPOUNDS	%	<= 0.005	<0.005	
THIOPHENE	PASS/FAIL	= PASS TEST	PASS TEST	
NATER (H2O)	%	<= 0.01	<0.01	
WATER-SOLUBLE TITRABLE ACID	MEQ/G	<= 0.0003	0.0001	

recd by RS on 3/19/25

Keb Salym

E3914

Harout Sahagian - Quality Control Manager - Fair Lawn

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

<sup>\*</sup>Based on suggested storage condition.



# Certificate of Analysis

1 Reagent Lane Fair Lawn, NJ 07410 201.796.7100 tel

Thermo Fisher Scientific's Quality System has been found to conform to Quality Management System

Standard ISO9001:2015 by SAI Global Certificate Number CERT - 0120633 201.796.1329 fax

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

Catalog Number	H303	ne rollowing information is the actual analytical results obtained.		
Lot Number	243570	Quality Test / Release Date	11/07/2024	
Description	HEXANES - OPTIMA	· ·		
Country of Origin	United States	Suggested D. L. C.		
hemical Origin	Organic - non animal	Suggested Retest Date	Nov/2029	
SSE/TSE Comment	No animal products are used as	starting raw material ingredients, or used aterial that might migrate to the finished pro	in processing, including lubricants,	

N/A		legal filteres. The	
Result Name	Units	Cm. 15	
APPEARANCE		Specifications	Test Value
ASSAY (N-HEXANE)	%	REPORT	Clear, colorless liquid
ASSAY (SUM C6 HYDROCARBONS	5) %	>= 60	69
COLOR	APHA	>= 99.9	>99.9
DENSITY AT 25 DEGREES C		<= 5	<5
EVAPORATION RESIDUE	GM/ML	Inclusive Between 0.653 - 0.673	0.669
FLUORESCENCE BACKGROUND	ppm	<= 1	<1
DENTIFICATION	ppb	<= 1	<1
OPTICAL ABS AT 195 NM	PASS/FAIL	= PASS TEST	PASS TEST
OPTICAL ABS AT 210 NM	ABS. UNITS	<= 1	0.74
OPTICAL ABO AT 220 NM	ABS. UNITS	<= 0.25	
OPTICAL ABS AT 220 NM	ABS. UNITS	<= 0.07	0.17
PTICAL ABS AT 254 NM	ABS. UNITS	<= 0.005	0.05
ESTICIDE RESIDUE ANALYSIS	NG/L	<= 10	0.001
EFRACTIVE INDEX @ 25 DEG C			<10
UITABILITY FOR GC/MS		Inclusive Between 1.375 - 1.385	1.379
ULFUR COMPOUNDS	%	= PASS TEST	PASS TEST
HIOPHENE	PASS/FAIL	<= 0.005	<0.005
ATER (H2O)	%	= PASS TEST	PASS TEST
ATER-SOLUBLE TITRABLE ACID	MEQ/G	<= 0.01	<0.01
TO USE ACID	IMEQ/G	<= 0.0003	0.0001

ut Salym

Recd. by RP on 3/31/25

Harout Sahagian - Quality Control Manager - Fair Lawn

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

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 forwater) Color (APHA)	>= 99.4 %	
Residue after Evaporation	<= 10	100.0 % 5
Substances Reducing Permanganate	<= 1.0 ppm	0.0 ppm
Titrable Acid (µeq/g)	Passes Test	Passes Test
Fitrable Base (µeq/g)	<= 0.3	0.2
Vater (H <sub>2</sub> O)	<= 0.6	<0.1
ID-Sensitive Impurities (as 2-Octanol)Single Impurity Peak	<= 0.5 %	<0.1 %
CD Sensitive Impurities (as HeptachlorEpoxide) Single Peak	\ <del>-</del> 3	1
og/mL) (as neptachlorEpoxide) Single Peak	<= 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 cn 03/31/25



Director Quality Operations, Bioscience Production

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



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 C6 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 H2SO4	Passes Test	Passes Test
Water (by KF, coulometric)	<= 0.05 %	<0.01 %

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

Country of Origin: United States

Packaging Site: Phillipsburg Mfg Ctr & DC

E3928













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

www.restek.com

### **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.:

32021

Lot No.: A0193299

Description :

Chlordane Standard

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

Container Size:

2 mL

Expiration Date : A

April 30, 2029

Pkg Amt:

> 1 mL

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	Chlordane	57-74-9	978545	%	1,010.0 μg/mL	+/- 56.0475
	10% trans-Chlordane; 9% cis-Chlordane; 81% other					
	isomers					

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

Solvent:

Hexane ...

CAS # 110-54

Tech Tips:

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

### 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

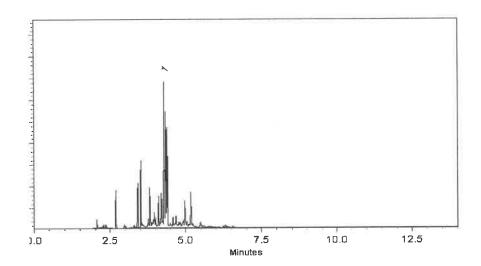
300 C

### Det. Type:

ECD

### Split Vert

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.

Bruan Snyder - Operations Tech i

Date Mixed:

06-Jan-2023

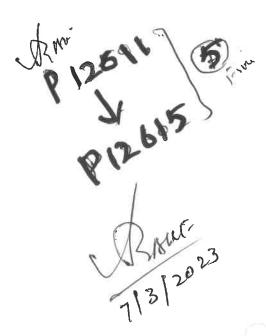
Balance Serial #

B442140311

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed:

09-Jan-2023











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

www.restek.com

### **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: Expiration Date:**  2 mL

June 30, 2027

Pkg Amt: > 1 mL

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	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 5
P13043 5

### **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

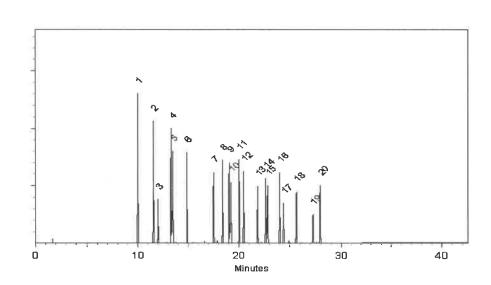
### Det. Type:

Split Vent:

### Split ratio 50:1

Inj. Vol

<u>1</u>μΙ



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.

lock McClockey - Operations Technician

Date Mixed:

19-Jun-2023

Balance Serial #

1128360905

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed:

23-Jun-2023

www.absolutestandards.com



## Certified Reference Material CRM

https://Absolutestandards.com ANAB ISO 17034 Accredited AR-1539 Certificate Number

## CERTIFIED WEIGHT REPORT

		¥.
Description:	Lot Number:	Par Number:
Mirex	042022	/8136
	Acetone	Solvent(s):

81025

ormulated By:

Prashant Chauhan

25.50

042022

DATE

Lot#

Recommended Storage: Expiration Date: Refrigerate (4 °C) 042027

Nominal Concentration (µg/mL): 1000

5E-05 Balance Uncertainty

50.0

Weight(s) shown below were combined and diluted to (mL): 0.006 Flask Uncertainty

ĕ

Nominal

Purity

Uncertainty

Target

Actual

Actual

Uncertainty

(Solvent Safety Info. On Attached pg.)

SDS Information

Expanded

Reviewed By:

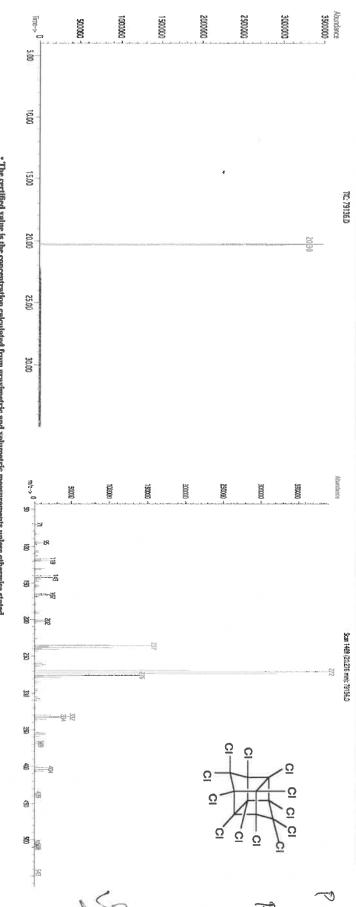
Pedro L. Rentas

042022

DATE

1. Mirex RM# 437 9492400 Conc (µg/mL) 1000 99.4 3 Purity Weight (g) 0.05034 0.05040 Weight (g) Conc(µg/mL) 1001.1 (+/-) (µg/mL 10.3 2385-85-5 CAS# OSHA PEL (TWA) orl-rat 306mg/kg

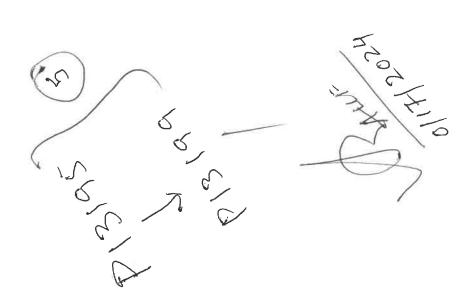
= 290°C. Split Ratio = 100:1, Scan Rate = 2. Analysis performed by Candice Warren. Method GC7MSD-1.M: Column: SPB-608 (30m X 0.25mm ID X 0.25µm film thickness) Temp 1 = 150°C (4min.), Temp 2 = 290°C (13.5 min.), Rate = 8°C/min., Injector B= 200°C, Detector B



- 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 cape light 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.:

32021

Lot No.: A0197993

Description:

Chlordane Standard

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

Container Size:

2 mL

Pkg Amt:

> 1 mL

**Expiration Date:** 

August 31, 2029

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	Chlordane 10% trans-Chlordane; 9% cis-Chlordane; 81% other isomers	57-74-9	978545	%	1,005.0 μg/mL	+/- 55.7700

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

Solvent: Hexane

> CAS# 110-54-3 Purity 99%

### Tech Tips:

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



Column:

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

Carrier Gas:

helium-constant pressure 20 psi.

Temp. Program:

@ 25°C/min. ( hold 10 min.)

Inj. Temp:

250°C

Det. Temp:

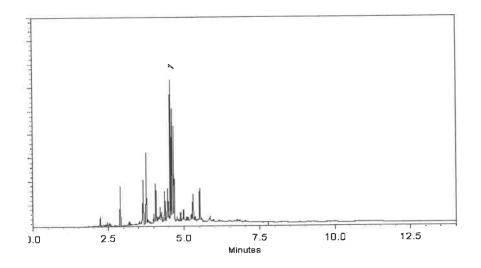
Det. Type:

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.

Morgan Creighead - Mix Technician

Date Mixed:

11-May-2023

Balance Serial #

1128360905

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed:

16-May-2023













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

www.restek.com

### **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

July 31, 2027

Container Size : Expiration Date : 2 mL

...

Pkg Amt: > 1 mL

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	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	230410ЛLМА	98%	201.9 μg/mL	+/- 9.0575

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

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

Solvent:

Hexane/Toluene (50:50)

110-54-3/108-88-3

**Purity** 

### **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

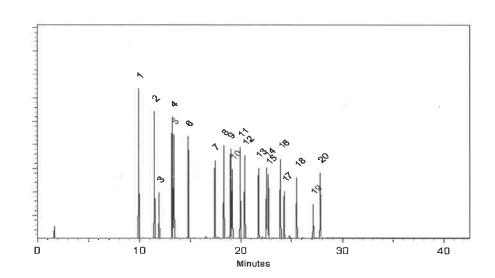
Det. Type:

Split Vent:

Split ratio 50:1

Inj. Vol

1μІ



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.

Soumuel Moodler m Moodler - Operations Tech I

Date Mixed:

31-Jul-2023

Balance Serial #

B442140311

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 03-Aug-2023



### 800-368-1131 Absolute Standards, Inc.

www.absolutestandards.com



## Certified Reference Material CRM



https://Absolutestandards.com ANAB ISO 17034 Accredited AR-1539 Certificate Number

### CERTIFIED WEIGHT REPORT

NIST Test ID#:	Nominal Concentration (µg/mL):	Recommended Storage:	Expiration Date:		Description:	Lot Number:	Part Number:
6UTB	Varied	Refrigerate (4 °C)	013129	9 components	CLP Pesticides & PCB's	013124	19161
5E-05 Balance Uncertainty		Toluene	Hexane	Solvent(s):	Resolution Check Stand		
		28508	273615	Lot	ard		

DAT	Pedro L. Rentas	Reviewed By:
013124	les there	M
DAT	Lawrence Barry	Formulated By:
013124	home bry	1

								Expanded		<b>SDS Information</b>	
	Part	Lot	Dil	Initial	Initial Uncertainty	Initial	Initial Final Uncertainty	Uncertainty		(Solvent Safety Info. On Attached pg.)	ached pg.)
npound	Nimber	Nismhor	Fantar		Dinatta (m)						
pound	MURUM	Number	Factor	Vol. (ml.)	Pipette (mL)	Conc.(ug/ml.)	Conc.(ug/mL)	(+/-) µg/mL	CAS#	OSHA PEL (TWA)	LD50
s-Chlordane	19361	19361 013124	0.010	1.00	0.004	101.3	1.0	0.02	5103-74-2	0.5ma/m3 (skin)	orl-rat 500n

5E-05

**Balance Uncertainty** 

7. 4,4'-Methoxychlor

19361 19361

013124 013124

> 0.010 0.010 0.010

0.010

1.8

0.004 0.004

1000.7 204.2 202.6

2.0 2.0

202.6

0.03 0.09

> 877-09-8 72-43-5

10mg/m3 ₹ ¥

orl-rat 6000mg/kg

NA

Š S

0.004

1,00

19361

Decachlorobiphenyl (209) 2,4,5,6-Tetrachloro-m-xylene 2. Endosulfan I

4. Dieldrin

White Co.							-				
volume(s) snown below were combined and diluted to (mL):	and diluted	to (mL):	100.0	0.021	Flask Uncertainty						
								Expanded		SDS information	
	Part	Lot	Dil	Initial	Uncertainty	Initial	Final	Uncertainty	(Solvent :	(Solvent Safety Info. On Attached pg.)	ched pg.)
Compound	Number	Number	Factor	Val. (ml.)	Pipette (mL)	Conc.(ug/mL)	Conc.(ug/ml.) Conc.(ug/ml.)	-(+/-) μg/mL	CAS#	OSHA PEL (TWA)	LDS0
trans-Chlordane	19361	013124	0.010	1.00	0.004	101.3	1.0	0.02	5103-74-2	0.5ma/m3 (skin)	orl-rat 500mo/ko
Endosulfan I	19361	013124	0.010	<u>1</u> .00	0.004	101.3	1.0	0.02	959-98-8	0.1mg/m3 (skin)	ori-rat 18ma/ko
4,4'-DDE	19361	013124	0.010	1.00	0.004	201.6	2.0	0.03	72-55-9	NA	orl-rat 880mo/kg
Dieldrin	19361	013124	0.010	1.00	0,004	202.8	2.0	0.03	60-57-1	0.25mg/m3 (skin)	ori-rat 38300ug/kg
Endosulfan sulfate	19361	013124	0.010	1.00	0.004	204.2	2.0	0.03	1031-07-8	N/A	ori-rat 18mg/kg
Endrin ketone	19361	013124	0.010	1.00	0.004	202.6	2.0	0.03	53494-70-5	N/A	N/A
A AT NA											

Sold Sold Sold Sold Sold Sold Sold Sold	se stated.		$\sim$	
1,5	Jana 2024	- 13	0	

The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise sta
 Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
 Standards are certified (4/-) 0.5% of the stated value, unless otherwise stated.

All Standards, after opening ampute, 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, D.C., (1994).











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

www.restek.com

### **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. P133401

Catalog No.:

32000

Lot No.: A0206810

**Description:** 

Pesticide Surrogate Mix

Pesticide Surrogate Mix 200 µg/mL, Acetone, 1mL/ampul

Container Size:

Pkg Amt:

> 1 mL

**Expiration Date:** 

April 30, 2030

Storage:

10°C or colder

Handling:

Contains PCBs - sonicate prior to

Ship:

Ambient

use.

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 99%

**Purity** 

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

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.

### 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:

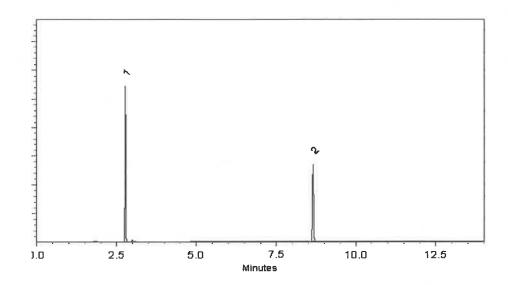
FCD

### 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

Gunga J Address

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

P13357
P13357
P13357
04/25/2025













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

www.restek.com

### **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. P133401

Catalog No.:

32000

Lot No.: A0206810

**Description:** 

Pesticide Surrogate Mix

Pesticide Surrogate Mix 200 µg/mL, Acetone, 1mL/ampul

Container Size:

use.

Pkg Amt:

> 1 mL

**Expiration Date:** 

April 30, 2030

Storage:

10°C or colder

Handling:

Contains PCBs - sonicate prior to

Ship:

Ambient

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# **Purity** 

67-64-1 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

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.

### 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:

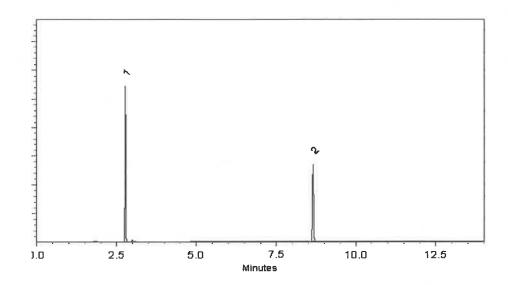
FCD

### 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

Gunga J Address

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

P13357
P13357
P13357
04/25/2025













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

Fax: 1-814-353-1309

www.restek.com

### 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

January 31, 2028

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

**Container Size: Expiration Date:**  2 mL

Pkg Amt: > 1 mL

10°C or colder

Ship:

Storage:

**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%

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

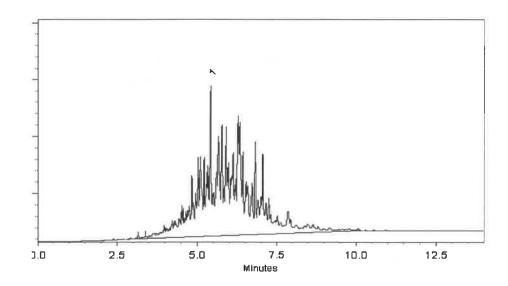
Det. Type:

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

P 13402 (5)
P 13406 )
P 13406 )
P 13406 )













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

Fax: 1-814-353-1309

www.restek.com

### 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

January 31, 2028

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

**Container Size: Expiration Date:**  2 mL

Pkg Amt: > 1 mL

10°C or colder

Ship:

Storage:

**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%

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

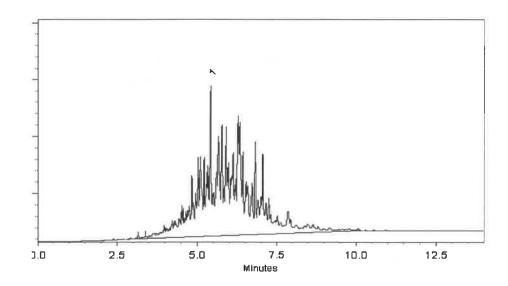
Det. Type:

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

P 13402 (5)
P 13406 )
P 13406 )
P 13406 )



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

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

Lot No.: A0214495

32000 Catalog No.:

Description:

Pesticide Surrogate Mix

Pesticide Surrogate Mix 200 µg/mL, Acetone, 1mL/ampul

Pkg Amt: October 31, 2030 2 mL **Expiration Date:** Container Size:

10°C or colder Storage:

Ambient

Ship:

Contains PCBs - sonicate prior to

Handling:

68£61d

> 1 mL

42191111 584610

### ш > RTIFIED

						2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
Elution Order	Compound	CAS#	Lot#	Purity	Purity Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	2,4,5,6-Tetrachloro-m-xylene	877-09-8 RP220407	RP220407	%66	200.2 µg/mL +/- 11.1087	+/- 11.1087
7	Decachlorobiphenyl (BZ# 209)	2051-24-3 30679	30679	%66	201.4 µg/mL +/- 11.1753	+/- 11.1753

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

Acetone Solvent:

67-64-1 CAS#

%66 Purity

### 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

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. product quality.

**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.)

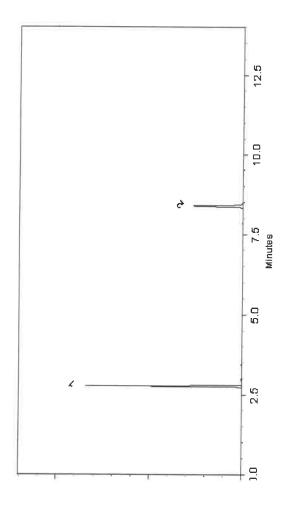
Inj. Temp:

Det. Temp: 300°C

Det. Type: ECD

Split Vent: 10 ml/min.

Inj. Vol



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.

80 St

Aaron Enyart - Operations Tech |

29-Jul-2024 Date Mixed:

B345965662 Balance Serial#

01-Aug-2024 Date Passed:

Jennifer Pollino - Operations Tech III - ARM QC

Granfe & Poste.



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

www.restek.com

Fax: 1-814-353-1309

### **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.: A0210240

Description: Toxaphene Standard

**Container Size:** 

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

2 mL Pkg Amt: > 1 mL **Expiration Date:** July 31, 2028 Storage:

10°C or colder Ship: **Ambient** 

CERTIFIED VALUES

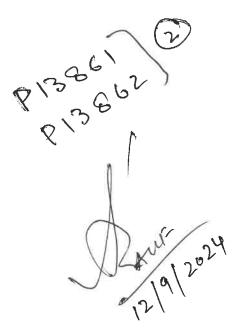
Elution Order	Compound	CAS#	Lot#	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Toxaphene	8001-35-2	1051817	%	1,009.3 μg/mL	+/- 56.0105

\_

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

Solvent: Hexane CAS#

110-54-3 Purity 99%



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

300 C

Det. Type:

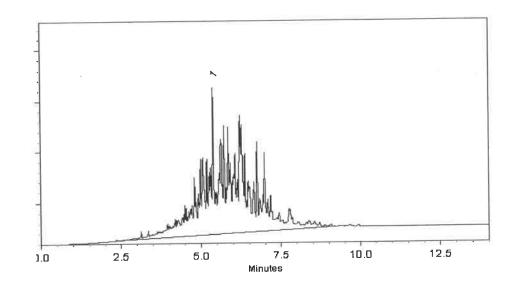
ECD

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.

Amanda Miller - Operations Tech III - ARM QC

Date Mixed:

11-Apr-2024

Balance Serial #

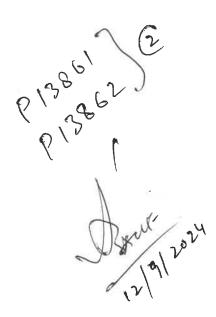
B442140311

Mist talk

Christie Mills - Operations Lead Tech - ARM QC

Date Passed:

26-Apr-2024

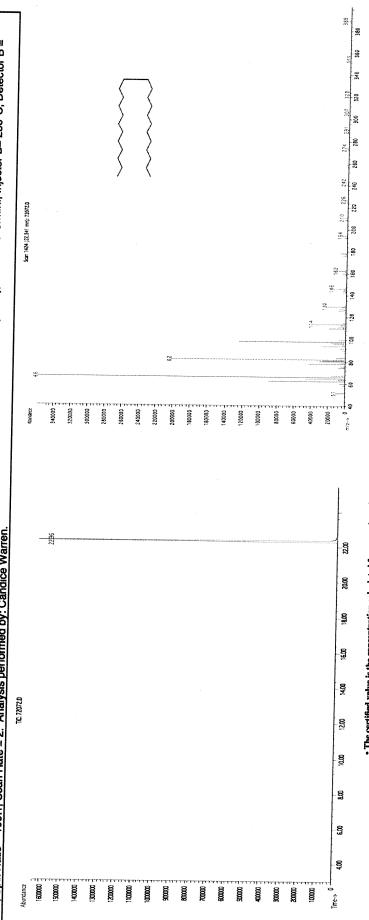


www.absolutestandards.com

CERTIFIED WEIGHT REPORT



112018 DATE 112018 DATE			<u> </u>
	hed pg.) LDS0	N A	or B =
Prashant Chauhan  Prashant Chauhan  Pedro Rentas	SDS Information (Solvent Safety Info. On Attached pg.)  CAS# OSHA PEL (TWA) LDS	N/A	tor B= 250°C, Detect
ad By:		16416-32-3	C/min., Injec
Formulated By:	Expanded Uncertainty (+/-) (µg/mL)	4.2	Rate = 10°
	Expanded Actual Uncertainty Conc (ug/mL) (+/-) (ug/mL).	1000.2	0°C (9min.),
Lot# 102669	Actual Weight(g)	0.20415	emp 2 = 30
Solvent(s): Methylene chloride  [5]  [7]  [7]  [7]  [7]  [7]  [8]  [9]  [9]  [9]  [9]	Target Weight(g)	0.20411	°C (1min.),
Methylen R (R (E, vel by S) 904 (4 - P 9053 5E-05 Balance Uncertainty 0.058 Hast Uncertainty	Purity Uncertainty (%) Purity	0.2	emp 1 = 50
(4 (4 - 5) (5) (6) (6) (6) (6) (6) (6) (6) (6) (6) (6	Purity (%)	88	kness) T Varren.
200.00	Nominal Conc (µg/mL)	1000	um film thick: Candice W
72072 112018 n-Tetracosane-d50 112028 Ambient (20 °C) 1000 2684186 rted to (mL):	Lot Number	2072 PR-17753/09216TC1	alysis performed by
and dillu	RM#	2072	2. An
Part Number: 72072  Lot Number: 112018 Description: n-Tetracos Expiration Date: 112028 Recommended Storage: Ambient (2 Nominal Concentration (µg/mL): 1000 NIST Test ID#: 2684186 Weight(s) shown below were combined and diluted to (mL):	Compound	1. n-Tetracosane-d50 Method GC8MSD-3 M- Column-SDB-5	275°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 (4+) 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).

Absolute Standards, Inc.

www.absolutestandards.com



# Run 40, "P72072 L112018 [1000µg/mL in MeCl2]"

Sampled: Sequence "112018-GC4M1", Method "GC4-M1". Analyzed using Method "GC4-M1". Run Length: 35.00 min, 20999 points at 10 points/second. Created: Thu, Nov 22, 2018 at 7:23:18 AM.

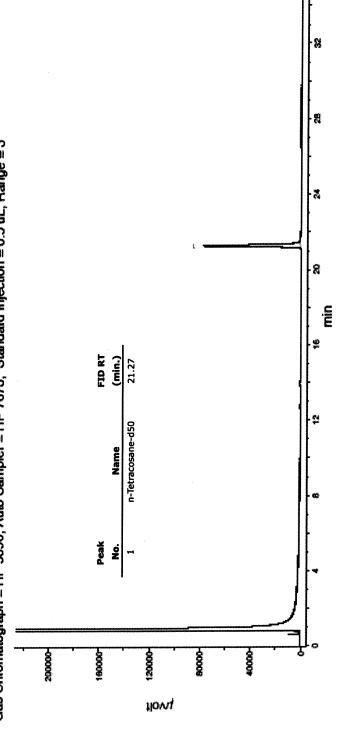
### Comments

GC4-M1 Analysis by Melissa Stonier Column ID SPB5 L#60062-01A : 30 meter x 0.53mm x 1.5um Film Thickness

Flow rates; Total Flow = 300 ml/min, Helium (carrier) = 6.5 ml., Helium (make-up) = 25 ml., Hydrogen (detector) = 30 ml., Air (detector) = 360 ml.

Oven Temp 1 = 50°C (1 min), Rate = 10°C/min, Oven Temp 2 = 300°C (9 min), Total Run Time = 35 Minutes. Injector Temp = 200°C, FID Temp = 300°C, FID Signal = eDaq Channel 1.

Gas Chromatograph = HP 5890, Auto Sampler = HP 7673, Standard Injection = 0.5 uL, Range = 3



Printed: 10/31/2019, 11:22:08 AM

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





Johns Certificate of Analysis

Material No.: 9262-03 Batch No.: 24G1962003

Manufactured Date: 2024-05-23 Expiration Date: 2025-08-22

Revision No.: 0

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 Colsomers) (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 H2SO4	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

Jamie Croak Director Quality Operations, Bioscience Production