

Prep Standard - Chemical Standard Summary

Order ID : Q1812

Test : Gasoline Range Organics

Prepbatch ID :

Sequence ID/Qc Batch ID: FB041625,

Standard ID :

PP24110,PP24111,PP24112,PP24426,PP24427,PP24428,PP24429,PP24430,PP24431,PP24463,PP24464,

Chemical ID :

P11119,P9831,V14543,V14624,W3112,

Pest/Pcb STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
231	10 PPM GRO STD 1ST SOURCE	PP24110	01/15/2025	07/13/2025	Yogesh Patel	None	None	Ankita Jodhani
								01/15/2025

FROM 0.11100ml of P9831 + 9.89000ml of V14624 = Final Quantity: 10.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
233	10 PPM GRO STD 2nd SOURCE	PP24111	01/15/2025	07/13/2025	Yogesh Patel	None	None	Ankita Jodhani
								01/15/2025

FROM 0.11100ml of P11119 + 9.89000ml of V14624 = Final Quantity: 10.000 ml

Pest/Pcb STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3619	25 PPM AAA-TFT Surg	PP24112	01/15/2025	07/13/2025	Yogesh Patel	None	None	Ankita Jodhani
								01/15/2025

FROM 0.10000ml of V14543 + 9.90000ml of V14624 = Final Quantity: 10.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
238	5 PPB ICC GRO STD	PP24426	03/26/2025	07/13/2025	Yogesh Patel	None	None	Abdul Mirza
								04/03/2025

FROM 5.00000ml of W3112 + 0.00100ml of PP24112 + 0.00250ml of PP24110 = Final Quantity: 5.004 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>
237	10 PPB ICC GRO STD	PP24427	03/26/2025	07/13/2025	Yogesh Patel	None	None	Abdul Mirza
								04/03/2025

FROM 5.00000ml of W3112 + 0.00200ml of PP24112 + 0.00500ml of PP24110 = Final Quantity: 5.007 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>
239	20 PPB ICC GRO STD	PP24428	03/26/2025	07/13/2025	Yogesh Patel	None	None	Abdul Mirza
								04/03/2025

FROM 5.00000ml of W3112 + 0.00400ml of PP24112 + 0.01000ml of PP24110 = Final Quantity: 5.014 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>
235	50 PPB ICC GRO STD	PP24429	03/26/2025	07/13/2025	Yogesh Patel	None	None	Abdul Mirza
								04/03/2025

FROM 5.00000ml of W3112 + 0.01000ml of PP24112 + 0.02500ml of PP24110 = Final Quantity: 5.035 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>
234	100 PPB ICC GRO STD	PP24430	03/26/2025	07/13/2025	Yogesh Patel	None	None	Abdul Mirza
								04/03/2025

FROM 5.00000ml of W3112 + 0.02000ml of PP24112 + 0.05000ml of PP24110 = Final Quantity: 5.070 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>
240	20 PPB ICV GRO STD	PP24431	03/26/2025	07/13/2025	Yogesh Patel	None	None	Abdul Mirza
								04/03/2025

FROM 5.00000ml of W3112 + 0.00400ml of PP24112 + 0.01000ml of PP24111 = Final Quantity: 5.014 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>
241	20 PPB CCC GRO STD	PP24463	04/16/2025	07/13/2025	Yogesh Patel	None	None	Abdul Mirza
								04/21/2025

FROM 5.00000ml of W3112 + 0.00400ml of PP24112 + 0.01000ml of PP24110 = Final Quantity: 5.014 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>
241	20 PPB CCC GRO STD	PP24464	04/16/2025	07/13/2025	Yogesh Patel	None	None	Abdul Mirza 04/21/2025
<u>FROM</u>	5.00000ml of W3112 + 0.00400ml of PP24112 + 0.01000ml of PP24110 = Final Quantity: 5.014 ml							

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30065 / GRO Mix (EPA)	A0155991	01/31/2027	11/27/2023 / yogesh	02/10/2021 / Sohil	P11119

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30065 / GRO Mix (EPA)	A0161776	07/15/2025	01/15/2025 / yogesh	09/11/2020 / DHAVAL	P9831

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30068 / VOA Mix, a, a, a-trifluorotoluene 2500uq/ml, P&T methanol, 1ml	A0206957	07/15/2025	01/15/2025 / yogesh	09/30/2024 / yogesh	V14543

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA9077-02 / Methanol, Purge/Trap (cs=6x1L)	23I0762004	07/13/2025	01/13/2025 / SAM	11/26/2024 / SAM	V14624

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

Methanol
ULTRA RESI-ANALYZED
For Purge and Trap Analysis



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

Certificate of Analysis

Test	Specification	Result
Assay (CH ₃ OH) (by GC, corrected for water)	≥ 99.9 %	100.0 %
Residue after Evaporation	≤ 1.0 ppm	0.5 ppm
Titration Acid (μeq/g)	≤ 0.3	0.2
Titration Base (μeq/g)	≤ 0.10	0.01
Water (by KF, coulometric)	≤ 0.08 %	< 0.01 %
Volatile Organic Trace Analysis – Below EPA 8260B CRQL	Conforms	Conforms

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

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

Ken Koehnlein
Sr. Manager, Quality Assurance



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

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

1st source

DP

P9817

To

10

P9826

Catalog No. : 30065 **Lot No.:** A0155991

Description : Gasoline Range Organics Mix (EPA)

Gasoline Range Organics Mix (EPA) 500 - 1500µg/mL, P&T Methanol, 1mL/ampul

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

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

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)
1	2-Methylpentane CAS # 107-83-5 (Lot MKCB1674V) Purity 98%	1,505.3 µg/mL	+/- 8.9409 µg/mL Gravimetric +/- 84.4194 µg/mL Unstressed +/- 86.3938 µg/mL Stressed
2	2,2,4-Trimethylpentane (isooctane) CAS # 540-84-1 (Lot SHBD2922V) Purity 99%	1,504.0 µg/mL	+/- 8.9333 µg/mL Gravimetric +/- 84.3476 µg/mL Unstressed +/- 86.3203 µg/mL Stressed
3	n-Heptane (C7) CAS # 142-82-5 (Lot SHBK8626) Purity 98%	500.8 µg/mL	+/- 2.9745 µg/mL Gravimetric +/- 28.0848 µg/mL Unstressed +/- 28.7417 µg/mL Stressed
4	Benzene CAS # 71-43-2 (Lot SHBK5679) Purity 99%	501.0 µg/mL	+/- 2.9758 µg/mL Gravimetric +/- 28.0972 µg/mL Unstressed +/- 28.7543 µg/mL Stressed
5	Toluene CAS # 108-88-3 (Lot MKCH9232) Purity 99%	1,505.0 µg/mL	+/- 8.9392 µg/mL Gravimetric +/- 84.4037 µg/mL Unstressed +/- 86.3777 µg/mL Stressed
6	Ethylbenzene CAS # 100-41-4 (Lot SHBJ4278) Purity 99%	502.0 µg/mL	+/- 2.9817 µg/mL Gravimetric +/- 28.1533 µg/mL Unstressed +/- 28.8117 µg/mL Stressed
7	m-Xylene CAS # 108-38-3 (Lot SHBJ8743) Purity 99%	1,004.0 µg/mL	+/- 5.9635 µg/mL Gravimetric +/- 56.3065 µg/mL Unstressed +/- 57.6234 µg/mL Stressed

8	o-Xylene		1,008.0 µg/mL	+/- 5.9872	µg/mL	Gravimetric
	CAS # 95-47-6	(Lot SHBK7739)		+/- 56.5308	µg/mL	Unstressed
	Purity 99%			+/- 57.8530	µg/mL	Stressed
9	1,2,4-Trimethylbenzene		1,004.5 µg/mL	+/- 5.9664	µg/mL	Gravimetric
	CAS # 95-63-6	(Lot MKBJ6229V)		+/- 56.3345	µg/mL	Unstressed
	Purity 98%			+/- 57.6521	µg/mL	Stressed
Solvent:	P&T Methanol					
	CAS # 67-56-1					
	Purity 99%					

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

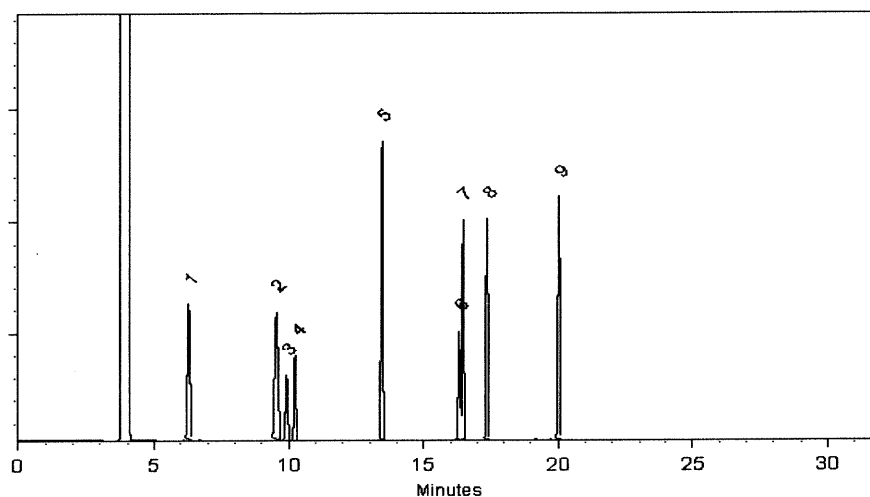
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



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

Miranda Kline
Miranda Kline - Operations Technician I

Date Mixed: 19-Dec-2019 Balance: 1127510105

Feng-Yun Lo
Feng-Yun Lo - QC Analyst

Date Passed: 23-Dec-2019

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