

## **Instructions for: WP Volatiles (cat # PT-VOA-WP)**

### **STANDARD DESCRIPTION**

- The WP Volatiles standard is provided in a flame sealed ampule that contains approximately 1.5 mL of concentrate.
- The WP Volatiles standard is packaged in methanol.
- Store the standard in the unopened ampule refrigerated (at ~4°C).

### **ADDITIONAL INFORMATION**

- The standard has been provided as a concentrate that must be diluted prior to analysis.
- The standard has been designed and manufactured in compliance with NELAC/EPA criteria. As such each lot of the WP Volatiles standards will contain a minimum of 60% of the total number of NELAC Accreditation and Experimental Analytes listed on the Data Reporting Sheets and in these instructions.
- Refer to "Reporting Instructions" section of this booklet for guidance on reporting results for analytes that you do not detect.
- Due to the nature of volatile analytes, the standard must be analyzed as soon as possible after dilution.

### **STANDARD PREPARATION, ANALYSIS and STORAGE**

1. For best results, the PT standard should be stored refrigerated and then brought to room temperature (near 20°C) when used.
2. Bring a 100 mL class A volumetric flask to volume with volatile free deionized water.
3. Carefully open the ampule by snapping off the top at the narrow part of the neck.
4. Transfer exactly 50.0 µL (micro liters) of the PT concentrate to the flask using a gas tight syringe and delivering the aliquot below the surface of the water.
5. Mix the solution by inverting the volumetric flask a minimum of three times.
6. The standard is now ready for preparation and analysis per your routine method(s).s).
7. The sample should be analyzed as soon as possible after dilution,
8. Report all results in µg/L per the reporting instructions contained in this booklet.
9. Store the diluted standard and any remaining concentrate refrigerated (at ~4°C).

## Water Pollution Proficiency Testing Concentration Ranges and PTRLs

### Definitions:

#### PTRL

NELAC Proficiency Testing Reporting Limits (PTRLs) are provided as guidance to laboratories analyzing NELAC PT samples. At a minimum, the laboratory should use a method that is sensitive enough to generate quantitative results at the PTRLs shown. (REF: NELAC PT FOT Tables)

#### NA

Not Applicable (NA) has been applied to analytes where a PTRL is not applicable and to state specific analytes that have not had a PTRL determined by the applicable accrediting agency.

### Volatiles (PT-VOA-WP)

NELAC Code	Analyte	Units	Concentration Range	PTRL
4375	Benzene	µg/L	8.00 - 120	4.60
4395	Bromodichloromethane	µg/L	8.00 - 115	5.00
4400	Bromoform	µg/L	11.0 - 100	5.60
4950	Bromomethane	µg/L	20.0 - 100	8.00
4455	Carbon tetrachloride	µg/L	10.0 - 140	6.00
4475	Chlorobenzene	µg/L	10.0 - 120	7.10
4485	Chloroethane	µg/L	20.0 - 100	8.00
4505	Chloroform	µg/L	12.0 - 95.0	8.10
4960	Chloromethane	µg/L	20.0 - 100	8.00
4575	Dibromochloromethane	µg/L	11.0 - 140	7.20
4610	1,2 Dichlorobenzene	µg/L	8.00 - 100	4.90
4615	1,3 Dichlorobenzene	µg/L	9.00 - 125	5.20
4620	1,4 Dichlorobenzene	µg/L	8.00 - 115	4.90
4635	1,2 Dichloroethane	µg/L	10.0 - 150	6.80
4640	1,1-Dichloroethene	µg/L	11.0 - 120	6.10
4700	trans-1,2-Dichloroethene	µg/L	10.0 - 150	3.60
4655	1,2-Dichloropropane	µg/L	10.0 - 150	5.90
4685	trans-1,3-Dichloropropene	µg/L	8.00 - 90.0	3.90
4765	Ethylbenzene	µg/L	9.00 - 100	5.80
4975	Methylene Chloride	µg/L	10.0 - 125	5.80
4995	4-Methyl-2-pentanone (MIBK)	µg/L	20.0 - 200	4.30
5100	Styrene	µg/L	20.0 - 100	13.0
5110	1,1,2,2-Tetrachloroethane	µg/L	10.0 - 150	3.90
5115	Tetrachloroethene	µg/L	10.0 - 150	4.30
5140	Toluene	µg/L	7.00 - 100	4.90
5160	1,1,1-Trichloroethane	µg/L	10.0 - 90.0	6.50
5165	1,1,2-Trichloroethane	µg/L	25.0 - 150	17.0
5170	Trichloroethene	µg/L	10.0 - 95.0	6.20
5175	Trichlorofluoromethane	µg/L	20.0 - 100	8.00
5235	Vinyl chloride	µg/L	20.0 - 100	8.00
5260	Xylenes, total	µg/L	20.0 - 300	10.0
<b>NELAC Experimental Analytes</b>				
4630	1,1-Dichloroethane	µg/L	15.0 - 150	9.70
4645	cis-1,2-Dichloroethene	µg/L	15.0 - 150	9.60
4680	cis-1,3-Dichloropropylene	µg/L	15.0 - 100	10.0
4860	2-Hexanone	µg/L	20.0 - 150	8.00
5000	Methyl tert-butyl ether (MTBE)	µg/L	15.0 - 100	8.20
<b>Additional State Specific Analytes</b>				
4315	Acetone	µg/L	5.00 - 200	NA
4320	Acetonitrile	µg/L	5.00 - 200	NA

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### Volatiles (PT-VOA-WP) cont'd

NELAC Code	Analyte	Units	Concentration Range	PTRL
<b>Additional State Specific Analytes cont'd</b>				
4325	Acrolein	µg/L	5.00 - 200	NA
4340	Acrylonitrile	µg/L	5.00 - 200	NA
4390	Bromochloromethane	µg/L	5.00 - 200	NA
4410	2-Butanone (MEK)	µg/L	5.00 - 200	NA
4435	n-Butylbenzene	µg/L	10.0 - 300	NA
4440	sec-Butylbenzene	µg/L	10.0 - 300	NA
4445	tert-Butylbenzene	µg/L	10.0 - 300	NA
4450	Carbon disulfide	µg/L	5.00 - 200	NA
4500	2-Chloroethylvinylether	µg/L	5.00 - 200	NA
4535	2-Chlorotoluene	µg/L	5.00 - 200	NA
4540	4-Chlorotoluene	µg/L	10.0 - 300	NA
4570	1,2-Dibromo-3-chloropropane (DBCP)	µg/L	5.00 - 200	NA
4585	1,2-Dibromoethane (EDB)	µg/L	5.00 - 200	NA
4595	Dibromomethane	µg/L	5.00 - 200	NA
4625	Dichlorodifluoromethane	µg/L	5.00 - 200	NA
-	Dichlorofluoromethane	µg/L	5.00 - 200	NA
4660	1,3-Dichloropropane	µg/L	10.0 - 300	NA
4665	2,2-Dichloropropane	µg/L	10.0 - 300	NA
4670	1,1-Dichloropropene	µg/L	5.00 - 200	NA
4835	Hexachlorobutadiene	µg/L	20.0 - 200	NA
4900	Isopropylbenzene	µg/L	10.0 - 300	NA
4910	p-Isopropyltoluene	µg/L	10.0 - 300	NA
5005	Naphthalene	µg/L	20.0 - 200	NA
5090	n-Propylbenzene	µg/L	10.0 - 300	NA
5105	1,1,1,2-Tetrachloroethane	µg/L	5.00 - 200	NA
5150	1,2,3-Trichlorobenzene	µg/L	5.00 - 200	NA
5155	1,2,4-Trichlorobenzene	µg/L	20.0 - 200	NA
5180	1,2,3-Trichloropropane	µg/L	5.00 - 200	NA
5210	1,2,4-Trimethylbenzene	µg/L	20.0 - 75.0	NA
5215	1,3,5-Trimethylbenzene	µg/L	20.0 - 75.0	NA
5225	Vinyl acetate	µg/L	5.00 - 200	NA
5240	m+p-Xylene	µg/L	20.0 - 300	10.0
5250	o-Xylene	µg/L	20.0 - 300	10.0