

Instructions for: **WS Unregulated Volatiles (Cat # PT-UNRVOA-WS)**

STANDARD DESCRIPTION

- The WS Unregulated Volatiles standard is provided in a flame sealed ampule that contains approximately 1.5 mL of concentrate.
- The WS Unregulated 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 within NELAC/EPA criteria. As such, each lot of the WS Unregulated Volatiles standard will contain a minimum of 80% of the total number of NELAC Accreditation 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).

CONCENTRATION RANGE and PTRL

- After preparation per these instructions, the standard will contain the analytes in the following table at a certified Concentration within the ranges shown.
- The NELAC Proficiency Testing Reporting Limit (PTRL) is provided as guidance when analyzing NELAC PT standards. At a minimum, the laboratory should use a method that is sensitive enough to generate quantitative results at the PTRL shown.

Water Supply 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.

Unregulated Volatiles (PT-UNRVOA-WS)

NELAC Code	Analyte	Units	Concentration Range	PTRL
4385	Bromobenzene	µg/L	2.00 - 20.0	1.20
4390	Bromochloromethane	µg/L	2.00 - 20.0	1.20
4950	Bromomethane	µg/L	5.00 - 50.0	3.00
4435	n-Butylbenzene	µg/L	2.00 - 20.0	1.20
4440	sec-Butylbenzene	µg/L	2.00 - 20.0	1.20
4445	tert-Butylbenzene	µg/L	2.00 - 20.0	1.20
4485	Chloroethane	µg/L	5.00 - 50.0	3.00
4960	Chloromethane	µg/L	5.00 - 50.0	3.00
4535	2-Chlorotoluene	µg/L	2.00 - 20.0	1.20
4540	4-Chlorotoluene	µg/L	2.00 - 20.0	1.20
4595	Dibromomethane	µg/L	2.00 - 20.0	1.20
4615	1,3-Dichlorobenzene	µg/L	2.00 - 20.0	1.20
4625	Dichlorodifluoromethane	µg/L	5.00 - 50.0	3.00
4630	1,1-Dichloroethane	µg/L	2.00 - 20.0	1.20
4660	1,3-Dichloropropane	µg/L	2.00 - 20.0	1.20
4665	2,2-Dichloropropane	µg/L	2.00 - 20.0	1.20
4670	1,1-Dichloropropene	µg/L	2.00 - 20.0	1.20
4680	cis-1,3-Dichloropropene	µg/L	2.00 - 20.0	1.20
4685	trans-1,3-Dichloropropene	µg/L	2.00 - 20.0	1.20
5175	Fluorotrichloromethane	µg/L	5.00 - 50.0	3.00
4835	Hexachlorobutadiene	µg/L	5.00 - 50.0	3.00
4900	Isopropylbenzene	µg/L	2.00 - 20.0	1.20
4910	4-Isopropyltoluene	µg/L	2.00 - 20.0	1.20
5000	MTBE	µg/L	5.00 - 50.0	3.00
5005	Naphthalene	µg/L	5.00 - 50.0	1.20
5090	n-Propylbenzene	µg/L	2.00 - 20.0	1.20
5105	1,1,1,2-Tetrachloroethane	µg/L	2.00 - 20.0	1.20
5110	1,1,1,2,2-Tetrachloroethane	µg/L	2.00 - 20.0	1.20
5150	1,2,3-Trichlorobenzene	µg/L	5.00 - 50.0	3.00
5180	1,2,3-Trichloropropane	µg/L	2.00 - 20.0	1.20
5210	1,2,4-Trimethylbenzene	µg/L	2.00 - 20.0	1.20
5215	1,3,5-Trimethylbenzene	µg/L	2.00 - 20.0	1.20