

## **Instructions for: WP PCB Congeners (cat # PT-CNG-WP)**

### **STANDARD DESCRIPTION**

- The WP PCB Congeners standard is provided in a flame sealed ampule that contains approximately 2.1 mL of concentrate.
- The WP PCB Congeners standard is unpreserved.
- 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.

### **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. Add approximately 990 mL of ASTM Type 1 water to a 1000 mL class A volumetric flask.
3. Carefully open the ampule by snapping off the top at the narrow part of the neck.
4. Transfer exactly 1.0 mL of the PT standard concentrate to the flask using a gas tight syringe and delivering the aliquot below the surface of the water.
5. Bring the volumetric flask to volume with organic free deionized water.
6. Mix the solution by inverting the volumetric flask a minimum of three times.
7. The standard is now ready for preparation and analysis per your routine method(s).
8. The sample should be analyzed as soon as possible after dilution.
9. Report all results in ng/L per the reporting instructions available at [www.wibby.com](http://www.wibby.com).
10. 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.
- All concentrations shown in ng/L.

## 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.

### PCB Congeners (PT-CNG-WP)

NELAC Code	Analyte	Units	Concentration Range	PTRL
9252	2,4,4'-Trichlorobiphenyl (PCB 28)	ng/L	5.00 - 20.0	NA
8955	2,2',5,5'-Tetrachlorobiphenyl (PCB 52)	ng/L	5.00 - 20.0	NA
8965	3,3',4,4'-Tetrachlorobiphenyl (PCB 77)	ng/L	5.00 - 20.0	NA
8970	3,4,4',5-Tetrachlorobiphenyl (PCB 81)	ng/L	5.00 - 20.0	NA
8980	2,2',4,5,5'-Pentachlorobiphenyl (PCB 101)	ng/L	5.00 - 20.0	NA
8985	2,3,3',4,4'-Pentachlorobiphenyl (PCB 105)	ng/L	5.00 - 20.0	NA
9005	2,3,4,4',5-Pentachlorobiphenyl (PCB 114)	ng/L	5.00 - 20.0	NA
9011	2,3',4,4',5'-Pentachlorobiphenyl (PCB 118)	ng/L	5.00 - 20.0	NA
8995	2,3',4,4',5-Pentachlorobiphenyl (PCB 123)	ng/L	5.00 - 20.0	NA
9015	3,3',4,4',5-Pentachlorobiphenyl (PCB 126)	ng/L	5.00 - 20.0	NA
9025	2,2',3,4,4',5'-Hexachlorobiphenyl (PCB 138)	ng/L	5.00 - 20.0	NA
9040	2,2',4,4',5,5'-Hexachlorobiphenyl (PCB 153)	ng/L	5.00 - 20.0	NA
9050	2,3,3',4,4',5-Hexachlorobiphenyl (PCB 156)	ng/L	5.00 - 20.0	NA
9045	2,3,3',4,4',5'-Hexachlorobiphenyl (PCB 157)	ng/L	5.00 - 20.0	NA
9055	2,3',4,4',5,5'-Hexachlorobiphenyl (PCB 167)	ng/L	5.00 - 20.0	NA
9060	3,3',4,4',5,5'-Hexachlorobiphenyl (PCB 169)	ng/L	5.00 - 20.0	NA
9070	2,2',3,4,4',5,5'-Heptachlorobiphenyl (PCB 180)	ng/L	5.00 - 20.0	NA
9085	2,3,3',4,4',5,5'-Heptachlorobiphenyl (PCB 189)	ng/L	5.00 - 20.0	NA
-	Total PCBs	ng/L	5.00 - 400	NA