

Instructions for: WS Mercury (cat # PT-HG-WS)

STANDARD DESCRIPTION

- The WS Mercury standard is provided in a vial that contains approximately 21 mL of concentrate.
- The WS Mercury standard is preserved with hydrochloric acid and hexavalent chromium.
- Store the standard in the unopened vial at room temperature (~ 20 - 25°C).

ADDITIONAL INFORMATION

- The standard has been provided as a concentrate that must be diluted prior to analysis.
- After dilution the standard should be analyzed per your routine procedures for mercury.

STANDARD PREPARATION, ANALYSIS and STORAGE

1. For best results, the PT standards should be stored at room temperature (~ 20 - 25°C).
2. Add approximately 900 mL of ASTM Type 1 water to a 1000 mL class A volumetric flask.
3. Carefully add 10.0 mL of the acid your lab normally uses to preserve samples for mercury determination (either nitric or hydrochloric).
4. Transfer exactly 10.0 mL of the PT standard concentrate to the flask using a class A volumetric pipette.
5. Bring the flask to volume with ASTM Type 1 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 the selected method(s).
8. The sample should be analyzed as soon as possible after dilution,
9. Report all results in µg/L per the reporting instructions contained in this booklet.
10. Store the diluted standard and any remaining concentrate at room temperature (~ 20 - 25°C).

CONCENTRATION RANGE and PTRL

- After preparation per these instructions, the standard will contain mercury at a certified Concentration within the range 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.

| Analyte | Units | Concentration Range | PTRL |
|---------|-------|---------------------|------|
| Mercury | µg/L | 0.5 - 10 | 0.35 |