# Hydrogen Peroxide Verification Kit Cat. No.: I-5543

CHEMetrics by AquaPhoenix Scientific Photometers are factory calibrated and use LEDs as the light source. The calibrations and the LEDs should not change under normal use conditions. However, it is good quality protocol to routinely verify the performance of any LED photometer. Tracking verification kit readings at user-defined intervals (e.g. weekly, monthly) will verify the stability of the photometer's performance. This verification kit is intended for use by customers who use CHEMetrics Peroxide Vacu-vials®, Cat. No. K-5543 and would like to verify the photometer's performance using the factory calibration for this product. This verification kit is designed to verify the performance of the following CHEMetrics photometers: I-2016 Peroxide SAM and V-2000 and V-3000 Multi-Analyte Photometers (Program 95 only).

Conformance Certification

CHEMetrics certifies that this Verification Kit has been manufactured and evaluated in accordance with strict Quality Control (QC) and Quality Assurance (QA) protocols and performs within the specifications listed below. The acceptance criteria are established by reading each ampoule in a spectrophotometer that has been certified using optical standards traceable to NIST standards.

Lot #: Insp. Date: day Month year Exp. Date: Month year

## Acceptance Criteria, ppm Hydrogen Peroxide

Ampoule ID	I-2016	V-2000 Program 95	V-3000 Program 95
Low			
High			

Contact technical support for lot-specific acceptance criteria

### **Test Procedure**

#### I-2016 Peroxide SAM Test Procedure

- Wipe the Zero Ampoule (contains colorless liquid) with a clean cloth and follow the SAM instructions to Set Zero.
- Wipe the Low Standard Ampoule with a clean cloth and follow the SAM instructions to Make a Measurement. Record the result.
- Repeat Step 2 to obtain a total of 10 results for the Low Standard Ampoule, removing the ampoule from the SAM and reinserting it each time. Record the results and determine the difference between the lowest and highest of the 10 results.
- Repeat Step 2 using the High Standard Ampoule to obtain one result. Record the result.
- 5. If any of the results for the Standard Ampoules are not within the acceptance criteria for the SAM or if the difference between the lowest and highest results for the Low Standard Ampoule is greater than 0.08 ppm, clean the cell compartment and cell adapter, and re-wipe the ampoules, then repeat the test. If results are again unacceptable, contact technical support for further instructions.

### V-2000 and V-3000 Test Procedure

- 1. Follow the photometer specific instructions for installing the 13-mm sample cell adapter.
- 2. Turn the photometer on. Select program 95.
- Wipe the Zero Ampoule (contains colorless liquid) with a clean cloth. Then insert it into the sample cell compartment and follow the photometer specific instructions to set zero (or make zero adjustment).
- Wipe the Low Standard Ampoule with a clean cloth. Then insert it
  into the sample cell compartment and follow the photometer specific
  instructions to obtain a test result in ppm hydrogen peroxide. Record
  the result.
- 5. Repeat Step 4 using the High Standard Ampoule.
- 6. If results for the Standard Ampoules are not within the acceptance criteria for the instrument being verified, clean the cell compartment and cell adapter, and re-wipe the ampoules, then repeat the test. If results are again unacceptable, contact technical support for further instructions.

