## Peracetic Acid CHEMets® Kit

**K-7904/R-7904:** 0 - 1 & 0 - 5 ppm

## Safety Information

Read SDS before performing this test procedure. Wear safety glasses and protective gloves.

## **Test Procedure**

- 1. Add 5 drops of S-2500 Activator Solution to the empty sample cup (fig. 1).
- 2. Fill the sample cup to the 25 mL mark with the sample to be tested (fig. 2).
- 3. Immediately place the CHEMet ampoule, tip first, into the sample cup and snap the tip. The ampoule will fill leaving a bubble for mixing (fig. 3).
- 4. To mix the ampoule, invert it several times, allowing the bubble to travel from end to end.
- 5. Dry the ampoule. Obtain a test result **1 minute** after snapping the tip.
- 6. Obtain a test result using the appropriate comparator.
  - a. Low Range Comparator (fig. 4): Place the ampoule, flat end first, into the comparator. Hold the comparator up toward a source of light and view from the bottom. Rotate the comparator until the best color match is found.





## **Test Method**

The Peracetic Acid CHEMets<sup>®</sup><sup>1</sup> test kit employs the DPD chemistry.<sup>2</sup> The sample is treated with an excess of potassium iodide. Peracetic acid oxidizes the iodide to iodine. The iodine then oxidizes DPD (N,N-diethyl-p-phenylenediamine) to form a pink colored species in direct proportion to the peracetic acid concentration.

Various oxidizing agents such as halogens, ferric ions and cupric ions will produce high test results. Hydrogen peroxide does <u>not</u> interfere with this test if present at levels comparable to the peracetic acid levels.

- 1. CHEMets is a registered trademark of AquaPhoenix Scientific, LLC U.S. Patent No. 3,634,038
- 2. APHA Standard Methods Online, Method 4500-PAA 2019



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Figure 4