Hydrogen Peroxide CHEMets® Kit

K-5510/R-5510: 0 - 0.8 & 1 - 10 ppm

Sample Temperature

Sample temperatures that deviate significantly from 20°C (68°F) may introduce test result bias.

Test Procedure

1. Fill the sample cup to the 25 mL mark with the sample to be tested (fig. 1).

Figure 1

2. Place the CHEMet ampoule, tip first, into the sample cup. Snap the tip. The ampoule will fill leaving a bubble for mixing (fig. 2).
3. To mix the ampoule, invert it several times, allowing the bubble to travel from end to end.

Figure 2

4. Dry the ampoule. Obtain a test result between **30 seconds and 1 minute** after snapping the tip.
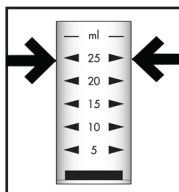5. Obtain a test result using the appropriate comparator.

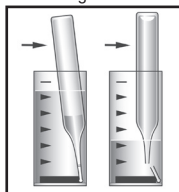   a. **Low Range Comparator (fig. 3):** Place the ampoule, flat end first, into the comparator. Hold the comparator up toward a source of light and view from the bottom. Rotate the comparator until the best color match is found.

Figure 3

   b. **High Range Comparator (fig. 4):** Place the ampoule between the color standards until the best color match is found.

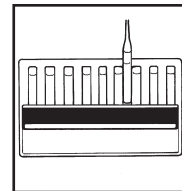   **NOTE:** Use the 1 - 10 ppm concentration scale on the comparator label.

Figure 4

Test Method

The Hydrogen Peroxide CHEMets®[1] test method employs the ferric thiocyanate chemistry.[2] In an acidic solution, hydrogen peroxide oxidizes ferrous iron. The resulting ferric iron reacts with ammonium thiocyanate to form ferric thiocyanate, a redorange colored complex, in direct proportion to the hydrogen peroxide concentration.

Ferric iron and peracetic acid (PAA) will produce high test results. Cupric copper also interferes with the test.

Testing for peroxide in the presence of PAA or cupric copper requires a modified test procedure. See technical bulletin on the website for details.

1. CHEMets is a registered trademark of AquaPhoenix Scientific, LLC U.S. Patent No. 3,634,038
2. APHA Standard Methods, Method 4500-H_2O_2 B-2020

Safety Information

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

CHEMetrics®
By AquaPhoenix Scientific

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