Sodium Persulfate CHEMets® Kit

K-7870/R-7870: 0 - 7 & 7 - 70 ppm

Safety Information

Read MSDS (available at www.chemetrics.com) before performing this test procedure. Wear safety glasses and protective gloves.

Test Procedure

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

4. Dry the ampoule and **wait 1.5 minutes** for color development.

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.

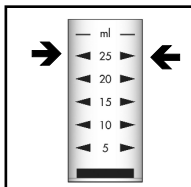   b. **High Range Comparator (fig 4):** Place the ampoule between the color standards until the best color match is found.
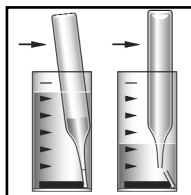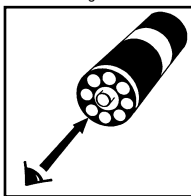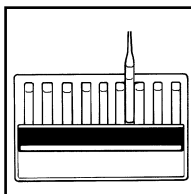

Figure 1

Figure 2
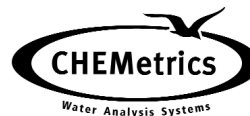

Figure 3

Figure 4

Test Method

The Sodium Persulfate CHEMets®[1] test method employs the ferric thiocyanate chemistry.[2] In an acidic solution, sodium persulfate oxidizes ferrous iron. The resulting ferric iron reacts with ammonium thiocyanate to form ferric thiocyanate, a red-orange colored complex, in direct proportion to the sodium persulfate concentration.

Various oxidizing agents such as hydrogen peroxide, ozone, ferric ions and cupric ions will produce high test results. Sample pHs above 8 may cause low test results.

1. CHEMets is a registered trademark of CHEMetrics, Inc. U.S. Patent No. 3,634,038

2. D. F. Boltz and J. A. Howell, eds., Colorimetric Determination of Nonmetals, 2nd ed., Vol. 8, p. 304 (1978)

Visit www.chemetrics.com to view product demonstration videos. Always follow the test procedure above to perform a test.

CHEMetrics
Water Analysis Systems