Sodium Persulfate CHEMets® Kit

K-7870/ R-5510: 0 - 5.6 & 7 - 70 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).
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. Obtain a test result **1.5 minutes** 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.
   b. **High Range Comparator (fig. 4):** Place the ampoule between the color standards until the best color match is found.

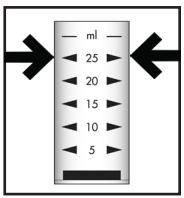

Figure 1

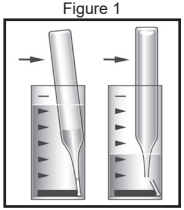
Figure 2


Figure 3

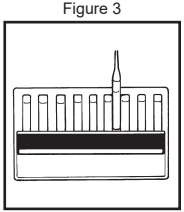
Figure 4

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 redorange colored complex, in direct proportion to the sodium persulfate concentration.

Hydrogen peroxide and ferric iron will produce high test results. Cupric copper interferes with the test. Sample pHs above 8 may cause low test results.

1. CHEMets is a registered trademark of AquaPhoenix Scientific, LLC 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)

Safety Information

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

CHEMetrics® By AquaPhoenix Scientific

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