Phosphate CHEMets® Kit

K-8530/ R-8515: 2 - 30 ppm PO_4
K-8515/ R-8515: 0 - 120 ppm PO_4

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 **5 minutes** after snapping the tip.
5. Obtain a test result using the comparator.
   a. **For K-8530 (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. **For K-8515 (fig. 4):** Place the ampoule between the color standards until the best color match is found.

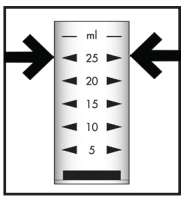

Figure 1

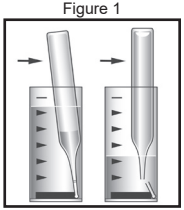
Figure 2

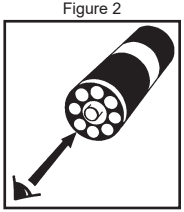
Figure 3

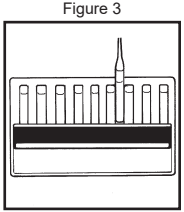
Figure 4

Test Method

The Phosphate CHEMets®[1] test method employs the vanadomolybdophosphoric acid chemistry.[2,3] In an acidic solution, ortho-phosphate reacts with ammonium molybdate and ammonium vanadate to produce a yellow colored complex in direct proportion to the phosphate concentration.
Condensed phosphates (pyro-, meta-, and other polyphosphates) and organically bound phosphates do not respond to this test. Sulfide, thiosulfate, and thiocyanate will cause low test results.

1. CHEMets is a registered trademark of AquaPhoenix Scientific, LLC U.S. Patent No. 3,634,038
2. APHA Standard Methods, 23rd ed., Method 4500-P C - 2005
3. ASTM D 515 - 82, Phosphorus in Water, Test Method C

Safety Information

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

CHEMetrics®
By AquaPhoenix Scientific

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