

Phosphate CHEMets® 2 - 30 ppm

Safety Information

Read MSDS before performing this test procedure. Wear safety glasses.

Test Procedure

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

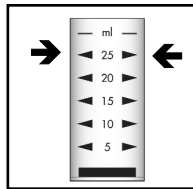


Figure 1

2. Place the CHEMet ampoule in the sample cup. Snap the tip by pressing the ampoule against the side of the cup. The ampoule will fill leaving a small bubble to facilitate mixing (fig 2).

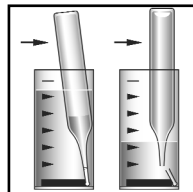


Figure 2

3. Mix the contents of the ampoule by inverting it several times, allowing the bubble to travel from end to end each time. Wipe all liquid from the exterior of the ampoule. Wait **5 minutes** for color development.

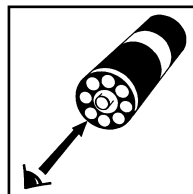


Figure 3

4. Place the CHEMet ampoule, flat end downward into the center tube of the comparator. Direct the top of the comparator up toward a source of bright light while viewing from the bottom. Rotate the comparator until the color standard below the CHEMet ampoule shows the closest match (fig 3). If the color of the CHEMet ampoule is between two color standards, a concentration estimate can be made.

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. Results are expressed in ppm (mg/Liter) PO₄.

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 CHEMetrics, Inc. U.S. Patent No. 3,634,038
2. APHA Standard Methods, 20th ed., p 4-144, method 4500-P C (1998)
3. ASTM D 515 - 82, Phosphorus in Water, Test Method C--Colorimetric Molybdo-vanadophosphate Method

Reorder Information

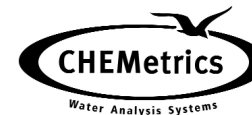
Cat. No.

Test Kit, complete K-8530

Refill, 30 CHEMet ampoules R-8515

Sample Cup, 25 mL, package of six A-0013

Comparator, 2-30 ppm C-8530



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