Oxygen CHEMets®

1 - 12 ppm

Sampling

The most critical part of any dissolved oxygen test is sampling. It is difficult to obtain an aliquot which accurately reflects the oxygen content of a sample. Exposure to the high oxygen content of "air" will cause a sample to approach saturation. Biological activity may cause rapid oxygen depletion. Dipping and pouring operations should be performed with as little agitation as possible.

Test Procedure

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

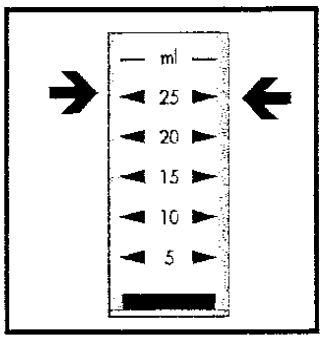

Figure 1

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).

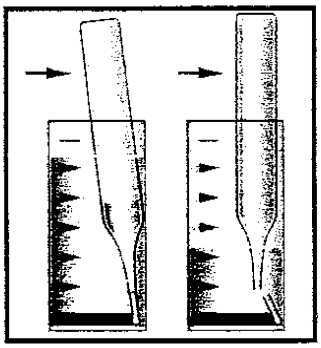
Figure 2

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 **2 minutes** for color development.

4. Hold the comparator in a nearly horizontal position while standing directly beneath a bright source of light. Place the CHEMet ampoule between the color standards moving it from left to right along the comparator until the best color match is found (fig 3). If the color of the CHEMet ampoule is between two color standards, a concentration estimate can be made.

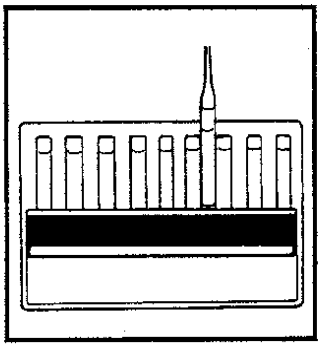
Figure 3

Nitrate CHEMets® Kit

K-6905: 0 - 3.0 ppm N

Safety Information

Read MSDS before performing this test procedure. Wear safety glasses and disposable gloves.

Test Procedure

1. Fill the **reaction tube** (green screw cap tube) to the 15 mL mark with the sample to be tested.
2. Empty the contents of one Zinc Foil Pack into the reaction tube (fig 1). Cap the reaction tube and shake it vigorously for exactly **2 minutes**.

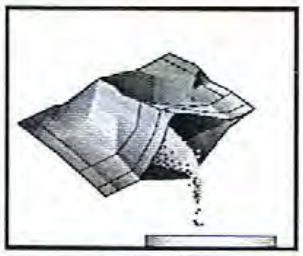

Figure 1

3. Add 10 drops of A-6901 Acidifier Solution to the empty **25 mL sample cup** (fig. 2).
4. Pour the treated sample from the reaction tube into the sample cup, being careful not to transfer any solid material to the sample cup.

   NOTE: Getting a small amount of solid material into the sample cup will not affect test results.

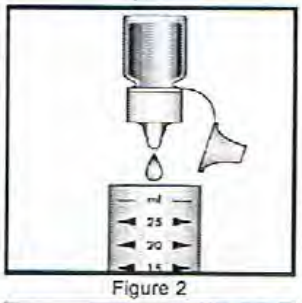

Figure 2

5. 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 3).

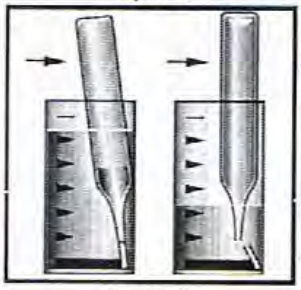

Figure 3

6. Mix the contents of the ampoule by inverting it several times, allowing the bubble to travel from end to end. Dry the ampoule and wait **10 minutes** for color development.
7. Hold the comparator in a nearly horizontal position while standing directly beneath a source of light. Place the ampoule between the color standards moving it from left to right along the comparator until the best color match is found (fig 4). If the color of the ampoule is between two color standards an estimate can be made.

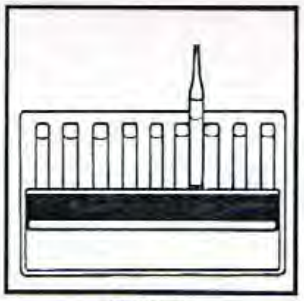

Figure 4

NOTE: To convert to ppm (mg/Liter) nitrate as NO_3, simply multiply test results by 4.4.

Phosphate CHEMets®
0 - 1 & 1 - 10 ppm

Test Procedure

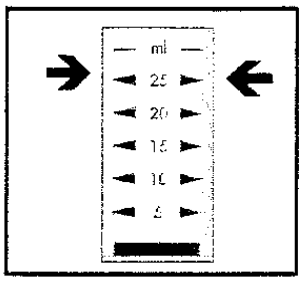
Figure 1

1. Fill the sample cup to the 25 mL mark with the sample (fig 1).
2. Add 2 drops of A-8500 Activator Solution (fig 2). Cap the sample cup and shake it to mix the contents well.

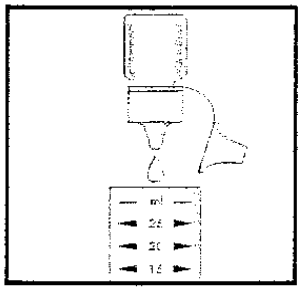
Figure 2

3. 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 3).
4. 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 **2 minutes** for color development.

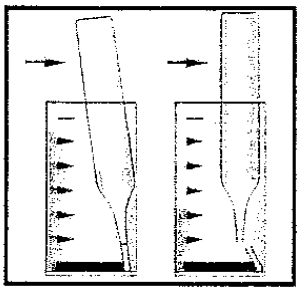
Figure 3

5. Use the appropriate comparator to determine the level of ortho-phosphate in the sample. If the color of the CHEMet ampoule is between two color standards, a concentration estimate can be made.
   a. Place the CHEMet ampoule, flat end downward into the center tube of the low range 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 4).

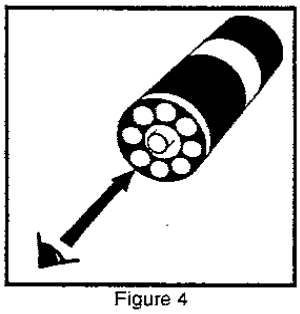
Figure 4

   b. Hold the high range comparator in a nearly horizontal position while standing directly beneath a bright source of light. Place the CHEMet ampoule between the color standards moving it from left to right along the comparator until the best color match is found (fig 5).

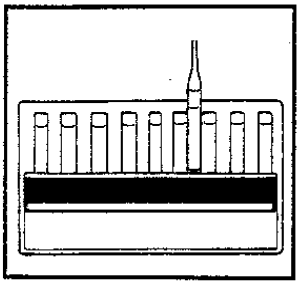
Figure 5