

# Oxygen CHEMets® Kit

K-7512/R-7512: 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 the sample to be tested (fig 1).
2. Place the 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 **2 minutes** for color development.
5. Obtain a test result by placing the ampoule between the color standards until the best color match is found (fig 3).

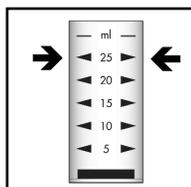


Figure 1

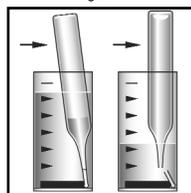


Figure 2

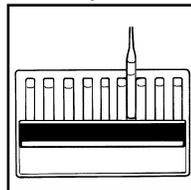


Figure 3

## Test Method

The Oxygen CHEMets®<sup>1</sup> test kit employs the indigo carmine method<sup>2,3</sup>. In an acidic solution, oxygen oxidizes the yellow-green colored leuco form of indigo carmine to form a highly colored blue dye. The resulting blue color is proportional to the dissolved oxygen concentration in the sample.

1. CHEMets is a registered trademark of CHEMetrics, Inc. U.S. Patent No. 3,634,038
2. ASTM D 888 - 87, Dissolved Oxygen in Water, Test Method A
3. Gilbert, T. W., Behymer, T. D., Castaneda, H. B., "Determination of Dissolved Oxygen in Natural and Wastewaters," American Laboratory, pp. 119-134, March 1982

## Safety Information

Read SDS (available at [www.chemetrics.com](http://www.chemetrics.com)) before performing this test procedure. Wear safety glasses and protective gloves.

Visit [www.chemetrics.com](http://www.chemetrics.com) to view product demonstration videos.  
Always follow the test procedure above to perform a test.



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