Chlorine Dioxide CHEMets® Kit

K-2705/R-2705: 0 - 2 & 0 - 10 ppm

Safety Information

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

Test Procedure

1. Fill the sample cup to the 15 mL mark with the sample to be tested (fig. 1).
2. Add 6 drops of A-2700 Neutralizer Solution (fig. 2). Stir to mix the contents of the cup.
3. Place the CHEMet ampoule, tip first, into the sample cup. Snap the tip. The ampoule will fill leaving a bubble for mixing (fig. 3).
4. To mix the ampoule, invert it several times, allowing the bubble to travel from end to end.
5. Dry the ampoule and wait **exactly 1 minute** for color development.
6. Obtain a test result using the appropriate comparator.
   a. **Low Range Comparator (fig. 4):** 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.

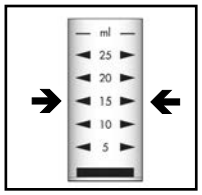

Figure 1


Figure 2

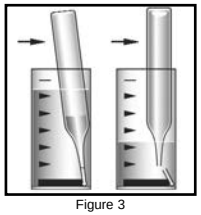
Figure 3


Figure 4

   b. **High Range Comparator (fig. 5):** Place the ampoule between the color standards until the best color match is found.

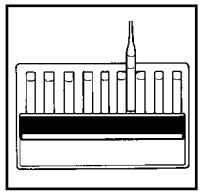
Figure 5

Test Method

The Chlorine Dioxide CHEMets®[1] test method employs the DPD chemistry.[2,3] Chlorine dioxide oxidizes DPD (N,N-diethyl-p-phenylenediamine) to form a pink colored species in direct proportion to the chlorine dioxide concentration. Interference from free Cl_2 is prevented (up to 6 ppm Cl_2) by the addition of glycine to the sample. Glycine converts free chlorine to choroaminoacetic acid.

Bromine, iodine, ozone and halogenating agents will produce high test results. Chlorine dioxide, at concentrations significantly above the test range, may prevent proper color development causing 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., Method 4500-ClO_2 D - 1993 and 22nd ed, Method 4500-Cl G - 2000
3. EPA Methods for Chemical Analysis of Water and Wastes, method 330.5 (1983)

Visit www.chemetrics.com to view product demonstration videos.
Always follow the test procedure above to perform a test.

CHEMetrics
Simplicity in Water Analysis

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