Bromine CHEMets® Kit

K-1605/R-7904: 0 - 2.2 & 0 - 11 ppm

Test Procedure

1. Add 5 drops of S-2500 Activator Solution to the empty sample cup (fig. 1).
2. Fill the sample cup to the 25 mL mark with the sample to be tested (fig. 2).
3. Immediately place the CHEMet ampoule, tip first, into the sample cup and 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. Obtain a test result **1 minute** after snapping the tip.
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.

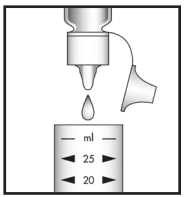

Figure 1

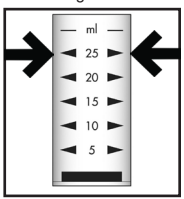

Figure 2

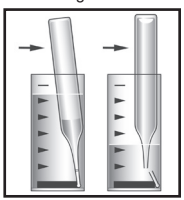
Figure 3


Figure 4

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

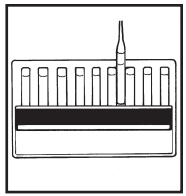
Figure 5

Test Method

The Bromine CHEMets®[1] test kit employs the DPD chemistry.[2,3] The sample is treated with an excess of potassium iodide. Bromine oxidizes the iodide to iodine. The iodine then oxidizes DPD (N,N-diethyl-p-phenylenediamine) to form a pink colored species in direct proportion to the bromine concentration.

Various oxidizing agents such as halogens, ferric ions and cupric ions will produce high 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-Cl G - 2000
3. EPA Methods for Chemical Analysis of Water and Wastes, Method 330.5 (1983)

Safety Information

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

CHEMetrics®
By AquaPhoenix Scientific

Mar. 24, Rev. 9