## Ozone CHEMets® Kit

**K-7404/R-7404:** 0 - 0.6 & 0.6 - 3 ppm

## **Safety Information**

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

## **Test Procedure**

- 1. Add 5 drops of A-7400 Activator Solution to the sample cup (fig 1).
- 2. Fill the sample cup to the 25 mL mark with the sample to be tested, being careful to minimize turbulance (fig 2).

**Note:** Ozone loss from sample occurs rapidly. Analyze immediately.

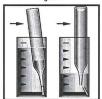
- 3. Place the CHEMet ampoule, tip first, into the sample cup. Snap the tip. The ampoule will fill leaving a bubble for mixing (fig 3).
- To mix the ampoule, invert it several times, allowing the bubble to travel from end to end.
- 5 Dry the ampoule and wait 1 minute for color development.
- Obtain a 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



= 0



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 Ozone CHEMets<sup>®</sup>1 test kit employs the DPD chemistry.<sup>2,3</sup> The sample is treated with an excess of potassium iodide. Ozone 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 ozone concentration.

Various oxidizing agents such as halogens, ferric ions and cupric ions will produce high test results.

- CHEMets is a registered trademark of CHEMetrics, Inc. U.S. Patent No. 3,634,038
- 2. APHA Standard Methods, 21st ed., method 4500-Cl G (2005)
- 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.



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