

# Chlorine Kit

## K-2511/R-2511 ULR CHEMets® Kit

0 - 0.20 ppm

## K-2505/R-2505 CHEMets® Kit

0 - 1 & 1 - 5 ppm

### Free Chlorine Procedure

1. Fill the sample cup to the 25 mL mark with the sample to be tested (fig. 1).
2. Place the CHEMet 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. Obtain a test result **1 minute** after snapping the tip.
5. Obtain a test result using the appropriate comparator (K-2511 has only 1 comparator).
  - a. **Low Range Comparator (fig. 3):** 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.
  - b. **High Range Comparator (fig. 4):** Place the ampoule between the color standards until the best color match is found.

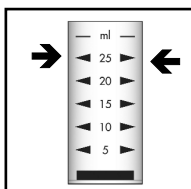


Figure 1

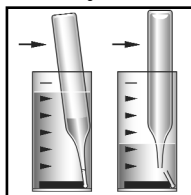


Figure 2

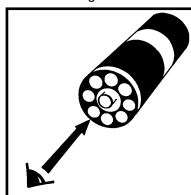


Figure 3

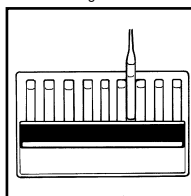


Figure 4

### Total Chlorine Procedure

1. Add 5 drops of S-2500 Activator Solution to the empty sample cup.
2. Fill the sample cup to the 25 mL mark with the sample to be tested.
3. Immediately perform the **Free Chlorine Procedure** starting with step 2.

### Test Method

The Chlorine CHEMets® & ULR CHEMets®<sup>1</sup> test kits employ the DDPD chemistry.<sup>2</sup> Free chlorine oxidizes DDPD to form a purple colored species in proportion to the chlorine concentration. Total chlorine, the sum of free and combined chlorine, is determined by adding potassium iodide to the sample.

It is not appropriate to use permanganate based standards to validate this test method. Standardized chlorine solutions must be used for this purpose.

Other halogens and ozone will produce high test results. Chlorine, at concentrations significantly above the test range, may prevent proper color development causing low test results. High levels of nitrite interfere with the free and total chlorine determinations. Do not use this product in direct sunlight. Sunlight exposure during testing produces false positive test results.

1. CHEMets & ULR CHEMets are registered trademarks of AquaPhoenix Scientific, LLC U.S. Patent No. 3,634,038
2. The DDPD methodology was developed by CHEMetrics, LLC

### Safety Information

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

