

# Nitrite CHEMets® Kit

**K-7004/R-7002: 0 - 2.5 ppm N**

## Test 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 **10 minutes** after snapping the tip.
5. Use the 0 - 2.5 ppm concentration scale on the comparator label. Obtain a test result by placing the ampoule between the color standards until the best color match is found (fig. 3).

**NOTE:** To convert to ppm nitrite ( $\text{NO}_2$ ), multiply test result by 3.3.

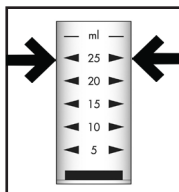


Figure 1

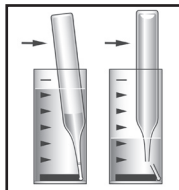


Figure 2

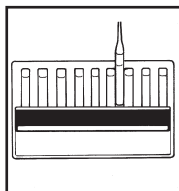


Figure 3

## Test Method

The Nitrite CHEMets®<sup>1</sup> test kit employs the azo dye formation method.<sup>2,3</sup> In an acidic solution, nitrite diazotizes with a primary aromatic amine and then couples with another organic molecule to produce a highly colored azo dye. The resulting pink-orange color is proportional to the nitrite concentration in the sample.

1. CHEMets is a registered trademark of AquaPhoenix Scientific, LLC U.S. Patent No. 3,634,038

2. APHA Standard Methods, 23<sup>rd</sup> ed., Method 4500- $\text{NO}_2^-$ -B-2000

3. EPA Methods for Chemical Analysis of Water and Wastes, Method 354.1 (1983).

## Safety Information

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

