Nitrite VACUettes® Kit

K-7004B/R-7002B: 0 - 300 ppm N K-7004C/R-7002C: 0 - 3000 ppm N

Test Procedure

- 1. Fill the dilutor snapper cup to the -ml- mark with **distilled water** (fig. 1).
- 2. Fill the micro-test tube approximately halfway with the sample to be tested (fig. 2).
- Place a VACUette tip firmly on to the ampoule tip.
-). e Figure 1

R

micro-test tube

Figure 2

4. Holding the VACUette almost horizontally, touch the tip to the contents of the microtest tube (fig. 2).

NOTE: The capillary tip will fill completely with sample.

- 5. Place the VACUette between the vertical tip guides on the inside of the dilutor snapper cup. Snap the ampoule tip. The ampoule will fill leaving a bubble for mixing (fig. 3).
- 6. To mix the ampoule, invert it several times, allowing the bubble to travel from end to end.
- 7. Dry the ampoule. Obtain a test result **10 minutes** after snapping the tip.
- 8. Obtain a test result by placing the ampoule between the color standards until the best color match is found (fig 4).
 - **NOTE:** To convert to ppm nitrite (NO₂), multiply test result by 3.3.



Figure 4

Test Method

The Nitrite VACUettes^{®1} test kit employs the azo dye formation method.^{2,3} 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. VACUettes is a registered trademark of AquaPhoenix Scientific, LLC U.S. Patent Nos. 4,537,747 & 4,596,780
- 2. APHA Standard Methods, 23rd ed., Method 4500-NO₂ $^{-}$ 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.



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