

# Nitrite VACUettes® Kit

**K-7004D/R-7002D:** 0 - 80 ppm N  
**K-7004A/R-7002A:** 0 - 170 ppm N  
**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).
3. Make sure that the VACUette tip is firmly attached to the ampoule tip.
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. **Required for R-7002D only:** Pull the VACUette into a vertical position. A small portion of the collected sample should fall into the sleeve of the VACUette tip (fig. 3).  
**NOTE:** If none of the sample falls **immediately**, tap lightly on the shoulder of the ampoule.
6. 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. 4).
7. To mix the ampoule, invert it several times, allowing the bubble to travel from end to end.
8. Dry the ampoule. Obtain a test result **10 minutes** after snapping the tip.

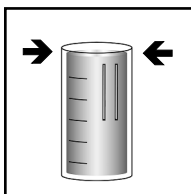


Figure 1

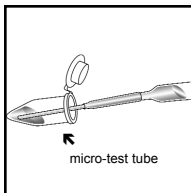


Figure 2

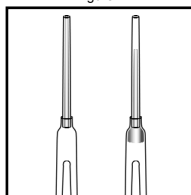


Figure 3

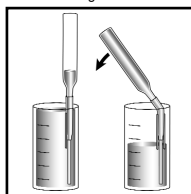


Figure 4

9. Obtain a test result by placing the ampoule between the color standards until the best color match is found (fig 5).

**NOTE:** To convert to ppm nitrite (NO<sub>2</sub>), multiply test result by 3.3.

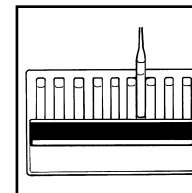


Figure 5

## Test Method

The Nitrite VACUettes®<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. VACUettes is a registered trademark of CHEMetrics, Inc. U.S. Patent Nos. 4,537,747 & 4,596,780
2. APHA Standard Methods, 23rd ed., Method 4500-NO<sub>2</sub><sup>-</sup> B - 2000
3. EPA Methods for Chemical Analysis of Water and Wastes, Method 354.1 (1983).

## Safety Information

Read SDS (available at [www.chemetrics.com](http://www.chemetrics.com)) before performing this test procedure. Wear safety glasses and protective gloves.

Visit [www.chemetrics.com](http://www.chemetrics.com) to view product demonstration videos.  
Always follow the test procedure above to perform a test.



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