Nitrite 150

Range(s): 0-150 ppm NO_2^-, 0-225 ppm $NaNO_2$

Procedure

Note: When testing multiple samples simultaneously, a separate sample cell with an unreacted sample of the water tested must be used to zero the colorimeter. Please note that varying the test procedure from the original can affect the precision of the test.

1. If the expected concentration is above 150 ppm NO_2^-, dilute the designated volume of sample water to 50 mL using DI Water (R-0833) in the dilution vial; then cap and mix thoroughly.

Range	Sample Water Volume	Multiplication Factor
150-1500 ppm NO_2^-	5 mL	10

2. Turn on the Colorimeter.
3. Select a test menu (ALL TESTS, RECENT TESTS, or FAVORITES) containing Nitrite 150 using ◀▶.
4. Select Nitrite 150 using ▲▼; then press ENTER ⊙.
5. Select a chemical form (NO_2 or $NaNO_2$) for expression of test results using ▲▼.
6. Rinse and fill 25 mm sample cell to 10 mL mark with sample; then cap.
7. Insert sample cell into sample cell compartment. Align marks per User's Manual.
8. Select ZERO using ◀▶; then press ENTER ⊙. Zero will be displayed.
9. Remove sample cell from sample cell compartment; then remove cap.
10. Using the 0.15 g dipper spoon, add 1 level dipper Nitrite 150 - Reagent A; then swirl to dissolve powder.
11. Add 1 mL Nitrite 150 - Reagent B; then cap and swirl to mix thoroughly.
12. Insert sample cell into sample cell compartment. Align marks.
13. Select TIMER using ◀▶; then press ENTER ⊙.
14. Select START using ◀▶; then press ENTER ⊙. (A 2-minute [02:00] countdown will begin.) Immediately select AUTO using ◀▶; then press ENTER ⊙.
15. When the timer beeps, the instrument will read the sample and the result will be displayed. If a sample dilution was performed, multiply the displayed result by the multiplication factor.

Interferences

Glycol, all levels – negative interference

The following analytes were tested to the levels listed and found not to cause any interference up to the specified values:

Alkalinity, Total ($CaCO_3$) – 600 ppm
Azole (BT) – 5 ppm
Azole (TT) – 5 ppm
Bromine – 5 ppm
Chloride – 1000 ppm
Chlorine – 5 ppm
Copper – 5 ppm
Fluoride – 10 ppm
Hardness, Calcium ($CaCO_3$) – 1000 ppm
Iron, Ferric – 10 ppm
Iron, Ferrous – 10 ppm
Molybdate – 10 ppm
Nitrate – 2000 ppm
Phosphate – 20 ppm
Phosphonate – 20 ppm
Polymer – 20 ppm
Polyphosphate – 5 ppm
Silica – 150 ppm
Sulfate – 1000 ppm
Zinc – 5 ppm

(over)

Test Method

Ferrous Sulfate

Under acidic conditions nitrite reacts with iron producing a yellow-brown color proportional to the nitrite concentration in a sample.

Estimated Detection Limit

2 ppm NO_2^-

Precision

Using a single lot of reagent and a standard solution of 75 ppm NO_2^-, an individual analyst obtained a standard deviation with the instrument of ± 1 ppm NO_2^-.

Application

Industrial Water

Ordering Info

Reagent Pack

K-8021 Nitrite 150

Formulated for exclusive use with Taylor's TTi® Colorimeter.

Reagent Pack Components

R-8021A Nitrite 150 - Reagent A

R-8021B Nitrite 150 - Reagent B

Optional Reagents & Accessories

R-0833 DI Water

taylor

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