Colorimeter Series

Nitrite 150

Range(s): $0-150 \text{ ppm NO}_2$, $0-225 \text{ ppm NaNO}_2$



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.

 If the expected concentration is above 150 ppm NO₂⁻, 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 Wat	er Volume	Multiplication Factor
150-1500 ppm N	102 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 (NO₂ or NaNO₂) for expression of test results using ▲▼.
- 6. Rinse and fill 25 mm sample cell to 10 mL mark with sample; then cap.
- Insert sample cell into sample cell compartment. Align marks per User's Manual.
- 8. Select ZERO using **◆▶**; then press ENTER **⑤**. 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 **⑤**.
- 14. Select START using ◀▶; then press ENTER **③**. (A 2-minute [02:00] countdown will begin.) Immediately select AUTO using ◀▶; then press ENTER **⑤**.
- 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 (CaCO₃) – 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 (CaCO₃) – 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

Instruction #5048

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 NO₂

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 \pm 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

