

pH 9.5-11.5

Range(s): 9.5-11.5



Procedure

Note: Metal ions such as iron, copper, and calcium may interfere by forming turbidity at high pH levels. If the source water is turbid, filtration is recommended.

Note: Low conductivity water may cause inaccurate results.

1. Turn on the Colorimeter.
2. Select a test menu (ALL TESTS, RECENT TESTS, or FAVORITES) containing pH 9.5-11.5 using ◀▶.
3. Select pH 9.5-11.5 using ▲▼; then press ENTER ⊙.

4. Rinse and fill 25 mm sample cell to 10 mL mark with sample; then cap.
5. Insert sample cell into sample cell compartment. Align marks per User's Manual.
6. Select ZERO using ◀▶; then press ENTER ⊙. Zero will be displayed.
7. Remove sample cell from sample cell compartment; then remove cap.

8. Add 0.5 mL pH 9.5-11.5 - Reagent A; then cap and swirl to mix thoroughly.
9. Insert sample cell into sample cell compartment. Align marks.
10. Select READ using ◀▶; then press ENTER ⊙. The instrument will read the sample and the result will be displayed.

Interferences

Bromine > 10 ppm – positive interference

To remove interference: Add 1 drop of Thiosulfate N/10 (R-0697) to the sample cell prior to testing.

Chlorine > 5 ppm – positive interference

To remove interference: Add 1 drop of Thiosulfate N/10 (R-0697) to the sample cell prior to testing.

Turbidity, all levels – positive interference

To remove interference: Filter the sample prior to testing.

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

Azole (BT) – 10 ppm

Azole (TT) – 10 ppm

Alkalinity, Total (CaCO₃) – 1000 ppm

Chloride – 1000 ppm

Copper – 5 ppm*

Fluoride – 10 ppm

Hardness, Calcium (CaCO₃) – 1000 ppm*

Iron, Ferric – 10 ppm*

Iron, Ferrous – 10 ppm*

Molybdate – 50 ppm

Nitrate – 2000 ppm

Nitrite – 2000 ppm

Phosphonate – 20 ppm

Phosphate – 20 ppm

Polyphosphate – 5 ppm

Silica – 150 ppm

Sulfate – 1000 ppm

Zinc – 5 ppm

*Note: Sample turbidity was removed by filtration prior to testing.

Test Method

Mordant Orange

Mordant Orange has a working pH range of approximately 9.5 - 11.5. Mordant Orange is yellow at pH 9.5 and orange-red at pH 11.5.

Estimated Detection Limit

Not Applicable

Precision

Using a single lot of reagent and a standard solution of pH 10.0, an individual analyst obtained a standard deviation with the instrument of ± 0.2 pH units.

Application

Industrial Water

Ordering Info**Reagent Pack**

K-8047 pH 9.5-11.5

Formulated for exclusive use with Taylor's TTI[®] Colorimeter.

Reagent Pack Components

R-8047A pH 9.5-11.5 - Reagent A

Optional Reagents & Accessories

R-0833 DI Water

R-0697 Thiosulfate N/10

Filtration equipment:

6260 Syringe, 30 mL

6251-10 Filter, syringe 0.45 μ M, 13mm, 10-pack