

# Colorimeter Series

Instruction #5298

## pH 6.5-8.5

Range(s): 6.5-8.5



### 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.

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 6.5-8.5 using **◀▶**.

3. Select pH 6.5-8.5 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 6.5-8.5 - 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

Alkalinity, Total ( $\text{CaCO}_3$ ) < 60 ppm – negative interference

Alkalinity, Total ( $\text{CaCO}_3$ ) > 180 ppm – positive interference

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

Biguanide (as product) – 50 ppm

Bromine – 10 ppm

Chlorine – 10 ppm

Copper – 0.5 ppm

Cyanuric Acid – 200 ppm

Hardness, Calcium ( $\text{CaCO}_3$ ) – 1000 ppm

### Test Method

Phenol Red

Phenol red indicator is used to determine pH in the range of 6.5–8.5. A water sample at the low end will turn yellow when treated with phenol red. The color will gradually transition to a dark reddish-purple as the sample's pH increases to 8.5.

### Estimated Detection Limit

6.5 pH units

(over)

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### **Precision**

Using a single lot of reagent and a standard solution of pH 7.5, an individual analyst obtained a standard deviation with the instrument of  $\pm 0.1$  pH units.

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### **Application**

Potable Water, Recreational Water, and Wastewater

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### **Ordering Info**

#### **Reagent Pack**

K-8027    pH 6.5-8.5

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

#### **Reagent Pack Components**

R-8027A    pH 6.5-8.5 - Reagent A

