



# Orthophosphate Test Kit

PO-14 (147500)

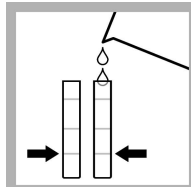
DOC326.97.00077

## Test preparation

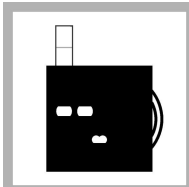
**CAUTION:** ⚠ *Review the Safety Data Sheets (MSDS/SDS) for the chemicals that are used. Use the recommended personal protective equipment.*

- Put the color disc on the center pin in the color comparator box (numbers to the front).
- Use sunlight or a lamp as a light source to find the color match with the color comparator box.
- Rinse the tubes with sample before the test. Rinse the tubes with deionized water after the test.
- If the color match is between two segments, use the value that is in the middle of the two segments.
- If the color disc becomes wet internally, pull apart the flat plastic sides to open the color disc. Remove the thin inner disc. Dry all parts with a soft cloth. Assemble when fully dry.
- To verify the test accuracy, use a standard solution as the sample.
- Read the results within 15 minutes after the reagents are added.

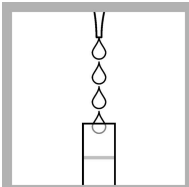
## Test procedure—Orthophosphate (0–4.4 mg/L PO<sub>4</sub>)



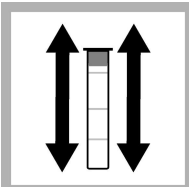
1. Fill two tubes to the first line (5 mL) with sample.



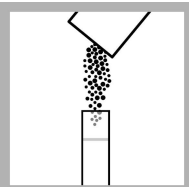
2. Put one tube into the left opening of the color comparator box.



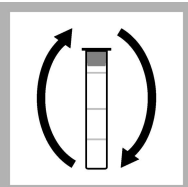
3. Add 4 drops of Ammonium Molybdate Reagent to the second tube.



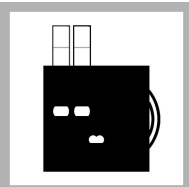
4. Put the stopper on the second tube. Shake to mix.



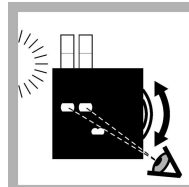
5. Add one Phosphate 2 Reagent Powder Pillow to the second tube.



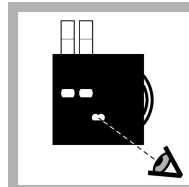
6. Put the stopper on the second tube. Invert to mix until the reagent is dissolved. A blue color develops.



7. Put the second tube into the color comparator box.

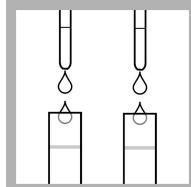


8. Hold the color comparator box in front of a light source. Turn the color disc to find the color match.

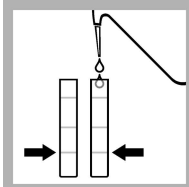


9. Read the result in mg/L in the scale window.

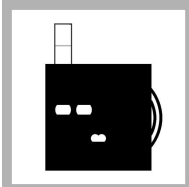
## Test procedure—Orthophosphate (0–44 mg/L PO<sub>4</sub>)



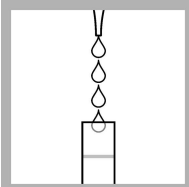
1. Use the dropper to add 0.5-mL of sample to two tubes.



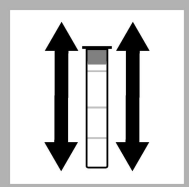
2. Fill the two tubes to the first line (5 mL) with deionized water.



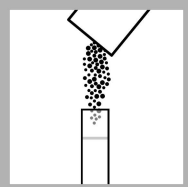
3. Put one tube into the left opening of the color comparator box.



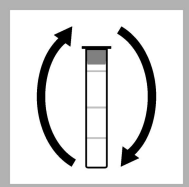
4. Add 4 drops of Ammonium Molybdate Reagent to the second tube.



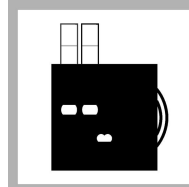
5. Put the stopper on the second tube. Shake to mix.



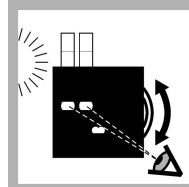
6. Add one Phosphate 2 Reagent Powder Pillow to the second tube.



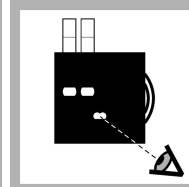
7. Put the stopper on the second tube. Invert to mix until the reagent is dissolved. A blue color develops.



8. Put the second tube into the color comparator box.



9. Hold the color comparator box in front of a light source. Turn the color disc to find the color match.



10. Read the value in the scale window. Multiply the value by 10 to get the result in mg/L.

## Replacement items

Description	Unit	Item no.
Ammonium Molybdate Reagent	100 mL MDB	11032H
Phosphate 2 Phosphate Reagent Powder Pillows	100/pkg	106199
Color disc, phosphate, 0–4.4 mg/L and 0–44 mg/L	each	9266600
Color comparator box	each	173200
Glass viewing tubes, 18 mm	6/pkg	173006
Stoppers for 18-mm glass tubes and AccuVac Ampuls	6/pkg	173106
Water, deionized	100 mL	27242
Dropper, glass, 0.5- and 1.0-mL marks	5/pkg	1419705

