Chlorine and pH Test Kit

CN-67 (1411100)

DOC326.98.00026

Test preparation

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

NOTICE: This product has not been evaluated to test for chlorine and chloramines in medical applications in the United States.

- 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.

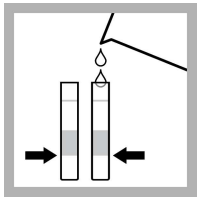
Chlorine

- Analyze samples immediately after collection.
- Undissolved reagent does not have an effect on test accuracy.
- For free chlorine, read the result immediately after the reagent is added to prevent interference from monochloramine. If the sample contains 3.0 mg/L monochloramine, the free chlorine result increases each minute by 0.1 mg/L.

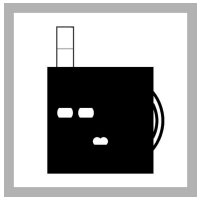
pH

- More than 15 mg/L chlorine interferes with the test for pH. To remove chlorine from the sample, add 1 drop of 0.1 N sodium thiosulfate solution to 25 mL of sample and mix. Use this dechlorinated sample in the test procedure. The sodium thiosulfate removes a maximum of 10 mg/L chlorine from the sample.

Test procedure—Free or total chlorine (0–3.4 mg/L Cl_2)

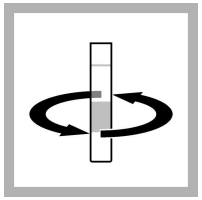


1. Fill two tubes to the first line (5 mL) with sample.



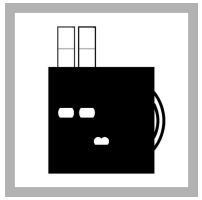
2. Put one tube into the left opening of the color comparator box.

3. Add one DPD (Free or Total) Chlorine Powder Pillow to the second tube.

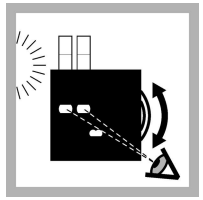


4. Swirl to mix. A pink color develops.

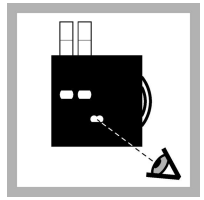
5. For free chlorine, read the result within 1 minute. For total chlorine, wait 3 minutes. Read the result within 6 minutes.



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



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



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

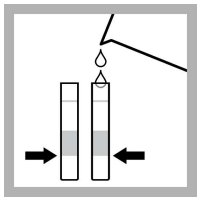
Replacement items

Description	Unit	Item no.
DPD Free Chlorine Reagent Powder Pillows, 5 mL	100/pkg	1407799
DPD Total Chlorine Reagent Powder Pillows, 5 mL	100/pkg	1407699
Phenol red pH indicator solution	100 mL MDB	21132
Color disc, DPD chlorine, 0–3.4 mg/L	each	990200
Color disc, pH, phenol red, 6.6–8.4 pH units	each	9261100
Color comparator box	each	173200
Plastic viewing tubes, 18 mm, with caps	4/pkg	4660004

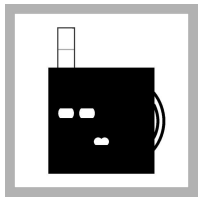
Optional items

Description	Unit	Item no.
Caps for plastic viewing tubes (4660004)	4/pkg	4660014
Glass viewing tubes, 18 mm	6/pkg	173006
Sodium thiosulfate, 0.1 N	100 mL MDB	32332
Stoppers for 18-mm glass tubes and AccuVac Ampuls	6/pkg	173106
Water, deionized	500 mL	27249

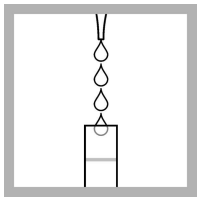
Test procedure—pH (6.6–8.4 pH units)



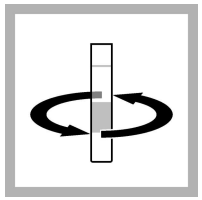
1. Fill two tubes to the first line (5 mL) with sample.



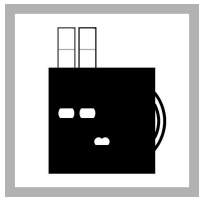
2. Put one tube into the left opening of the color comparator box.



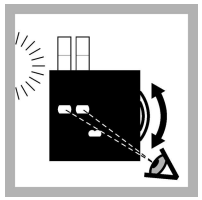
3. Add 4 drops of phenol red pH indicator solution to the second tube.



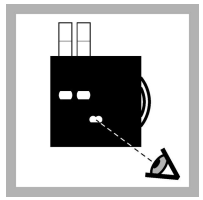
4. Swirl to mix.



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



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



7. Read the result in pH units in the scale window.

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