



Swimming Pool Test Kit

0 to 3.5 mg/L Cl₂ and 6.5 to 8.5 pH units
For test kit 1411100 (Model CN-67)

DOC326.98.00026

Additional copies available on www.hach.com

Test preparation

- Use sunlight or a lamp as a light source when matching colors with the color comparator.
- Rinse tubes with the sample water before testing. Rinse with deionized water after testing.
- Accuracy is not affected by undissolved powder.
- **Free chlorine test**—monochloramine causes a gradual drift to higher values. Read immediately after the addition of the free chlorine reagent. At 3.0 mg/L monochloramine, a 0.1 mg/L increase in the reading will be obtained.
- **pH test**—chlorine interferes at concentrations over 15 mg/L Cl₂. If the sample contains more than 15 mg/L Cl₂ add one drop of 0.1 N sodium thiosulfate solution (see [Optional items](#)) to 25 mL of sample and mix. Use 5 mL of this treated sample in the test procedure. The sodium thiosulfate compensates for an additional 10 mg/L Cl₂ in the sample.

CAUTION: Handle chemical standards and reagents carefully. Review Material Safety Data Sheets before handling chemicals.

Replacement items

Description	Unit	Catalog no.
Color Comparator Box	each	173200
Color Disc, DPD chlorine, 0–3.5 mg/L	990200 each	2198800
Color Disc, pH, phenol red, 6.5–8.5 pH units	9261100 each	141300
Color Viewing Tube, plastic, with cap	4/pkg	4660004
DPD Free Chlorine Reagent Powder Pillows	100/pkg	1407799
DPD Total Chlorine Reagent Powder Pillows	100/pkg	1407699
Phenol Red Indicator Solution	100 mL MDB ¹	21132

¹Marked Dropping Bottle

Optional items

Description	Unit	Catalog no.
Deionized Water	500 mL	27249
Sodium Thiosulfate Solution, 0.1 N	100 mL MDB ¹	32332

¹Marked Dropping Bottle

Free chlorine test procedure (0 to 3.5 mg/L)

1. Insert the DPD Chlorine Color Disc into the Color Comparator Box on the center pin with the lettering facing out.
2. Fill a tube to the first (5-mL) line with sample.
3. Insert the tube into the left opening of the comparator.
4. Fill another tube to the first (5-mL) line with sample.
5. Add one DPD Free Chlorine Reagent Powder Pillow to the second tube. Swirl to mix.

Note: Complete the test and read the result within one minute of adding the reagent.

6. Insert the second tube into the right opening of the comparator.
7. Hold the comparator so that a light source is directly behind the tubes. Rotate the color disc until the colors in the front windows match.
8. Read the result in mg/L chlorine in the scale window.

Total chlorine test procedure (0 to 3.5 mg/L)

1. Insert the DPD Chlorine Color Disc into the Color Comparator Box on the center pin with the lettering facing out.
2. Fill a tube to the first (5-mL) line with sample.
3. Insert the tube into the left opening of the comparator.
4. Fill another tube to the first (5-mL) line with sample.
5. Add one DPD Total Chlorine Reagent Powder Pillow to the second tube. Swirl to mix.

Note: Read the test result after three minutes but before six minutes of adding the reagent.

6. Insert the second tube into the right opening of the comparator.
7. Hold the comparator so that a light source is directly behind the tubes. Rotate the color disc until the colors in the front windows match.
8. Read the result in mg/L chlorine in the scale window.

pH test procedure (6.5 to 8.5 pH units)

1. Insert the pH Color Disc into the Color Comparator Box on the center pin with the lettering facing out.
2. Fill a tube to the first (5-mL) line with sample.
3. Insert the tube into the left opening of the comparator.
4. Fill another tube to the first (5-mL) line with sample.
5. Add 4 drops of Phenol Red Indicator Solution to the second tube. Swirl to mix.

6. Insert the second tube into the right opening of the comparator.
7. Hold the comparator so that a light source is directly behind the tubes. Rotate the color disc until the colors in the front windows match.
8. Read the result in pH units in the scale window.