DROP TEST CHLORINE BLEACH (1 drop = 0.05 or 0.5%)

COMPONENTS:

1 x 4026 Dipper Spoon, 2 g, plastic, white

1 x 5004 Instruction

1 x 6045 Syringe, 3 mL

1 x 9009 Pipet, Calibrated (0.5 & 1.0 mL) w/ yellow cap, plastic

1 x 9198Y Sample Tube, Graduated (25 mL) w/ cap, plastic

1 x R-0664-C Bleach Reagent #1, 2 oz

1 x R-0665S-II Bleach Reagent #2 (crystals), 50 g

1 x R-0666-C Bleach Reagent #3, 2 oz, DB

TO ORDER REPLACEMENT PARTS AND REAGENTS CALL TOLL-FREE 800-TEST KIT (800-837-8548).

PROCEDURE:

CAREFULLY READ AND FOLLOW PRECAUTIONS ON REAGENT LABELS. KEEP REAGENTS AWAY FROM CHILDREN.

NOTE: When dispensing reagents from dropper bottles, **always** hold bottle in a vertical position.

Chlorine Bleach Test

For Working Bleach Solutions (less than 5% chlorine)

- Using 3 mL syringe (#6045), add 5 mL (2 x 2.5 mL) water to be tested to 25 mL sample tube (#9198Y). Dilute to 10 mL mark with distilled, deionized, or tap water. Swirl to mix.
- Using 1.0 mL pipet (#9009), add 1 pipetful (as much as can be drawn up by means of the bulb) R-0664 Bleach Reagent #1. Swirl to mix.
- 3. Using 2 g dipper spoon (#4026), add 1 level dipper R-0665S Bleach Reagent #2. Swirl until dissolved. Sample will turn deep yellow (Fig. 1) or brown (Fig. 2) if chlorine is present.

- Add R-0666 Bleach Reagent #3 dropwise, swirling and counting after each drop, until color changes from brown to colorless.
- 5. Multiply drops of R-0666 Bleach Reagent #3 by 0.05. Record as percent (%) available chlorine (Cl_a).

For Concentrated Bleach Solutions (5% to 15% chlorine)

- Using 3 mL syringe (#6045), add 0.5 mL concentrated bleach solution to 25 mL sample tube (#9198Y). Dilute to 10 mL mark with distilled, deionized, or tap water. Swirl to mix.
- Using 1.0 mL pipet (#9009), add 1 pipetful (as much as can be drawn up by means of the bulb) R-0664 Bleach Reagent #1. Swirl to mix.
- 3. Using 2 g dipper spoon (#4026), add 2 level dippers R-0665S Bleach Reagent #2. Swirl until dissolved. Sample will turn deep yellow (Fig. 1) or brown (Fig. 2) if chlorine is present.
- 4. Add R-0666 Bleach Reagent #3 dropwise, swirling and counting after each drop, until color changes from brown to colorless.
- 5. Multiply drops of R-0666 Bleach Reagent #3 by 0.5. Record as percent (%) available chlorine (Cl₂).

NOTE: Chlorine concentration is determined as grams per 100 mL (g/100mL). In weak solutions (less than 5%) this is approximately equal to percent (%). In concentrated solutions (5-15%) divide the answer in Step 5 by the specific gravity. Record as percent (%) by weight available chlorine (Cl.).

For example: If 15% available chlorine is calculated in Step 5 and the specific gravity is 1.3, actual percent available chlorine is 11.5% by weight.





Fig. 1



Fig. 2