## **DROP TEST** FREE & COMBINED CHLORINE (1 drop = 0.2 or 0.5 ppm)

## COMPONENTS:

1 x 4044 Dipper Spoon, 0.15 g, plastic, white

1 x 5016 Instruction

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

1 x R-0765-II Potassium Iodide Crystals, 50 g

1 x R-0870-I DPD Powder, 10 q

1 x R-0871-C FAS-DPD Titrating Reagent (Chlorine), 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.

## Free & Combined Chlorine Tests

1. Rinse and fill 25 mL sample tube (#9198) to desired mark with water to be tested.

NOTE: For 1 drop = 0.2 ppm, use 25 mL sample. For 1 drop = 0.5 ppm, use 10 mL sample.

2. Add 2 dippers R-0870 DPD Powder. Swirl until dissolved. Sample will turn pink (Fig. 1) if free chlorine is present.

NOTE: If pink color disappears, add R-0870 DPD Powder until color turns pink.

3. Add R-0871 FAS-DPD Titrating Reagent (Chlorine) dropwise, swirling and counting after each drop, until color changes from pink to colorless.

- 4. Multiply drops in Step 3 by equivalence (Step 1). Record as parts per million (ppm) free chlorine (Cl<sub>2</sub>).
- 5. Using 0.15 a dipper spoon (#4044), add 1 heaping dipper R-0765 Potassium lodide Crystals. Swirl until dissolved. Sample will turn pink (Fig. 1) if combined chlorine is present.
- 6. Add R-0871 FAS-DPD Titrating Reagent (Chlorine) dropwise, swirling and counting after each drop, until color changes from pink to colorless.
- 7. Multiply drops in Step 6 by drop equivalence (Step 1). Record as parts per million (ppm) combined chlorine (Cl<sub>o</sub>).



Fig. 1

