

*Guidebook (#2004B) amplifies these instructions and should be read to use this product properly.*

### **POOL & SPA WATER TESTS**

1. Keep test kit out of reach of children.
2. Read precautions on all labels.

3. Store test kit in cool, dark place.
4. Replace reagents once each year.
5. Do not dispose of solutions in pool or spa.

6. Rinse tubes before and after each test.
7. Obtain samples 18" (45 cm) below water surface.
8. Hold dropper bottle vertically when dispensing reagent.

Instr. #5145

#### **Total Bromine Test**

1. Rinse and fill large comparator tube to desired mark with water to be tested.  
NOTE: For 1 drop = 0.5 ppm, use 25 mL sample.  
For 1 drop = 1.25 ppm, use 10 mL sample.
2. Add 2 dippers R-0870. Swirl until dissolved. If total bromine is present, sample will turn pink.  
NOTE: If pink color disappears, add R-0870 until color turns pink.
3. Add R-0872 dropwise, swirling and counting after each drop, until color changes from pink to colorless.
4. Multiply drops in Step 3 by drop equivalence (Step 1). Record as parts per million (ppm) total bromine (Br<sub>2</sub>).

#### **pH Test**

1. Rinse and fill large comparator tube to 44 mL mark with water to be tested.
2. Add 5 drops R-0004. Cap and invert to mix.
3. Match color with color standard. Record as pH units and save sample if pH needs adjustment.  
If sample color is between two values, pH is average of the two. To LOWER pH: See Acid Demand Test. To RAISE pH: See Base Demand Test.

#### **Acid Demand Test**

1. Use treated sample from pH test.
2. Add R-0005 dropwise. After each drop, count, invert to mix, and compare with color standards until desired pH is matched. See Treatment Tables to continue.

#### **Base Demand Test**

1. Use treated sample from pH test.
2. Add R-0006 dropwise. After each drop, count, invert to mix, and compare with color standards until desired pH is matched. See Treatment Tables to continue.

#### **Total Alkalinity (TA) Test**

1. Rinse and fill large comparator tube to 25 mL mark with water to be tested.\*
  2. Add 2 drops R-0007. Swirl to mix.
  3. Add 5 drops R-0008. Swirl to mix. Sample will turn green.
  4. Add R-0009 dropwise, swirling and counting after each drop, until color changes from green to red.
  5. Multiply drops in Step 4 by 10. Record as parts per million (ppm) total alkalinity as calcium carbonate (CaCO<sub>3</sub>).
- \*When high TA is anticipated:* Use 10 mL sample, 1 drop R-0007, 3 drops R-0008, and multiply drops in Step 4 by 25.

#### **Calcium Hardness (CH) Test**

1. Rinse and fill large comparator tube to 25 mL mark with water to be tested.\*
  2. Add 20 drops R-0010. Swirl to mix.
  3. Add 5 drops R-0011L. Swirl to mix. If calcium hardness is present, sample will turn red.
  4. Add R-0012 dropwise, swirling and counting after each drop, until color changes from red to blue.
  5. Multiply drops in Step 4 by 10. Record as parts per million (ppm) calcium hardness as calcium carbonate (CaCO<sub>3</sub>).
- \*When high CH is anticipated:* Use 10 mL sample, 10 drops R-0010, 3 drops R-0011L, and multiply drops in Step 4 by 25.

