DROP TEST TOTAL HARDNESS (1 drop = 2 or 10 ppm)

COMPONENTS:

- 1 x 5093 Instruction 1 x 9198B Sample Tube, Graduated (25 mL) w/ cap & blue dot, plastic 1 x P. 0610P. C. Hordneoe Buffer 2 or w/ blue con DP
- 1 x R-0619B-C Hardness Buffer, 2 oz w/ blue cáp, DB
- 1 x R-0620B-I Hardness Indicator Powder, 10 g w/ blue dot
- 1 x R-0683-C Hardness Reagent, 2 oz, DB
- 1 x R-0806-C Hardness Reagent, 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.

Total Hardness Test

For 1 drop = 2 ppm Calcium Carbonate

- 1. Rinse and fill 25 mL sample tube (#9198B) to 25 mL mark with water to be tested.
- NOTE: For results in grains per gallon (gpg), fill to 14.6 mL mark.
- 2. Add 5 drops R-0619B Hardness Buffer. Swirl to mix.
- 3. Add 1 dipper R-0620B Hardness Indicator Powder. Swirl until dissolved. Sample will turn red (Fig. 1) if hardness is present.
- 4. Add R-0806 Hardness Reagent dropwise, swirling and counting after each drop, until color changes from red to blue (Fig. 2).
- 5. Multiply drops of R-0806 Hardness Reagent by 2. Record as parts per million (ppm) total hardness as calcium carbonate (CaCO₃).

NOTE: For 14.6 mL sample, multiply drops of R-0806 Hardness Reagent by 0.2. Record as grains per gallon (gpg) total hardness as calcium carbonate (CaCO₃).

For 1 drop = 10 ppm Calcium Carbonate

- 1. Rinse and fill 25 mL sample tube (#9198B) to 25 mL mark with water to be tested.
- NOTE: For results in grains per gallon (gpg), fill to 14.6 mL mark.
- 2. Add 5 drops R-0619B Hardness Buffer. Swirl to mix.
- 3. Add 1 dipper R-0620B Hardness Indicator Powder. Swirl until dissolved. Sample will turn red (Fig. 1) if hardness is present.
- 4. Add R-0683 Hardness Reagent dropwise, swirling and counting after each drop, until color changes from red to blue (Fig. 2).
- 5. Multiply drops of R-0683 Hardness Reagent by 10. Record as parts per million (ppm) total hardness as calcium carbonate (CaCO₃).
- NOTE: For 14.6 mL sample, record drops of R-0683 Hardness Reagent as grains per gallon (gpg) total hardness as calcium carbonate (CaCO₃).



Instr. #5093





