850

900

950

1000

## DROP TEST

# P ALKALINITY (1 drop = 85 ppm OR 1 drop = 50 ppm) CHLORINE (10-200 ppm) TOTAL HARDNESS

# QUATERNARY AMMONIUM COMPOUND (QAC) (100-400 ppm)

#### COMPONENTS:

1 x 5049	Instruction

1 x 6034 Test Paper, chlorine 1 x 6433 Test Paper, QAC (Quat)

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

1 x R-0638G Phenolphthalein Indicator, DB 1 x R-0683 Hardness Reagent, DB

1 x R-0083 Hardness Reagent, DE 1 x R-0736G Sulfuric Acid .6N. DB

1 x R-0854 Total Hardness Reagent, 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.

# **Total Hardness**

- 1. Rinse and fill sample tube (#9198) to 14.6 mL mark with water to be tested.
- 2.Add 5 drops R-0854 Total Hardness Reagent. Swirl to mix. Sample will turn wine red if total hardness is present.
- 3.Add R-0683 Hardness Reagent dropwise, swirling and counting after each drop, until color changes from wine red to blue. Always hold bottle in vertical position.
- 4. Record drops of R-0683 Hardness Reagent as grains per gallon (gpg) total hardness as calcium carbonate ( $CaCO_3$ ).

14.6	mL Sample	
Alka	linity Chart	

	7 1111 1011111	,	
# of drops	ppm alkalinity	# of drops	ppm alkalinity
1	85	11	935
2	170	12	1020
3	255	13	1105
4	340	14	1190
5	425	15	1275
6	510	16	1360
7	595	17	1445
8	680	18	1530
9	765	19	1615
10	850	20	1700

Alkalinity Chart						
# of drops	ppm alkalinity	# of drops	ppm alkalinity			
1	50	11	550			
2	100	12	600			
3	150	13	650			
4	200	14	700			
5	250	15	750			
6	300	16	800			

17

18

19

20

350

400

450

500

25 mL Sample

### P Alkalinity

- 1. Rinse and fill sample tube (#9198) to 14.6 mL OR 25 mL mark with water to be tested.
- 2.Add 3 drops R-0638G Phenolphthalein Indicator. Swirl to mix. Sample should turn pink.

10

- 3.Add R-0736G Sulfuric Acid .6N dropwise, swirling and counting after each drop, until color changes from pink to colorless. Always hold bottle in vertical position.
- 4. Refer to Alkalinity Chart (at right) to determine ppm detergent alkalinity as calcium carbonate (CaCO<sub>3</sub>).

NOTE: Chlorine and Quaternary Ammonium Compound instructions can be found on their test paper packaging.

