

# DROP TEST

## P/T ALKALINITY (Laundry Washroom, 1 drop = 10 or 50 ppm)

Instr. #5013

### COMPONENTS:

1 x 5013	Instruction
1 x 9198G	Sample Tube, Graduated (25 mL) w/ cap & green dot, plastic
1 x R-0638G-C	Phenolphthalein Indicator, 2 oz w/ green cap, DB
1 x R-0645-C	Total Alkalinity Indicator, 2 oz, DB
1 x R-0687G-C	Sulfuric Acid .12N, 2 oz w/ green cap, DB
1 x R-0736G-C	Sulfuric Acid .6N, 2 oz w/ green cap, 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.

### P/T Alkalinity Test

#### Water Supply & Rinses

1. Rinse and fill 25 mL sample tube (#9198G) 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 3 drops R-0638G Phenolphthalein Indicator. Swirl to mix. Sample will turn pink (Fig. 1) if P alkalinity is present—proceed to Step 3. If sample is colorless, proceed to Step 4.

3. Add R-0687G Sulfuric Acid .12N dropwise, swirling and counting after each drop, until color just changes from pink to colorless. Record drops as P reading.

4. Add 5 drops R-0645 Total Alkalinity Indicator. Swirl to mix. Sample will turn green (Fig. 2).

5. Add R-0687G Sulfuric Acid .12N dropwise, swirling and counting after each drop, until color changes from green to red (Fig. 3). Record total drops (Steps 3 & 5) as T reading.

6. Multiply P reading by 10. Record as parts per million (ppm) P alkalinity as calcium carbonate ( $\text{CaCO}_3$ ). Multiply T reading by 10. Record as ppm T alkalinity as  $\text{CaCO}_3$ .

NOTE: For 14.6 mL sample, record P reading as grains per gallon (gpg) P alkalinity as calcium carbonate ( $\text{CaCO}_3$ ). Record T reading as gpg T alkalinity as  $\text{CaCO}_3$ .

### Breaks & Suds

1. Rinse and fill 25 mL sample tube (#9198G) 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 3 drops R-0638G Phenolphthalein Indicator. Swirl to mix. Sample will turn pink (Fig. 4) if P alkalinity is present—proceed to Step 3. If sample is colorless, proceed to Step 4.

(OVER)



Fig. 1



Fig. 2



Fig. 3

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3. Add R-0736G Sulfuric Acid .6N dropwise, swirling and counting after each drop, until color just changes from pink to colorless. Record drops as P reading.
4. Add 5 drops R-0645 Total Alkalinity Indicator. Swirl to mix. Sample will turn green (Fig. 5).
5. Add R-0736G Sulfuric Acid .6N dropwise, swirling and counting after each drop, until color changes from green to red (Fig. 6). Record total drops (Steps 3 & 5) as T reading.
6. Multiply P reading by 50. Record as parts per million (ppm) P alkalinity as calcium carbonate ( $\text{CaCO}_3$ ). Multiply T reading by 50. Record as ppm T alkalinity as  $\text{CaCO}_3$ .

NOTE: For 14.6 mL sample, multiply P reading by 5. Record as grains per gallon (gpg) P alkalinity as calcium carbonate ( $\text{CaCO}_3$ ). Multiply T reading by 5. Record as gpg T alkalinity as  $\text{CaCO}_3$ .



Fig. 4



Fig. 5



Fig. 6



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