

# DROP COUNT, 1 DROP = 10, 25, 50 ppm CODE 7240-02

QUANTITY	CONTENTS	CODE
15 mL	*Phenolphthalein Indicator, 0.5%	*2258-E
15 mL	Total Alkalinity Indicator	2786-E
2 x 30 mL	*Sulfuric Acid, 0.12N	*7748WT-G
1	Test Tube, 5-10-25 mL, plastic, w/cap	0715

<sup>\*</sup>WARNING: Reagents marked with an \* are considered to be potential health hazards. To view or print a Safety Data Sheet (SDS) for these reagents go to www.lamotte.com. Search for the four digit reagent code number listed on the reagent label, in the contents list or in the test procedures. Omit any letter that follows or precedes the four digit code number. For example, if the code is 4450WT-H, search 4450. To obtain a printed copy, contact LaMotte by email, phone or fax.

Emergency information for all LaMotte reagents is available from Chem-Tel: (US, 1-800-255-3924) (International, call collect, 813-248-0585).

NOTE: This test allows the analyst to use different sample volumes to vary equivalencies. Select the appropriate sample volume from the table below and add reagents as specified.

SAMPLE SIZE	EQUIVALENCE
25 mL	1  drop = 10  ppm
10 mL	1  drop = 25  ppm
5 mL	1  drop = 50  ppm

#### **PROCEDURE**

## PHENOLPHTHALEIN (P) ALKALINITY

- 1. Rinse sample tube with sample water. Fill with desired sample size selected from table on page 1.
- 2. Add \*Phenolphthalein Indicator, 0.5% (2258) as follows:

25 mL sample 2 drops 10 mL sample 1 drop 5 mL sample 1 drop

Mix. Solution will turn pink if Active Alkalinity is present. If solution is colorless, P Alkalinity is zero; proceed to Step 5.

- 3. While gently swirling tube, add \*Sulfuric Acid, 0.12N (7748WT), one drop at a time, until pink color disappears. Count the number of drops added. Hold bottle vertically.
- 4. Multiply number of drops used in Step 3 as follows.

25 mL sample multiply by 10 10 mL sample multiply by 25 5 mL sample multiply by 50

Record as ppm P Alkalinity as CaCO<sub>3</sub>.

DO NOT DISCARD SAMPLE IF TESTING FOR TOTAL (T) ALKALINITY.

### TOTAL (T) ALKALINITY

5. To sample from Step 4 add Total Alkalinity Indicator (2786) as follows:

25 mL sample 3 drops 10 mL sample 2 drops 5 mL sample 2 drops

Mix. Solution will turn green.

- 6. While gently swirling tube, add \*Sulfuric Acid, 0.12N (7748WT), one drop at a time, until green color changes to red. Count the number of drops added. Hold bottle vertically.
- 7. Multiply number of drops used in Step 6 as follows:

25 mL sample multiply by 10 10 mL sample multiply by 25 5 mL sample multiply by 50

Add this result to the P Alkalinity from Step 4. Record as ppm T Alkalinity as CaCO<sub>3</sub>.

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