

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 |

^{*}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 CaCO₃.

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 multiply by 25 mL sample multiply by 50

Add this result to the P Alkalinity from Step 4. Record as ppm T Alkalinity as CaCO₃.

LaMOTTE COMPANY

Helping People Solve Analytical Challenges

802 Washington Ave · Chestertown · Maryland · 21620 · USA 800-344-3100 · 410-778-3100 (Outside U.S.A.) · Fax 410-778-6394 Visit us on the web at www.lamotte.com