

# P ALKALINITY, CHLORINE, & HARDNESS WAREWASH KIT

CODE 7250-02

QUANTITY	CONTENTS	CODE
30 mL	*Hardness Reagent #5	*4483-G
30 mL	*Hardness Reagent #6 Solution	*4485-G
60 mL	Hardness Titrant #10	2783WT-H
30 mL	*Phenolphthalein Indicator, 1%	*2246-G
60 mL	*Hydrochloric Acid, 0.1N	*6323WT-H
60 mL	*Hydrochloric Acid, 1.0N	*6130WT-H
1	Chlorine Test Papers	4250-BJ
1	Test Tube, ALK & HARD, plastic, w/cap	0715-2

<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).

To order individual reagents or test kit components, use the specified code number.

### **PROCEDURE**

# **HARDNESS**

NOTE: 1 gpg = 17.1 ppm

- 1. Fill test tube (0715-2) to HARD (GPG) line with sample water.
- 2. Add 5 drops of \*Hardness Reagent #5 (4483). Cap and mix.
- 3. Add 5 drops of \*Hardness Reagent #6 (4485). Cap and mix. Solution will turn red. If the solution turns blue, no measurable amount of hardness is present.
- 4. While gently swirling tube, add Hardness Titrant #10 (2783WT), one drop at a time, until red color changes to blue. Count the number of drops added. Hold bottle vertically.
- 5. Record the number of drops used in Step 4. Record as gpg Hardness as CaCO<sub>3</sub>.

## ALKALINITY

This test should be run on the supply tap water first and then on the rinse water to compare the two sets of Alkalinity. If the rinse water is within 30 ppm of the tap water, the rinsing is sufficient. If the difference is greater than 30 ppm additional rinsing is needed.

- 1. Fill a test tube (0715-2) to ALK line with sample water.
- 2. Add 3 drops of \*Phenolphthalein Indicator, 1% (2246). If solution turns red, active alkali is present; proceed to Step 3. If no red color appears, Active Alkalinity equals 0.
- 3. While gently swirling tube, add \*Hydrochloric Acid, 0.1N (6323WT), one drop at a time, until red color disappears. Count the number of drops added. Hold bottle vertically.
- 4. Multiply the number of drops used in Step 3 by 10. Record as ppm Active Alkalinity as CaCO<sub>3</sub>.

# Number of Drops x 10 = ppm Active Alkalinity

NOTE: Procedure for 1 Drop = 100 ppm Active Alkalinity is same as above but using \*Hydrochloric Acid, 1.0N (6130WT) in Step 3.

### **CHLORINE**

Follow instructions on Chlorine Test Papers.

### LaMOTTE COMPANY

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