

# 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

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

\*Reagent is a potential health hazard. **READ SDS:** lamotte.com  
**Emergency information:**  
Chem-Tel USA 1-800-255-3924  
Int'l, call collect, 813-248-0585



## 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  $\text{CaCO}_3$ .

### 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  $\text{CaCO}_3$ .

**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.

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