



## Residential 4-Way Test Kit • Code 7018-01

When taking a reading, hold DipCell comparator so that you are looking above the horizon with sunlight coming over your shoulder.

Free Chlorine Cl <sub>2</sub>	<ol style="list-style-type: none"><li>1 Fill DipCell (3375) to the fill line with sample.</li><li>2 Add 5 drops of DPD 1A Free Chlorine Reagent (P-6740) and 5 drops of *DPD 1 B Free Chlorine Reagent (P-6741). Cap and invert to mix.</li><li>3 Match sample color to a color standard. Record result as ppm Free Chlorine.</li></ol>
Total Chlorine Cl <sub>2</sub>	<ol style="list-style-type: none"><li>1 Remove cap and add 5 drops of *DPD 3 Total Chlorine Reagent (P-6743).</li><li>2 Cap and invert to mix.</li><li>3 Match sample color to a color standard. Record result as ppm Total Chlorine.</li></ol> <p>NOTE: Total Chlorine - Free Chlorine = Combined Chlorine</p>
Bromine Br	<ol style="list-style-type: none"><li>1 Multiply Free Chlorine results above by 2.25.</li></ol>
pH	<ol style="list-style-type: none"><li>1 If DipCell is empty, fill to line with sample.</li><li>2 Add 5 drops of *pH Indicator (P-7026). Cap and invert to mix</li><li>3 Match sample color to a color standard. Record as pH. If pH is not within desired range, retain sample for Acid Demand test.</li></ol>
Acid	<ol style="list-style-type: none"><li>1 Remove cap from DipCell.</li><li>2 If pH is HIGH: Add *Acid Demand Reagent (P-6068) one drop at a time, and mix until color matches desired pH. See chart for dosage recommendation.</li></ol>
Total Alkalinity Alk	<ol style="list-style-type: none"><li>1 Fill tube (0929) to the upper X10 line with sample.</li><li>2 Add 5 drops of *Alk 1 (P-7028). Swirl to mix.</li><li>3 Add *Alk Titrant (P-6111) dropwise while swirling until color changes from blue-green to RED. Record total drops. Each drop equals 10 ppm Total Alkalinity. NOTE: For HIGH range tests: Fill to X20 line in Step 1. Each drop = 20 ppm Alkalinity.</li></ol>

\*Potential Health Hazard: Read MSDS at [www.lamotte.com](http://www.lamotte.com).

# DipCell User's Tips

## SAMPLING

Submerge the DipCell to elbow length (18") below water surface. Remove and shake out excess water to meet the FILL line. (Use same method for other tests.)

## ADDING REAGENTS

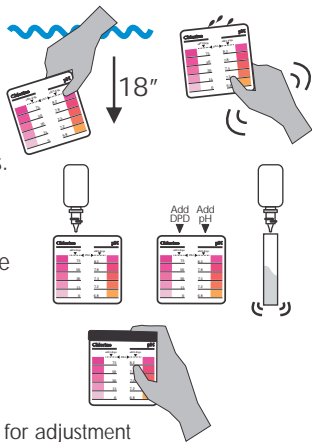
Always hold reagents upright to add uniform drop sizes.

After sampling add DPD reagents to the DipCell chamber to the right of the chlorine colors. Add pH Indicator to the chamber to the left of the pH colors.

When using the Alkalinity titrant, add one drop at a time and swirl solution in tube after each drop. Endpoint color should remain for several seconds after swirling.

## READING RESULTS

After capping and mixing the reagents within the DipCell, hold the comparator above the horizon with the light source behind your shoulder.



## Acid Demand Chart

Muriatic Acid required for adjustment  
Shaded area = Fluid Ounces / Unshaded area = Pints

Gallons in Pool	DROPS OF ACID TITRANT ADDED									
	1	2	3	4	5	6	7	8	9	10
500	0.9	1.8	2.7	3.6	4.0	5.5	6.4	7.3	8.2	9.1
1,000	1.8	3.6	5.5	7.3	9.1	10.9	12.8	14.6	1.0	1.1
5,000	9.1	1.1	1.7	2.3	2.8	3.4	4.0	4.6	5.1	5.7
10,000	1.1	2.3	3.4	4.6	5.7	6.8	8.0	9.1	10.3	11.4
20,000	2.3	4.6	6.8	9.1	11.4	13.7	16.0	18.2	20.5	22.8
50,000	5.7	11.4	17.1	22.8	28.5	34.2	39.9	45.6	51.3	57.0