

# ALKALINITY TEST KIT

Model AL-TA

Cat. No. 23145

The HACH logo is centered within a thick black horizontal bar. The logo itself consists of the word "HACH" in a bold, italicized, sans-serif font, enclosed within a white oval that has a black border. The oval is slightly tilted, giving it a three-dimensional appearance.

**HACH**

1. Fill the plastic measuring tube level full with the water to be tested. Pour the contents of the tube into the mixing bottle
2. Use the clippers to open one Bromcresol Green-Methyl Red Indicator Powder Pillow. Add the contents of the pillow to the mixing bottle. Swirl as shown in Figure 1.
3. Add Sulfuric Acid Standard Solution drop-by-drop to the mixing bottle. Swirl the bottle constantly while adding the drops. Count each drop as it is added. Continue adding drops until the color changes from blue-green to pink.
- 4A. The total (methyl orange) alkalinity of the water in grains per gallon as calcium carbonate ( $\text{CaCO}_3$ ) is found by multiplying the total number of drops of Sulfuric Acid Standard Solution used by 22.5. To express the alkalinity in milligrams per liter as calcium carbonate, multiply the number of drops by 385. (Table 1 gives the alkalinity for various drop counts).

***WARNING: The chemicals in this kit may be hazardous to the health and safety of the user if inappropriately handled. Please read all warnings before performing the test and use appropriate safety equipment.***

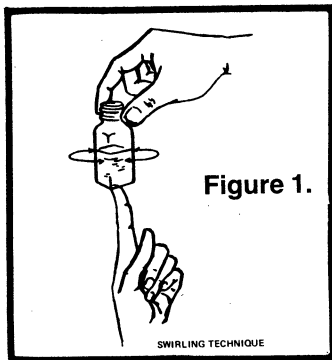
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TABLE 1

<u>Number of Drops</u>	<u>Alkalinity (as CaCO<sub>3</sub>)</u>	
	<u>Grains/Gallon</u>	<u>Milligram/Liter</u>
1	23	385
2	45	770
3	68	1155
4	90	1540
5	113	1925
6	135	2310
7	158	2695
8	180	3080
9	203	3465
10	225	3850
11	250	4235
12	270	4620
13	293	5005
14	315	5390
15	338	5775
16	360	6160
17	383	6545
18	405	6930
19	428	7315
20	450	7700
21	473	8085
22	495	8470

- 4B. For proprietary cleaning, cooling or lubricating products, multiply the number of drops by the factor supplied by your vendor.



## REPLACEMENTS

Cat. No.	Description	Unit
943-99	Bromcresol Green-Methyl Red Indicator Powder Pillows.....	pkg/100
2121-37	Sulfuric Acid Standard Solution 0.500 <i>N</i> .....	118 mL (4 oz) MDB*
2327-06	Bottle, mixing.....	pkg/6
936-00	Clippers.....	each
438-00	Measuring Tube, plastic, 5.83 mL.....	each

\*Marked Dropping Bottle

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