



TREATING SOLUTIONS EVERY DAY

## ALKALINITY TEST ("P" and "M" Alkalinity)

<b>REAGENT/EQUIPMENT:</b>	R-638-C	Phenolphthalein Indicator
	R-627S-10-F	Sulfuric Acid, 0.10/N
	R-645-C	BCG/MR Total Alkalinity Indicator
	#0847-24	10mL Burette
	#9198	25mL Vial

### PROCEDURE:

1. If sample is turbid or contains visible suspended solids, filter through a medium grade filter paper.
2. Discard the first 10mL of filtrate. Measure 50mL of clear sample into a porcelain casserole.
3. Add 4 or 5 drops of **Phenolphthalein Indicator**. If there is no color change, record "P" alkalinity as zero, and pass on to step 5. If the solution turns pink or red, proceed with step 4.
4. Titrate with **0.10/N Sulfuric Acid** until the pink color just disappears. Record the burette reading as "P" alkalinity. Do not refill the burette!
5. Add 4 or 5 drops of **Total Alkalinity Indicator**. The solution turns green. Continue titration from the point where the Phenolphthalein end-point appeared, until the sample develops a red color. Note the end-point can be determined by initially adding a few drops to sample without stirring and observing the local color change. Record burette reading for Total Alkalinity Calculation.

**CALCULATION:** (mL 0.1/N acid) X 100 = ppm alkalinity as CaCO<sub>3</sub>

## CHEM-TECH INTERNATIONAL, INC.

400 TERNES DRIVE • RANDOM LAKE, WISCONSIN 53075-1632 • WWW.CLEANERH<sub>2</sub>O.COM  
PHONE 920.994.2299 • TOLL FREE 866.99.USE.CT OR 866.998.7328 • FAX 920.994.4399