

Total Alkalinity Titrets® 100 - 1000 ppm

Test Procedure

1. Fill the sample cup to the 20 mL mark with your sample (fig. 1).

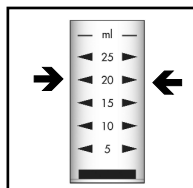


Figure 1

2. Add 6 drops of A-9800 Activator Solution to the sample (fig. 2). Stir briefly to mix the contents of the sample cup.

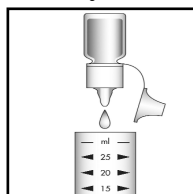


Figure 2

NOTE: The sample should now be green. If it is pink, total alkalinity is 0 ppm. There is no need to continue.

3. Gently snap the tip of the glass ampoule at the black snap ring (fig. 3).

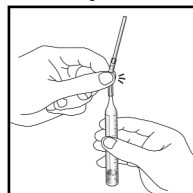


Figure 3

NOTE: When the tip is snapped, the flexible tubing will remain in place on the tapered neck of the ampoule.

4. Lift the control bar and insert the Titret assembly into the Titrettor (fig. 4).

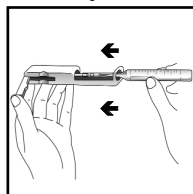


Figure 4

NOTE: The rigid sample pipe will extend approximately 1.5 inches beyond the body of the Titrettor.

5. Hold the Titrettor with the sample pipe in the sample and press the control bar firmly, but briefly, to pull in a small amount of sample. The contents will turn a **PINK** color (fig. 5).

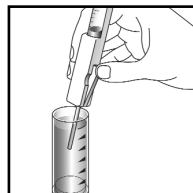


Figure 5

NOTE: NEVER press the control bar unless the sample pipe is immersed in the sample.

6. With the sample pipe in the sample, press the control bar again briefly to allow another small amount of sample to be drawn into the ampoule.

7. After each addition, rock the entire assembly to mix the contents of the ampoule. Watch for a color change from **PINK to BRIGHT GREEN**.

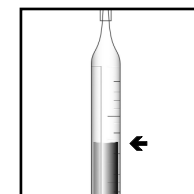


Figure 6

8. Repeat steps 6 and 7 until a permanent color change occurs.

9. When the color of the liquid in the ampoule changes to **GREEN**, remove the ampoule from the Titrettor. Hold the ampoule in a vertical position and read the scale opposite the liquid level (fig. 6). Results are expressed in ppm (mg/Liter) calcium carbonate (CaCO₃).

Test Method

The Total Alkalinity Titrets®¹ test method employs an acid titrant and a mixed pH indicator.^{2,3,4} Results are expressed as calcium carbonate (CaCO₃).

1. Titrets is a registered trademark of CHEMetrics, Inc. U.S. Patent No. 4,332,769
2. ASTM D 1067 - 02, Acidity or Alkalinity of Water, Test Method B
3. APHA Standard Methods, 20th ed., p. 2-27, method 2320 B (1998)
4. EPA Methods for Chemical Analysis of Water and Wastes, method 310.1 (1983)

Safety Information

Read MSDS before performing this test procedure. Wear safety glasses.

Reorder Information

Cat. No.

Test Kit, complete **K-9820**

Kits are available for total alkalinity analysis at other levels.

CHEMetrics, Inc., 4295 Catlett Road, Calverton, VA 20138-0214 U.S.A.
Phone: (800) 356-3072; Fax: (540) 788-4856; E-Mail: orders@chemetrics.com
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