

# Chloride Titrets®

## 100 - 1000 ppm

### Test Procedure

1. Fill the sample cup to the 25 mL mark with your sample (fig. 1).

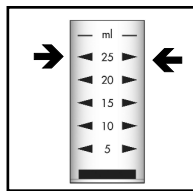


Figure 1

2. Gently snap the tip of the glass ampoule at the white ring nearest the end of the tapered tip (fig. 2).

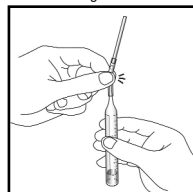


Figure 2

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

3. Lift the control bar and insert the Titret assembly into the Titrettor (fig. 3).

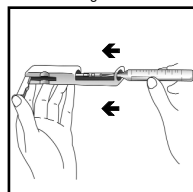


Figure 3

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

4. 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 **TURBID BROWNISH ORANGE** color (fig. 4).

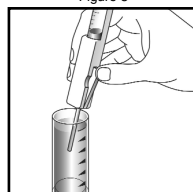


Figure 4

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

5. 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.

6. After each addition, rock the entire assembly to mix the contents of the ampoule. Watch for a color change from **BROWNISH ORANGE to YELLOW**.

7. Repeat steps 5 and 6 until a permanent color change occurs.

8. When the color of the liquid in the ampoule changes to **YELLOW**, remove the ampoule from the Titrettor. Hold the ampoule in a vertical position and read the scale opposite the liquid level to obtain test results in ppm chloride as Cl<sup>-</sup> (fig. 5).

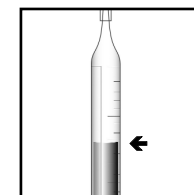


Figure 5

### Test Method

The Chloride Titrets®<sup>1</sup> test employs the Argentometric method<sup>2,3</sup>. Potassium chromate is used to indicate the end point of the silver nitrate titration of chloride. Red silver chromate is precipitated before silver chloride is formed. Results are expressed as chloride (Cl<sup>-</sup>).

1. Titrets is a registered trademark of CHEMetrics, Inc. U.S. Patent No. 4,332,769
2. ASTM D 512 - 89 (1999), Chloride in Water, Test Method B
3. APHA Standard Methods, 20th ed., p. 4-67, method 4500-Cl-B (1998)

### Safety Information

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

### Reorder Information

### Cat. No.

**Test Kit, complete** ..... **K-2030**

*Kits are available for chloride analysis at other levels.*



4295 Catlett Road, Calverton, VA 20138-0214 U.S.A.  
 Phone: (800) 356-3072; Fax: (540) 788-4856  
 E-Mail: [orders@chemetrics.com](mailto:orders@chemetrics.com)  
 Web: [www.chemetrics.com](http://www.chemetrics.com)