

Thiosulfate Titrets® 5 - 50 ppm

Test Procedure

1. Fill the sample cup to the 15 mL mark with your sample (fig. 1).
2. Add 5 drops of A-9700 Neutralizer Solution to the sample (fig. 2). Stir briefly.
3. If there is a possibility that nitrite is present in your sample, add 4 drops of A-9600 Neutralizer Solution. Stir briefly and wait **30 seconds**.
4. Gently snap the tip of the glass ampoule at the black snap ring (fig. 3).

NOTE: When the tip is snapped, the flexible tubing will remain in place on the tapered neck of the ampoule.
5. Lift the control bar and insert the Titret assembly into the Titrettor (fig. 4).

NOTE: The rigid sample pipe will extend approximately 1.5 inches beyond the body of the Titrettor.
6. 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 **BLUE** color (fig. 5). Wait **30 seconds**.

NOTE: NEVER press the control bar unless the sample pipe is immersed in the sample.
7. With the sample pipe in the sample, press the control bar again briefly to draw another small amount of sample into the ampoule.

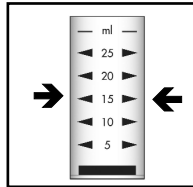


Figure 1

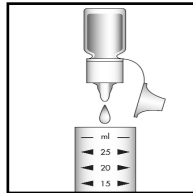


Figure 2

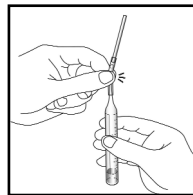


Figure 3

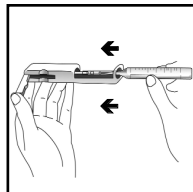


Figure 4

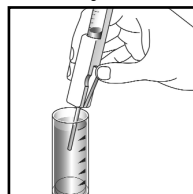


Figure 5

8. After each addition, rock the entire assembly to mix the contents of the ampoule. Watch for a color change from **BLUE to COLORLESS**.

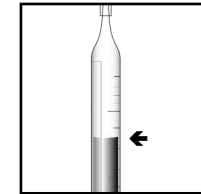


Figure 6

9. Repeat steps 7 and 8 until a permanent color change occurs.
10. When the color of the liquid in the ampoule changes to **COLORLESS**, 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) thiosulfate.

Test Method

The Thiosulfate Titrets®¹ test method employs an iodide-iodate titrant in an acid solution and a starch indicator^{2,3,4}. Results are expressed as thiosulfate.

1. Titrets is a registered trademark of CHEMetrics, Inc. U.S. Patent No. 4,332,769
2. ASTM D 1339-84, Sulfite Ion in Water, Test Method C
3. APHA Standard Methods, 20th ed., p. 4-173, method 4500-SO₃²⁻B (1998)
4. EPA Methods for Chemical Analysis of Water and Wastes, method 377.1 (1983)

Safety Information

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

Reorder Information

Cat. No.

Test Kit, complete **K-9705**

Kits are available for thiosulfate 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

www.chemetrics.com

Oct. 07, Rev. 6