

Hydrogen Peroxide Titrets[®] Kit

K-5530: 0.1 - 1.0 Percent (%)

Test Procedure

- Using the syringe provided, obtain **2 mL** of the sample to be tested and dispense it into the empty sample cup.
- Dilute the contents of the sample cup to the **20 mL** mark with distilled water (fig. 1).

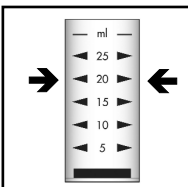


Figure 1

- Snap the tip of the ampoule at the black snap ring (fig. 2).

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

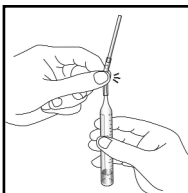


Figure 2

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

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

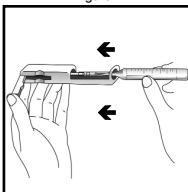


Figure 3

- Hold the Titrettor with the sample pipe in the sample. Press the control bar firmly, but briefly, to pull in a small amount of sample. The contents will turn **GREEN** (fig. 4).

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

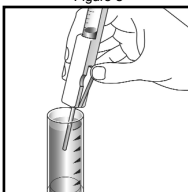


Figure 4

- Press the control bar again to draw another small amount of sample into the ampoule (fig. 4).

- Rock the entire assembly to mix the contents of the ampoule. Watch for a color change from **GREEN through BLUE to BROWNISH-ORANGE**.

- Repeat steps 6 and 7 until a permanent color change occurs.
- When the color of the liquid in the ampoule changes to **BROWNISH-ORANGE**, remove the ampoule from the Titrettor. Hold the ampoule, **tip pointed upward**, and read the scale opposite the liquid level (fig. 5).
- Multiply scale unit by 0.1 for test results in % hydrogen peroxide (H₂O₂).

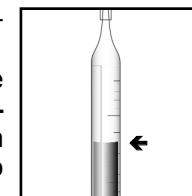


Figure 5

Interpretation of Test Results

If the contents of the ampoule do not turn **green** in Step # 5, the peroxide concentration in the sample is above the test range. If the ampoule fills completely and the contents do not turn **brownish orange**, the peroxide concentration is below the test range.

The kit range can be modified by performing a sample dilution.

Volume of Sample, mL	Total Volume, mL (using distilled water)	Multiply by this number in Step 10:	Resulting Range, % H ₂ O ₂
25	25	0.01	0.01 - 0.10
2	10	0.05	0.05 - 0.50
1	25	0.25	0.25 - 2.5
0.5	25	0.5	0.50 - 5.0
0.25	25	1	1.0 - 10.0
0.1	20	2	2 - 20.0

Test Method

The Hydrogen Peroxide Titrets^{®1} kit employs a ceric sulfate titrant and a ferroin endpoint indicator.²

1. Titrets is a registered trademark of CHEMetrics, Inc. U.S. Patent No. 4,332,769

2. Developed by CHEMetrics, Inc.

Safety Information

Read SDS (available at www.chemetrics.com) before performing this test procedure. Wear safety glasses and protective gloves.