

# 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).

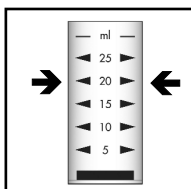


Figure 1

- 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.

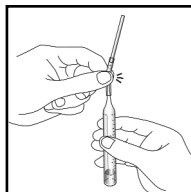


Figure 2

- 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.

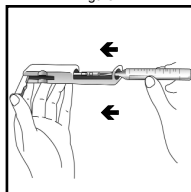


Figure 3

- 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 ( $H_2O_2$ ).

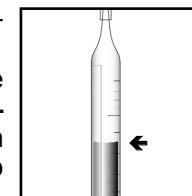


Figure 5

## 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, % $H_2O_2$
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®<sup>1</sup> kit employs a ceric sulfate titrant and a ferroin endpoint indicator.<sup>2</sup>

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](http://www.chemetrics.com)) before performing this test procedure. Wear safety glasses and protective gloves.

CHEMetrics, Inc., Midland, VA U.S.A.

[www.chemetrics.com](http://www.chemetrics.com)

Sept. 14, Rev. 8