

# Hydrogen Peroxide Test Kit

Model HYP-1

Cat. No. 22917-00



## Sample Preparation for Both Ranges

1. Fill the glass sample cell to the mark with the water to be tested. Use care to fill exactly to the mark.
2. Add 1 mL of Ammonium Molybdate solution to the sample cell.
3. Tear open one Sulfite 1 Reagent Powder Pillow as shown in Figure 1. Add the contents of the pillow to the sample cell.
4. Cap the sample cell and invert repeatedly to mix. Not all of the powder must dissolve. If hydrogen peroxide is present, a blue color will develop. Wait for five minutes before proceeding to Step 5. This is the prepared sample.

***WARNING: The chemicals in this kit may be hazardous to the health and safety of the user if inappropriately handled. Please read all warnings before performing the tests and use appropriate safety equipment.***

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## High Range Test Instructions

**1 drop = 1 mg/L Hydrogen Peroxide**

5. Fill the plastic measuring tube level full with the prepared sample. Pour the sample from the plastic measuring tube into the flask.
6. Add Sodium Thiosulfate Titrant drop by drop to the flask. Do not pause during the titration for anything other than to refill the dropper as this will cause low results. Hold the dropper vertically above the flask to add drops. Swirl the sample in the flask constantly while adding drops and count each drop as it is added. Continue to add Sodium Thiosulfate Titrant until the sample loses all blue color or is very faintly yellow.
7. Each drop used to bring about the color change in Step 6 is equal to 1 mg/L hydrogen peroxide ( $H_2O_2$ ).
8. As soon as possible, rinse the glass sample cell and cap, the plastic measuring tube and the flask with clean water.

## Low Range Test Instructions

**1 drop = 0.2 mg/L Hydrogen Peroxide**

If the result from Step 6 of the high range test is low (2 mg/L or less), it is advisable to test a larger sample to obtain a more sensitive test.

5. Follow the sample preparation instructions (Steps 1 to 4 above) with a fresh sample of water to be tested and pour the entire prepared sample from the glass sample cell into the flask.
6. Add Sodium Thiosulfate Titrant drop by drop to the flask. Do not pause during the titration for anything other than to refill the dropper as this will cause low results. Hold the dropper vertically above the flask to add drops. Swirl the sample in the flask constantly while adding drops and count each drop as it is added. Continue to add Sodium Thiosulfate Titrant until the sample loses all blue color or is very faintly yellow.

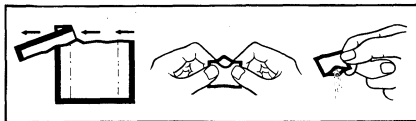
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7. To calculate the mg/L of hydrogen peroxide ( $H_2O_2$ ) present in the sample, multiply the number of drops used to bring about the color change in Step 6 by 0.2.
8. As soon as possible, rinse the glass sample cell and cap, the plastic measuring tube and the flask with clean water.



**Figure 1**

### REPLACEMENTS

Cat. No.	Description	Unit
24491-00	Hydrogen Peroxide Reagent Set contains one each:	100 tests
2203-99	Sulfite 1 Reagent Powder Pillows★	pkg/50x2
24087-37	Sodium Thiosulfate Titrant, Stabilizer	118 mL MDB★★
1933-37	Ammonium Molybdate Reagent	118 mL MDB★★
505-41	Flask, erlenmeyer, 50 mL	each
20849-00	Sample Cell, marked	pkg/6
21665-06	Cap, white, foam liner	pkg/6
438-00	Tube, plastic measuring	each

★Sulfite 1 Reagent is a proprietary name for a specially formulated starch-iodide reagent used in both the sulfite and hydrogen peroxide tests.

★★marked dropping bottle

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**Note:** When Cat. No. 20849-00 is ordered as a replacement for the glass sample cell it will be supplied with a black cap. Do **not** use this black cap in the hydrogen peroxide test as it will be decomposed. Always use Cat. No 21665-06 as the replacement cap for this test.