DROP TEST HYDROGEN PEROXIDE (1 drop = 0.5 or 1%)

COMPONENTS:

1 x 4026 Dipper Spoon, 2 q, plastic, white 1 x 4029 Pipet, Calibrated (0.5 & 1.0 mL), plastic 1 x 4078 Pipet, Graduated (3 mL w/ 0.5 mL div), plastic 1 x 5312 Instruction 2 x 9198 Sample Tube, Graduated (25 mL) w/ cap, plastic 1 x R-0601-C-DB Molybdate Reagent, 2 oz, DB 1 x R-0729-C-DB Sulfuric Acid 50%*. 2 oz. DB 1 x R-0765-II Potassium lodide Crystals, 50 g 1 x R-0885-C Thiosulfate Reagent, 2 oz, DB

TO ORDER REPLACEMENT PARTS AND REAGENTS CALL TOLL-FREE 800-TEST KIT (800-837-8548).

PROCEDURE:

CAREFULLY READ AND FOLLOW PRECAUTIONS ON REAGENT LABELS. KEEP REAGENTS AWAY FROM CHILDREN.

NOTE: When dispensing reagents from dropper bottles, **always** hold bottle in a vertical position.

Hydrogen Peroxide Test

For 1 drop = 0.5% Hydrogen Peroxide

- 1. Using 3 mL pipet (#4078), add 2 mL water to be tested to a 25 mL sample tube (#9198). Dilute to 25 mL mark with distilled, deionized, or hydrogen peroxide-free water. Swirl to mix.
- Using 2 g dipper spoon (#4026), add 1 dipper R-0765 Potassium lodide Crystals to second 25 mL sample tube. Dilute to 10 mL mark with distilled, deionized, or hydrogen peroxide-free water. Swirl until dissolved.
- 3. Add 10 drops R-0729 Sulfuric Acid 50% to second 25 mL sample tube. Swirl to mix.

CAUTION: R-0729 Sulfuric Acid 50% is a strong acid. Handle carefully.

4. Using 1.0 mL pipet (#4029), transfer 1.0 mL from first 25 mL sample tube to second 25 mL sample tube.

- 5. Add 10 drops R-0601 Molybdate Reagent. Swirl to mix. Sample will turn yellow orange if hydrogen peroxide is present.
- 6. Add R-0885 Thiosulfate Reagent dropwise, swirling and counting after each drop, until color changes from yellow orange to colorless.
- 7. Multiply drops of R-0885 Thiosulfate Reagent by 0.5. Record as percent (%) hydrogen peroxide (H $_2{\rm O}_2).$

For 1 drop = 1% Hydrogen Peroxide

- 1. Using 3 mL pipet (#4078), add 1 mL water to be tested to a 25 mL sample tube (#9198). Dilute to 25 mL mark with distilled, deionized, or hydrogen peroxide-free water. Swirl to mix.
- Using 2 g dipper spoon (#4026), add 1 dipper R-0765 Potassium lodide Crystals to second 25 mL sample tube. Dilute to 10 mL mark with distilled, deionized, or hydrogen peroxide-free water. Swirl until dissolved.
- 3. Add 10 drops R-0729 Sulfuric Acid 50% to second 25 mL sample tube. Swirl to mix.
- CAUTION: R-0729 Sulfuric Acid 50% is a strong acid. Handle carefully.
- 4. Using 1.0 mL pipet (#4029), transfer 1.0 mL from first 25 mL sample tube to second 25 mL sample tube.
- 5. Add 10 drops R-0601 Molybdate Reagent. Swirl to mix. Sample will turn yellow orange if hydrogen peroxide is present.
- 6. Add R-0885 Thiosulfate Reagent dropwise, swirling and counting after each drop, until color changes from yellow orange to colorless.
- 7. Record drops of R-0885 Thiosulfate Reagent as percent (%) hydrogen peroxide (H2O2).
- *WARNING: Sulfuric Acid 50% (R-0729) contains 62% w/w sulfuric acid, a corrosive acid.



Instr. #5312