## DROP TEST CHLORIDE (1 drop = 10, 25, 50, 100, or 500 ppm)

#### **COMPONENTS:**

- 1 x 4078 Pipet, Graduated, 3 mL (0.5 mL div.), plastic
- 1 x 5006 Instruction
- 2 x 91980 Sample Tubes, Graduated, 25 mL, plastic w/cap and orange dot
- 1 x R-0630-C Chromate Indicator, 2 oz, DB
- 1 x R-0706-C Silver Nitrate 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 sulfite content of sample water to be tested exceeds 10 ppm, the sulfite should be oxidized to prevent interference in test. A 25 mL water sample is first adjusted to the appropriate pH, then 1 mL (or 24 drops) of R-0649 3% Hydrogen Peroxide Solution (sold separately) is added and thoroughly mixed. Continue with the rest of the procedure.

## For 1 drop = 10 or 25 ppm or 1 gpg

1. Select sample size for required equivalence.

Required Equivalence	Sample Siz
1 drop = 10 ppm Cl <sup>-</sup>	25 mL
1 drop = 1 gpg Cl <sup>-</sup>	14.6 mL
1 drop = 25 ppm Cl <sup>-</sup>	10 mL

- 2. Rinse and fill 25 mL sample tube (#9198O) with required sample size with water to be tested (Fig. 1).
- 3. Add 5 drops R-0630 Chromate Indicator. Swirl to mix. Sample should turn yellow (Fig. 2).
- 4. Add R-0706 Silver Nitrate Reagent dropwise, swirling and counting after each drop, until color changes from yellow to a milky salmon (brick) red (Fig. 3). Always hold bottle in vertical position.

- NOTE: Do not add enough R-0706 Silver Nitrate Reagent to give a brown color. First change from yellow to a milky salmon (brick) red is the endpoint.
- 5. Multiply drops of R-0706 Silver Nitrate Reagent by required equivalence factor. Record as parts per million (ppm) or grains per gallon (gpg) chloride.
- NOTE: For results as sodium chloride, multiply final value by 1.65.

## For 1 drop = 50, 100, or 500 ppm

1. Select sample size for required equivalence.

Required Equivalence	Sam	ole Size
1 drop = 50 ppm Cl <sup>-</sup>	5 mL	(2 x 2.5 mL
$1 \text{ drop} = 100 \text{ ppm Cl}^{-}$	2.5 m	Ĺ
$1 \text{ drop} = 500 \text{ ppm Cl}^-$	0.5 m	L

- 2. Using a 3 mL pipet (#4078) add required sample size to 25 mL sample tube (#91980). Dilute to 10 mL mark with distilled, deionized, or chloride-free water (Fig. 1).
- 3. Add 5 drops R-0630 Chromate Indicator. Swirl to mix. Sample should turn yellow (Fig. 2).
- 4. Add R-0706 Silver Nitrate Reagent dropwise, swirling and counting after each drop, until color changes from yellow to a milky salmon (brick) red (Fig. 3). Always hold bottle in vertical position.
- NOTE: Do not add enough R-0706 Silver Nitrate Reagent to give a brown color. First change from yellow to a milky salmon (brick) red is the endpoint.
- 5. Multiply drops of R-0706 Silver Nitrate Reagent by required equivalence factor. Record as parts per million (ppm) chloride.
- NOTE: For results as sodium chloride, multiply final value by 1.65.



Instr. #5006





3/09