

DROP TEST

FREE & COMBINED CHLORINE (1 drop = 0.2 ppm) MONOPERSULFATE COMPOUND (1 drop = 0.2 ppm)

COMPONENTS:

1 x 4030	Pipet, Calibrated (0.5 & 1.0 mL) w/ cap, plastic
1 x 5806	Instruction
1 x 9198	Sample Tube, Graduated (25 mL) w/ cap, plastic
1 x R-0003-C	DPD Reagent #3, 2 oz, DB
1 x R-0867-C	Deox Reagent, 2 oz
1 x R-0870-I	DPD Powder, 10 g
1 x R-0871-C	FAS-DPD Titrating Reagent (chlorine), 2oz, DB

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

PROCEDURE:

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

NOTE: This procedure will selectively determine free chlorine, combined chlorine, and monopersulfate (not persulfate). To determine monopersulfate it is first necessary to determine both free and combined chlorine, if present.

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

Free & Combined Chlorine Test

1. Rinse and fill 25 mL sample tube (#9198) to 25 mL mark with water to be tested.
2. Add 1 heaping dipper R-0870 DPD Powder and QUICKLY swirl to mix. IMMEDIATELY add 1.0 mL R-0867 Deox Reagent and QUICKLY swirl to mix. Sample will turn pink if free chlorine (FC) is present.

Instr. #5806

3. Add R-0871 FAS-DPD Titrating Reagent (chlorine) dropwise, swirling and counting after each drop, until color changes from pink to colorless. Number of drops is **Reading A**. IMMEDIATELY add 10 drops R-0003 DPD Reagent #3. Swirl to mix. WAIT 1 MINUTE. Sample will turn pink if combined chlorine (CC) is present.
4. Add R-0871 FAS-DPD Titrating Reagent (chlorine) dropwise, swirling and counting after each drop, until color changes from pink to colorless. Number of drops is **Reading B**.
5. Multiply **Reading A** by 0.2. Record as parts per million (ppm) free chlorine (FC). Multiply **Reading B** by 0.2. Record as ppm combined chlorine (CC).

Monopersulfate Compound Test

1. Rinse and fill 25 mL sample tube (#9198) to 25 mL mark with water to be tested.
2. Add 1 heaping dipper R-0870 DPD Powder. Swirl until dissolved.
3. Add 10 drops R-0003 DPD Reagent #3. Swirl to mix. WAIT 1 MINUTE.
4. Add R-0871 FAS-DPD Titrating Reagent (chlorine) dropwise, swirling and counting after each drop, until color changes from pink to colorless.
5. Multiply drops of R-0871 FAS-DPD Titrating Reagent by 0.2. Record as parts per million (ppm) total oxidizer (TO).
6. To calculate parts per million (ppm) monopersulfate compound (MC) as chlorine (Cl₂):
Formula: $TO - (FC + CC) = MC$.

NOTE: A negative value for MC may be obtained when MC is zero (0) or very low (0-0.4 ppm as chlorine). This is caused by variables such as sample measurement, drop variation, etc.

NOTE: Refer to manufacturer's instructions for proper monopersulfate adjustment.



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