

# DROP TEST

## SODIUM SULFITE (1 drop = 2 or 10 ppm)

Instr. #5104

### COMPONENTS:

1 x 5104	Instruction
1 x 9198W	Sample Tube, Graduated (25 mL) w/ cap & white dot, plastic
1 x R-0638W-C	Phenolphthalein Indicator, 2 oz w/ white cap, DB
1 x R-0699-C	Iodide Iodate Reagent, 2 oz, DB
1 x R-0725-I	Acid Starch Indicator Powder, 10g
1 x R-0808-C	Iodide Iodate 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.

#### Sodium Sulfite Test

NOTE: Sample must be cooled to less than 100°F (38°C) to prevent high test results. Sample must be protected from air contact while cooling to prevent low test results.

#### For 1 drop = 2 ppm Sodium Sulfite

1. Collect water to be tested in a clean, preferably large-mouthed, bottle to overflowing. Immediately cap and cool to room temperature.
2. Rinse and fill 25 mL sample tube (#9198W) to 25 mL mark with cooled (room temperature) water to be tested.

NOTE: For results in grains per gallon (gpg), fill to 14.6 mL mark.

3. Add 1 drop R-0638W Phenolphthalein Indicator. Swirl to mix. Sample will turn pink (Fig. 1).
4. Add R-0725 Acid Starch Indicator Powder a dipper at a time, swirling after each dipper, until color changes from pink to colorless. Add 2 more dippers. Swirl until dissolved.
5. Add R-0808 Iodide Iodate Reagent dropwise, swirling and counting after each drop, until sample changes from colorless to a faint but permanent blue (Fig. 2).
6. Multiply drops of R-0808 Iodide Iodate Reagent by 2. Record as parts per million (ppm) sodium sulfite ( $\text{Na}_2\text{SO}_3$ ).

NOTE: For 14.6 mL sample, multiply drops by 0.2. Record as grains per gallon (gpg) sodium sulfite ( $\text{Na}_2\text{SO}_3$ ).

NOTE: For results as sulfite ( $\text{SO}_3^{2-}$ ), multiply sodium sulfite ( $\text{Na}_2\text{SO}_3$ ) concentration by 0.64.

NOTE: For results as sodium metabisulfite ( $\text{Na}_2\text{S}_2\text{O}_5$ ), multiply sodium sulfite ( $\text{Na}_2\text{SO}_3$ ) concentration by 0.754.

#### For 1 drop = 10 ppm Sodium Sulfite

1. Collect water to be tested in a clean, preferably large-mouthed, bottle to overflowing. Immediately cap and cool to room temperature.
2. Rinse and fill 25 mL sample tube (#9198W) to 25 mL mark with cooled (room temperature) water to be tested.

NOTE: For results in grains per gallon (gpg), fill to 14.6 mL mark.

3. Add 1 drop R-0638W Phenolphthalein Indicator. Swirl to mix. Sample will turn pink (Fig. 1).
4. Add R-0725 Acid Starch Indicator Powder a dipper at a time, swirling after each dipper, until color changes from pink to colorless. Add 2 more dippers. Swirl until dissolved.
5. Add R-0699 Iodide Iodate Reagent dropwise, swirling and counting after each drop, until sample changes from colorless to a faint but permanent blue (Fig. 2).
6. Multiply drops of R-0699 Iodide Iodate Reagent by 10. Record as parts per million (ppm) sodium sulfite ( $\text{Na}_2\text{SO}_3$ ).

NOTE: For 14.6 mL sample, record drops as grains per gallon (gpg) sodium sulfite ( $\text{Na}_2\text{SO}_3$ ).

NOTE: For results as sulfite ( $\text{SO}_3^{2-}$ ), multiply sodium sulfite ( $\text{Na}_2\text{SO}_3$ ) concentration by 0.64.

NOTE: For results as sodium metabisulfite ( $\text{Na}_2\text{S}_2\text{O}_5$ ), multiply sodium sulfite ( $\text{Na}_2\text{SO}_3$ ) concentration by 0.754.



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Fig. 1

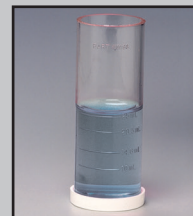


Fig. 2