

TITRATION TEST

SULFITE (1 mL = 1.0 mg)

COMPONENTS:

- | | |
|--------------------|--|
| 1 x 5354 | Instruction |
| * 1 x R-0617-E | Iodide Iodate N/63, 16 oz |
| * 1 x R-0633-40-E | Iodide Iodate N/40, 16 oz |
| * 1 x R-0633-80-E | Iodide Iodate N/80, 16 oz |
| * 1 x R-0633-126-E | Iodide Iodate N/126, 16 oz |
| 1 x R-0638W-C | Phenolphthalein Indicator, 2 oz w/ white cap, DB |
| 1 x R-0725-I | Acid Starch Indicator Powder, 10 g |
- * Kit may include only one of these reagents.

APPARATUS REQUIRED FOR TEST:

Suitable pipets, burets, graduates, and flasks

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.

Sulfite Test

1. Collect water to be tested in a clean, preferably large-mouthed, bottle to overflowing. Immediately cap and cool to room temperature.
2. Select sample size.

NOTE: The sample size will depend on the expected sulfite content and reagent used.

Using R-0617 Iodide Iodate N/63 (1 mL = 1 mg sodium sulfite) or R-0633-40 Iodide Iodate N/40 (1 mL = 1 mg sulfite):

For a 50 mL sample, multiply by 20.

For a 25 mL sample, multiply by 40.

For a 20 mL sample, multiply by 50.

For a 10 mL sample, multiply by 100.

Instr. #5354

Using R-0633-80 Iodide Iodate N/80 (1 mL = 0.5 mg sulfite) or R-0633-126 Iodide Iodate N/126 (1 mL = 0.5 mg sodium sulfite):

For a 50 mL sample, multiply by 10.

For a 25 mL sample, multiply by 20.

For a 20 mL sample, multiply by 25.

For a 10 mL sample, multiply by 50.

3. Using a pipet, add water to be tested to flask.
4. Add 1 drop R-0638W Phenolphthalein Indicator. Swirl to mix. If sample remains colorless, proceed to Step 4. If sample turns red, add R-0725 Acid Starch Indicator Powder, a dipper at a time, mixing after each dipper, until sample becomes colorless.
5. Add 2 dippers R-0725 Acid Starch Indicator Powder.
6. Titrate with Iodide Iodate reagent (R-0617, R-0633-40, R-0633-80, or R-0633-126) in buret, swirling constantly, until sample just changes from colorless to a faint but permanent blue. Record buret reading.
7. Multiply buret reading by chosen equivalence. Record as parts per million (ppm) sulfite (Na_2SO_3) or sodium sulfite (SO_3), as appropriate.

NOTE: The same procedure can be carried out using R-0729 Sulfuric Acid 50% and R-0636 Starch Indicator Solution (sold separately). Use R-0729 Sulfuric Acid 50% instead of R-0725 Acid Starch Indicator Powder, and add 5 drops R-0636 Starch Indicator Solution.



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