TITRATION TEST SULFITE (1 mL = 1.0 ma)

COMPONENTS: 1 x 5354

Instruction

*1 x R-0617-E lodide lodate N/63, 16 oz *1 x R-0633-40-E lodide lodate N/40, 16 oz

*1 x R-0633-80-E | lodide lodate N/80, 16 oz

*1 x R-0633-126-E lodide lodate 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

- 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 40.

For a 10 mL sample, multiply by 100.

Instr. #5354

Using R-0633-80 lodide lodate N/80 (1 mL = 0.5 mg sulfite) or R-0633-126 lodide lodate 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 (Na₂SO₃) or sodium sulfite (SO₃), 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.

