

## The Micro-COD Test Method accu-TEST<sup>TM</sup> Standard Range (20 - 900 MG/L COD)or Low Range (5 - 150 MG/L COD)

- (1) Preheat a COD heater block (do not use oven) to 150° Celsius.
- (2) Remove the cap from a COD twist-cap vial.
- (3) Carefully add 2.5 mls of sample down the side of the vial such that it forms a layer on top of the reagents.
- (4) Replace the twist cap.
- (5) Thoroughly mix the contents of the sealed vial by shaking.
- (6) Process standards and blanks exactly as the samples.
- (7) Place the twist-cap vial in a COD heater block capable of maintaining  $150^{\circ} + 2^{\circ}$  Celsius for 2 hours.
- (8) Remove the vial from the heater block and allow to cool.
- (9) Allow any suspended precipitate to settle and wipe the outside of the twist cap clean.
- (10) Use Method A for Standard Range reagent (20 900 mg/l COD) or Use Method B for Low Range reagent (5 - 150 mg/l COD)
  - (A) Set the wavelength of the spectrophotometer to 600 nm, and, using a procedural blank, zero the absorbance reading.
  - (B) Use the **highest standard** (up to 150 mg/l COD) to set the spectrophotometer to zero absorbance at 440 nm.
- (11) Read the absorbance of each standard and sample on the spectrophotometer.
- (12) Prepare a graphic calibration curve by plotting the absorbance of the standards versus their known concentrations. Compare sample absorbances to the graphic calibration curve to determine COD concentrations. \*
- \* Calculation of the linear regression calibration curve via scientific calculator or computer program is preferred.

## Also Available From Bioscience, Inc.

- accu-TEST High Range Twist Cap COD Vials (100-4500 mg/l COD)
- accu-TEST Mercury-free Twist-Cap COD Vials
- accu-TEST COD Heater Blocks
- Spectrophotometers/Colorimeters

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