

AVIBROM Test Kit

AVIBROM Concentration Procedure

TK4999-Z
orange caps

KIT COMPONENTS:

SA1940-A	Sulfuric Acid 50%, 30 mL
PI1450-B	Potassium Iodide 50%, 60 mL
ST5010-B	Starch Indicator Solution 1%, 60 mL
ST2705-B	Sodium Thiosulfate 0.0365N, 60 mL
SY-2012-P	Syringe, 12cc
VL-0525-V	Vial, 5-25 mL

INTERFERENCES: All oxidizers, including Chlorine, are positive interferences for this test. Interferences include, a pH over 8, Total Hardness over 1000 ppm, Sulfate over 1000 ppm, Total Alkalinity over 150 ppm, any concentration of Nitrite, Nitrate over 200 ppm, Silica Dioxide over 50 ppm, Copper over 10 ppm, any concentration of Ferrous Iron (Fe²⁺), and Ferric Iron (Fe³⁺) over 5 ppm.

SAFETY TIPS:



Wear
Gloves



Use Eye
Protection



Read
SDS

TESTING TIPS:



Collect
Accurate
Sample



Hold
Bottles
Vertically



Ensure
Proper
Lighting

ATTENTION: As necessary, calibrate this kit against a known standard made with plant / make-up water. Be sure to collect a representative sample.

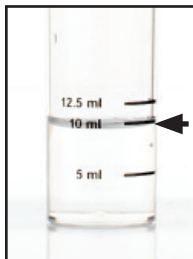
It is important that each reagent be added and then mixed well for at least 5 seconds before the addition of the subsequent reagent.



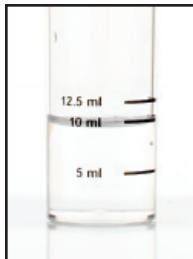
1 Rinse vial three times with the water used to dilute the AVIBROM. **Fill vial to 10 mL** with the water used to dilute the AVIBROM.

2 Add **10 drops of Potassium Iodide 50%** (PI1450) and swirl to mix.

3 Add **10 drops of Starch Indicator 1%** (ST5010) and swirl to mix.



STEP 1



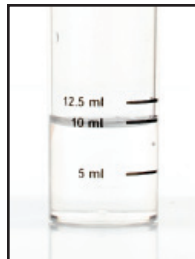
STEP 3

4 Add **3 drops of Sulfuric Acid 1:1** (SA1940) one drop at a time while swirling. The sample will turn a blue-black color.



STEP 4

5 Add **Sodium Thiosulfate 0.0365N** (ST2705) one drop at a time while swirling until the sample returns to its original color. Record the number of drops.

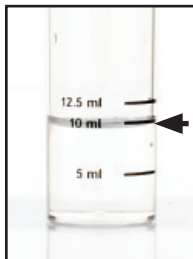


STEP 5

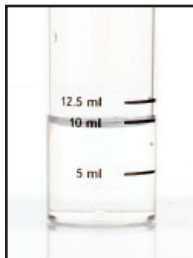
6 Rinse vial three times with the AVIBROM solution. **Fill vial to 10 mL** with the AVIBROM solution.

7 **Add 10 drops of Potassium Iodide 50% (PI1450)** and swirl to mix.

8 **Add 10 drops of Starch Indicator 1% (ST5010)** and swirl to mix.



STEP 6



STEP 8

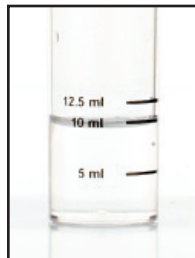
9 **Add 3 drops of Sulfuric Acid 1:1 (SA1940)** one drop at a time while swirling. The sample will turn a blue-black color.

10 **Add Sodium Thiosulfate 0.0365N (ST2705)** one drop at a time while swirling until the sample returns to its original color. Record the number of drops.

11 Subtract the drop count (Step 5 – Step 10) to obtain #drops. Determine the ppm Bromine in the AVIBROM solution from the #drops on the attached table.



STEP 9



STEP 10

# Drops	ppm	# Drops	ppm	# Drops	ppm	# Drops	ppm
5	56.25	12	135.00	19	213.75	26	292.50
6	67.50	13	146.25	20	225.00	27	303.75
7	78.75	14	157.50	21	236.25	28	315.00
8	90.00	15	168.75	22	247.50	29	326.25
9	101.25	16	180.00	23	258.75	30	337.50
10	112.50	17	191.25	24	270.00	31	348.75
11	123.75	18	202.50	25	281.25	32	360.00