LaMotte

FRESH WATER AQUACULTURE TEST KIT

MODEL AQ-3 CODE 3634-03

NOTE: Place dispenser Cap (0692) on *Mixed Acid Reagent (V-6278). Save this cap for refills**.** It is important to read the instruction manual before attempting to perform the tests with the short form instructions provided below.

***WARNING:** Reagents marked with a * are considered to be potential health hazards. To view or print a Material Safety Data Sheet (MSDS) for these reagents see MSDS CD or www.lamotte.com. To obtain a printed copy, contact LaMotte by e-mail, phone or fax.

To order individual reagents or test kit components, use the specified code number.

AMMONIA NITROGEN

1. Fill test tube (0106) to 5 mL line with sample water.
2. Add 4 drops Ammonia Nitrogen Reagent #1 (4797WT). Cap and mix. Wait 1 minute.
3. Add 12 drops of *Ammonia Nitrogen Reagent #2 (4798WT). Cap and mix. Wait 5 minutes.
4. Insert test tube into Octa-Slide Viewer (1100) with Ammonia Nitrogen Octa-Slide Bar (3438) inserted.
5. Record as ppm Ammonia Nitrogen (NH_3-N).

NITRITE NITROGEN

1. Fill test tube (0106) to 2.5 mL line with sample water.
2. Dilute to 5 mL line with *Mixed Acid Reagent (V-6278).
3. Use 0.1g spoon (0699) to add 0.1g of *Color Developing Reagent (V-6281). Cap and mix for 1 minute. Wait 5 minutes.
4. Insert test tube into Octa-Slide Viewer (1100) with Nitrite Nitrogen Octa-Slide Bar (3437) inserted.
5. Record as ppm Nitrate Nitrogen (NO_2- N).

ALKALINITY

1. Fill titration tube (0608) to 5 mL line with sample water.
2. Add 4 drops of *BCG-MR Indicator (2311-EG). Cap and mix. Sample will turn blue-green.
3. Fill Direct Reading Titrator (0382) with *Alkalinity Titration Reagent B (4493DR).
4. Titrate sample until blue-green color changes to pink.
5. Record as ppm Alkalinity ($CaCO_3$).

CARBON DIOXIDE

1. Fill titration tube (0608) to 20 mL line with sample water.
2. Add 2 drops *Phenolphthalein Indicator, 1% (2246). If sample turns red, no free carbon dioxide is present. If colorless, proceed to Step 3.
3. Fill Direct Reading Titrator (0380) with *Carbon Dioxide Reagent B (4253DR).
4. Titrate sample until faint pink color persists for 30 seconds.
5. Record as ppm Carbon Dioxide (CO_2).

CHLORIDE

1. Fill titration tube (0608) to 15 mL line with sample water.
2. Add 1 drop *Phenolphthalein Indicator, 1% (2246). If sample is colorless, proceed to Step 3. If sample turns pink, add *Sulfuric Acid, 0.5N (6090) one drop at a time until pink color disappears.
3. Add 3 drops *Chloride Reagent #1 (4504). Cap and mix. Sample will turn yellow.
4. Fill Direct Reading Titrator (0382) with *Chloride Reagent #2 (4505DR).
5. Titrate sample until yellow color first changes to orange or orange-red.
6. Record as ppm Chloride (Cl).

HARDNESS

1. Fill titration tube (0608) to 12.9 mL line with sample water.
2. Add 5 drops of *Hardness Reagent #5 (4483). Cap and mix.
3. Add 5 drops of *Hardness Reagent #6 (4485). Cap and mix. Sample will turn red.
4. Fill Direct Reading Titrator (0382) with Hardness Reagent #7 (4487DR).
5. Titrate sample until red color changes to clear blue.
6. Record as ppm Total Hardness ($CaCO_3$).

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