



AQUAPONICS KIT CODE 3637

NOTE: 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 an * are considered to be potential health hazards. To view or print a Safety Data Sheet (SDS) for these reagents go to www.lamotte.com. Search for the four digit reagent code number listed on the reagent label, in the contents list or in the test procedures. Omit any letter that follows or precedes the four digit code number. For example, if the code is 4450WT-H, search 4450. To obtain a printed copy, contact LaMotte by email, phone or fax.

Emergency information for all LaMotte reagents is available from Chem-Tel (US, 1-800-255-3924) (International, call collect, 813-248-0585).

AMMONIA NITROGEN

1. Insert Ammonia Nitrogen Octa-Slide 2 Bar (3441-01-FW or 3441-01-SW) into Octa-Slide 2 Viewer (1101).
2. Fill test tube (0106) to 5 mL line with sample water.
3. Add 10 drops *Salicylate Ammonia #1 (3978LWT). Cap and mix.
4. Add 7 drops of *Salicylate Ammonia #2 (3979WT). Cap and mix. Wait 1 minute.
5. Add 7 drops of Salicylate Ammonia #3 (3982WT). Cap and mix. Wait 20 minutes.
6. Insert test tube into Octa-Slide 2 Viewer.
7. Match color. Record as ppm Ammonia Nitrogen (NH₃-N).

IRON

TOTAL IRON

1. Insert Iron Octa-Slide 2 Bar (4448-01) into Octa-Slide 2 Viewer (1101).
2. Rinse test tube (0106) with sample water. Fill to 5 mL line.
3. Add 5 drops of *Iron Reagent #1 (4450). Cap and mix.
4. Use the 0.05g spoon (0696) to add one level measure of *Iron Reagent #2 Powder (4451). Cap and shake until powder dissolves. Wait 3 minutes.
5. Insert test tube into Octa-Slide 2 Viewer.
6. Match color. Record as ppm Total Iron.

FERROUS IRON

1. Insert Iron Octa-Slide 2 Bar (4448-01) into Octa-Slide 2 Viewer (1101).
2. Rinse test tube (0106) with sample water. Fill to 5 mL line.
3. Add 5 drops of *Iron Reagent #1 (4450). Cap and mix.
4. Use the 0.05g spoon (0696) to add one level measure of *Ferrous Iron Reagent (4453). Cap and shake until powder dissolves.
5. Insert test tube into Octa-Slide 2 Viewer.
6. Match color. Record as ppm Ferrous Iron.

pH

1. Insert Wide Range pH Octa-Slide 2 Bar (3483-01) into Octa-Slide 2 Viewer (1101).
2. Fill test tube (0106) to 10 mL line with sample water.
3. Add 8 drops *Wide Range pH Indicator (2218). Cap and mix.
4. Insert test tube into Octa-Slide 2 Viewer.
5. Match color. Record as pH.

NITRATE NITROGEN

1. Insert Nitrate Nitrogen Octa-Slide 2 Bar (3494-01) into Octa-Slide 2 Viewer (1101).
2. Fill test tube (0106) to 5 mL line with sample water.
3. Add one Nitrate #1 Tablet (2799A). Cap and mix until tablet disintegrates.
4. Add one *Nitrate #2 CTA Tablet (NN-3703A). Immediately slide the test tube into the Protective Sleeve (0106-FP). Cap and mix 2 minutes to disintegrate the tablet. Wait 5 minutes. Remove from protective sleeve.
5. Insert test tube into Octa-Slide 2 Viewer.
6. Match color. Record as ppm Nitrate Nitrogen.

NITRITE NITROGEN

1. Insert Nitrite Nitrogen Octa-Slide 2 Bar (3437-01) into Octa-Slide 2 Viewer (1101).
2. Fill test tube (0106) to 2.5 mL line with sample water.
3. Dilute to 5 mL line with *Mixed Acid Reagent (V-6278).
4. Use 0.1g spoon (0699) to add 0.1g of *Color Developing Reagent (V-6281). Cap and mix for 1 minute. Wait 5 minutes.
5. Insert test tube into Octa-Slide 2 Viewer.
6. Match color. Record as ppm Nitrite Nitrogen (NO₂-N).

ALKALINITY

1. Fill test tube (0608) to 5 mL line with sample water.
2. Add 1 BCG/MR Indicator Tablet (2311A). Swirl until tablet dissolves. Solution 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 purple. Consult color chart (4491-CC).
5. Read result from scale. Record as ppm Alkalinity (CaCO₃).

DISSOLVED OXYGEN

COLLECTING THE SAMPLE

1. Rinse sampling bottle (0688-DO). Replace cap.
2. Submerge bottle, then remove cap.
3. Tap sides of bottle to release air bubbles.
4. While bottle is submerged replace cap and retrieve from water.
5. If air bubbles are present repeat sampling method.

ADDING REAGENTS

1. Add 8 drops of *Manganous Sulfate Solution (4167).
2. Add 8 drops of *Alkaline Potassium Iodide Azide Solution (7166). Cap and mix by inverting several times. Allow precipitate to settle below shoulder.
3. Add 8 drops of *Sulfuric Acid, 1:1 (6141WT).
4. Cap and mix until precipitate dissolves. Sample is now "fixed".

TITRATION

1. Fill test tube (0608) to 20 mL line with "fixed" sample. Cap.
2. Fill Direct Reading Titrator (0377) with Sodium Thiosulfate, 0.025N (4169). Titrate sample, swirling between each addition until color is a very faint yellow.
3. Remove Titrator and cap. Add 8 drops of Starch Indicator Solution (4170WT). Sample should turn blue. Replace cap and Titrator.
4. Titrate sample until blue color just disappears.
5. Read result from scale. Record as ppm Dissolved Oxygen (O₂).

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PO Box 329 · Chestertown · Maryland · 21620 · USA
800-344-3100 · 410-778-3100 (Outside U.S.A.) · Fax 410-778-6394
Visit us on the web at www.lamotte.com