LaMotte 5848

LaMotte Company 5848 Earth Force Standard Water Monitoring Kit

Instruction Manual

1. Introduction

The LaMotte Company 5848 Earth Force Standard Water Monitoring Kit is designed to provide a comprehensive and accessible method for monitoring water quality. This kit is an excellent tool for educational purposes, particularly for grades 4 and up, and for initiating school-based or community-involved water monitoring programs.
It includes a valuable, comprehensive manual and a set of 9 test factor modules, utilizing the economical and safe TesTab method. Each module is equipped with easy-to-read, diagrammed instructions, a color chart, a test factor flashcard, and all necessary apparatus and non-hazardous TesTabs to perform numerous tests.

2. Kit Components

The LaMotte 5848 Earth Force Standard Water Monitoring Kit comes with a variety of components essential for water quality analysis.



Figure 2.1: Overview of the LaMotte Earth Force Standard Water Monitoring Kit contents. The image displays the main kit box, individual test modules for Coliform Bacteria, Turbidity, Nitrate, Phosphate, and pH Wide Range, along with various testing apparatus such as test tubes, plastic dishes, and instruction cards.

Included Test Factor Modules (examples):

- **Coliform Bacteria:** For detecting the presence of coliform bacteria in water samples.
- **Turbidity:** For measuring the clarity of water.
- **Nitrate:** For determining nitrate levels, an important nutrient indicator.
- **Phosphate:** For determining phosphate levels, another key nutrient indicator.
- **pH Wide Range:** For measuring the acidity or alkalinity of water.
- Additional modules for other parameters (total of 9 test factor modules).

General Apparatus:

- Test tubes and caps
- Plastic dishes/containers

- Color charts
- Test factor flashcards
- Non-hazardous TesTabs reagents
- Comprehensive instruction manual

3. Setup

Before beginning any water monitoring tests, ensure you have a clean and organized workspace. Proper setup is crucial for accurate results.

1. **Unpack the Kit:** Carefully remove all components from the main kit box.
2. **Organize Modules:** Identify each test factor module (e.g., Turbidity, Nitrate, pH) and place them in an easily accessible manner.
3. **Review Instructions:** Before performing any specific test, thoroughly read the detailed, diagrammed instructions provided within each individual test module. Familiarize yourself with the steps, required apparatus, and safety precautions.
4. **Prepare Workspace:** Ensure your testing area is clean, well-lit, and free from contaminants. Have a waste container ready for proper disposal of samples and used reagents.
5. **Gather Water Samples:** Collect water samples according to the guidelines provided in the comprehensive manual, ensuring samples are representative and collected in clean containers.

4. Operating Instructions

Each test within the LaMotte Earth Force Standard Water Monitoring Kit has specific operating procedures. Always refer to the individual module's instructions for precise steps.

General Testing Procedure:

1. **Select Test Module:** Choose the specific test you wish to perform (e.g., pH, Nitrate).
2. **Read Module Instructions:** Open the selected module and carefully read the step-by-step, diagrammed instructions. Pay attention to details such as sample volume, reaction times, and temperature requirements.
3. **Prepare Reagents and Apparatus:** Gather the necessary TesTabs and testing apparatus (test tubes, color charts, etc.) as indicated in the module's instructions.
4. **Perform Test:** Follow the instructions precisely to add the water sample, introduce TesTabs, and allow for any required reaction time.
5. **Interpret Results:** Use the provided color chart or other interpretive tools to determine the result of your test. Compare the color of your reacted sample to the color standards.
6. **Record Data:** Accurately record your findings. The comprehensive manual may include data sheets or guidelines for recording observations.
7. **Proper Disposal:** Dispose of used samples and reagents according to local regulations and the kit's guidelines. While TesTabs are non-hazardous, proper disposal is always recommended.

Note: For detailed instructions on each specific test (e.g., Coliform Bacteria, Turbidity), always refer to the dedicated instruction sheet included within that test module. These sheets provide precise, diagrammed steps for accurate results.

5. Maintenance

Proper maintenance of your LaMotte Water Monitoring Kit will ensure its longevity and the accuracy of future tests.

- **Clean Apparatus:** After each use, thoroughly clean all reusable apparatus (test tubes, plastic dishes) with distilled or deionized water. Allow them to air dry completely before storing.
- **Store Reagents Properly:** Keep TesTabs and other reagents in their original containers, tightly sealed, and store them in a cool, dry place away from direct sunlight. Check expiration dates periodically.
- **Inspect Components:** Regularly inspect all kit components for damage, cracks, or wear. Replace any damaged items to maintain accuracy and safety.
- **Keep Manuals Intact:** Store the comprehensive manual and individual module instructions in a safe place to prevent loss or damage.
- **Replenish Supplies:** Monitor your supply of TesTabs and other consumables. Order replacements as needed to ensure continuous monitoring capability.

6. Troubleshooting

If you encounter issues while using your water monitoring kit, consider the following common troubleshooting tips:

Problem	Possible Cause	Solution
Inaccurate or inconsistent results	Expired reagents, improper sample collection, incorrect procedure, contaminated apparatus.	Check reagent expiration dates. Re-collect sample. Review and re-follow instructions carefully. Clean all apparatus thoroughly.
Difficulty interpreting color chart	Poor lighting, color blindness, sample turbidity affecting clarity.	Ensure adequate, consistent lighting. Seek assistance from another individual if needed. Allow turbid samples to settle if possible, or use the Turbidity test first.
Reagents not dissolving properly	Insufficient shaking/mixing, old reagents, cold water sample.	Shake or mix vigorously as per instructions. Check reagent expiration. Allow water sample to reach room temperature if possible.

If problems persist, refer to the comprehensive manual or contact LaMotte Company customer support.

7. Specifications

Key specifications for the LaMotte Company 5848 Earth Force Standard Water Monitoring Kit:

- **Product Model Number:** 5848
- **Product Dimensions:** 15.7 x 19.9 x 5.4 inches
- **Product Weight:** Approximately 0.01 ounces (Note: This weight seems unusually low for a kit of this size and contents, please refer to product packaging for accurate shipping weight.)
- **Manufacturer:** LAMOTTE COMPANY
- **First Available:** April 18, 2012
- **Target Audience:** Grades 4 and up, schools, community groups.
- **Test Method:** TesTab method (non-hazardous reagents).
- **Test Capacity:** 100 tests per factor (44 for coliform bacteria; unlimited for benthic macroinvertebrates and turbidity, if applicable).

8. Warranty and Support

For specific warranty information regarding the LaMotte Company 5848 Earth Force Standard Water Monitoring Kit, please refer to the documentation included with your purchase or visit the official LaMotte Company website.
For technical support, replacement parts, or additional inquiries, please contact LaMotte Company customer service directly. Contact information can typically be found on the product packaging or their official website.
LaMotte Company Official Website: www.lamotte.com

© 2024 LaMotte Company. All rights reserved.
This manual is for informational purposes only. Always follow local regulations and safety guidelines when conducting water quality tests.

Ask a question about this manual

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. Privacy details.

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question