EISCO LABTS

EISCO Labs Basic Starter Laboratory Tool Set (Model LABTS) - Instruction Manual

Your guide to safe and effective use of your laboratory tools.

1. Introduction

Thank you for choosing the EISCO Labs Basic Starter Laboratory Tool Set. This manual provides essential information for the safe and effective use, maintenance, and care of your new laboratory tools. Please read this manual thoroughly before using the tools and retain it for future reference.

1.1. General Safety Guidelines

- Always wear appropriate personal protective equipment (PPE), such as safety goggles, lab coats, and gloves, when working in a laboratory environment.
- Handle all tools with care. Sharp or pointed tools can cause injury if misused.
- Ensure tools are clean and dry before and after use to prevent contamination and corrosion.
- Do not use tools for purposes other than their intended laboratory applications.
- Keep tools out of reach of children and untrained individuals.

2. Product Overview

The EISCO Labs Basic Starter Laboratory Tool Set (Model LABTS) is a 7-piece collection of essential hand tools designed for fundamental laboratory tasks. Each tool is constructed from high-quality materials for durability and reliability.

2.1. Included Components

1. **Scale:** A ruler with centimeter and inch markings for precise measurements.
2. **Stainless Steel Test Tube Holder:** Designed to securely hold test tubes during heating or handling.

3. **Stainless Steel Spoon (5.75" long):** For transferring small quantities of solid chemicals.
4. **Fine Point Metal Tweezers:** For delicate handling of small objects or samples.
5. **Flask Tong:** Used for safely gripping and moving hot flasks or beakers.
6. **Neoprene Tube Clamp:** For securing tubing or other apparatus.
7. **Nylon Test Tube Cleaning Bristled Brush:** For cleaning the interior of test tubes and other narrow glassware.

Figure 1: Overview of the EISCO Labs Basic Starter Laboratory Tool Set, displaying all seven included instruments.

Figure 2: Alternative view of the EISCO Labs Basic Starter Laboratory Tool Set, showcasing the individual tools.

3. Setup

The EISCO Labs Basic Starter Laboratory Tool Set requires minimal setup. Upon receiving the kit, inspect all components for any signs of damage during transit. If any item is damaged, do not use it and contact your supplier.

3.1. Initial Cleaning

Before first use, it is recommended to clean all tools to remove any manufacturing residues or dust. Use mild soap and water, then rinse thoroughly with distilled water and dry completely. For stainless steel items, ensure they are completely dry to prevent water spots or potential corrosion.

3.2. Storage

Store tools in a clean, dry environment, preferably in a designated drawer or container to prevent damage and maintain organization. Keep sharp or pointed tools protected to avoid accidental injury.

4. Operating Instructions

This section provides guidance on the proper use of each tool included in the set.

4.1. Scale (Ruler)

- Place the scale directly adjacent to the object to be measured.
- Align one end of the object with the zero mark on the scale.
- Read the measurement at the other end of the object. The scale provides measurements in both centimeters (CM) and inches.

4.2. Stainless Steel Test Tube Holder

- Squeeze the handles of the test tube holder to open the jaws.
- Carefully insert a test tube into the jaws, ensuring a firm but not overly tight grip. The holder should grip the upper portion of the test tube, away from any heated contents.
- Release the handles to secure the test tube.
- Use the holder to safely transport or heat test tubes.

4.3. Stainless Steel Spoon

- Use the spoon to transfer small amounts of solid chemicals or powders.
- Avoid using the spoon with corrosive or reactive substances that may damage the stainless steel.
- Clean thoroughly after each use to prevent cross-contamination.

4.4. Fine Point Metal Tweezers

- Gently squeeze the tweezers to open the tips.
- Position the tips around the small object or sample you wish to manipulate.
- Release pressure slightly to grip the object. Apply only enough pressure to hold the object securely without damaging it.
- Exercise caution as the tips are fine and can be sharp.

4.5. Flask Tong

- Open the jaws of the flask tong by squeezing the handles.
- Position the jaws around the neck or body of a flask or beaker, ensuring a stable grip.
- Release the handles to secure the glassware.
- Use the tong to safely lift, move, or pour from hot or chemical-containing glassware.

4.6. Neoprene Tube Clamp

- The neoprene tube clamp is designed to secure flexible tubing, often used in filtration or gas collection setups.
- Position the tubing within the clamp's jaws.
- Tighten the clamp to secure the tubing or adjust flow as needed.

4.7. Nylon Test Tube Cleaning Bristled Brush

- Insert the brush into the test tube or glassware to be cleaned.
- Use a rotating and up-and-down motion to scrub the interior surfaces.
- Use with appropriate cleaning solutions and rinse thoroughly after scrubbing.

5. Maintenance

5.1. Cleaning

Regular cleaning is crucial for the longevity and proper function of your laboratory tools. After each use:

- Wash tools with mild detergent and water.
- Rinse thoroughly with distilled or deionized water to remove all detergent residues.
- Dry all tools completely using a lint-free cloth or by air drying. Pay special attention to stainless steel items to prevent water spots or rust.
- For the nylon brush, rinse thoroughly and allow to air dry completely before storing.

5.2. Storage

Store tools in a dry, clean, and organized manner. Avoid storing them in corrosive environments or where they might be exposed to harsh chemicals for prolonged periods. Proper storage prevents damage and ensures tools are ready for the next use.

5.3. Inspection

Periodically inspect tools for signs of wear, damage, or corrosion. Replace any damaged tools to ensure safety and accuracy in your laboratory work.

6. Troubleshooting

This section addresses common issues you might encounter with your laboratory tools.

Problem	Possible Cause	Solution
Tool appears dirty or stained after cleaning.	Incomplete rinsing; hard water spots; residue from previous use.	Ensure thorough rinsing with distilled water. Use a non-abrasive cleaner for stubborn stains. Dry immediately after washing.
Stainless steel tools show signs of rust.	Exposure to moisture for prolonged periods; contact with corrosive chemicals; improper drying.	Clean and dry tools immediately after use. Avoid prolonged contact with acidic or corrosive substances. Store in a dry environment.
Test tube holder or flask tong grip is weak.	Improper positioning of glassware; worn springs (unlikely for new tools).	Ensure glassware is positioned correctly within the jaws. Apply firm but controlled pressure. If springs are visibly damaged, replace the tool.

Problem	Possible Cause	Solution
Brush bristles are matted or ineffective.	Accumulation of debris; improper cleaning or drying.	Rinse the brush thoroughly after each use. Allow it to air dry completely with bristles facing down to maintain shape. Replace if bristles are permanently damaged.

7. Specifications

Feature	Detail
Brand	EISCO
Model Number	LABTS
ASIN	B016E1W0SS
Included Components	1 Scale, 1 Stainless Steel Test tube holder, 1 Stainless Steel Spoon, 1 Fine point Metal Tweezers, 1 Flask Tong, 1 Neoprene tube clamp, 1 Nylon Test tube cleaning Bristled Brush
Material	Metal (Stainless Steel for some components), Nylon, Neoprene
Product Dimensions	15 x 5 x 1.5 inches (packaging dimensions)
Item Weight	10.4 ounces
Product Care Instructions	Wipe Clean

8. Support Information

For further assistance, product inquiries, or to report any issues, please contact EISCO customer support through their official website or your point of purchase. Please have your product model number (LABTS) and ASIN (B016E1W0SS) available when contacting support.
Note: Warranty information is not provided in the product details. Please refer to the retailer's or manufacturer's official channels for any applicable warranty terms.