

Oatey 22017

Oatey 22017 95/5 Solder Instruction Manual

Model: 22017

[Features](#) [Applications](#) [Preparation](#) [Introduction](#) [Safety Information](#) [Product](#) [Operation](#) [Maintenance](#) [Troubleshooting](#) [Specifications](#) [Warranty](#) [Support](#)

1. INTRODUCTION

This manual provides instructions for the safe and effective use of Oatey 22017 95/5 Lead-Free Plumbing Wire Solder. This product is designed for plumbing applications, refrigeration lines, and cooling equipment, particularly where frequent and extreme temperature changes and vibrations occur. It is important to read and understand all instructions before use.

2. SAFETY INFORMATION

Always prioritize safety when working with soldering equipment and materials. Failure to follow safety guidelines can result in injury or property damage.

- **Ventilation:** Use in a well-ventilated area to avoid inhaling fumes.
- **Personal Protective Equipment (PPE):** Wear appropriate safety glasses or goggles, heat-resistant gloves, and protective clothing.
- **Hot Surfaces:** Solder and soldering tools become extremely hot. Avoid direct contact. Allow components to cool before handling.
- **Fire Safety:** Keep a fire extinguisher or water source nearby. Do not solder near flammable materials.
- **Electrical Safety:** Ensure all electrical soldering equipment is in good working order and properly grounded.
- **Children and Pets:** Keep out of reach of children and pets.
- **Material Safety Data Sheet (MSDS):** Refer to the product's MSDS for detailed safety information.

3. PRODUCT FEATURES

The Oatey 22017 95/5 Solder offers the following key features:

- **Lead-Free Composition:** This solder is 100% lead-free, making it safe for potable water applications.
- **Alloy:** Composed of 95% tin and 5% antimony.
- **NSF-Listed:** Approved for use in potable water systems, meeting the requirements of the Safe Drinking Water Act.
- **Temperature Resilience:** Designed for applications experiencing frequent and extreme temperature changes.
- **Vibration Resistance:** Suitable for environments with vibrations.
- **Melting Range:** 450°F - 464°F (232°C - 240°C).



Image 1: Key Features of Oatey 95/5 Solder. This diagram highlights the solder's suitability for drinking water applications, its 100% lead-free composition, unlimited shelf life, and resistance to extreme temperature changes.

4. APPLICATIONS

Oatey 22017 95/5 Solder is suitable for a variety of applications, including:

- Plumbing systems, especially those carrying potable water.
- Refrigeration lines.
- Cooling equipment.
- Any application requiring a lead-free solder that can withstand frequent and extreme temperature fluctuations and vibrations.

5. PREPARATION FOR SOLDERING

Proper preparation is essential for creating strong, leak-free solder joints.

1. **Clean Surfaces:** Ensure all surfaces to be soldered are clean, dry, and free of dirt, grease, or oxidation. Use a wire brush or abrasive cloth to clean copper pipes and fittings until bright.
2. **Apply Flux:** Apply a thin, even coat of appropriate lead-free flux to both the male and female parts of the joint. Flux helps

clean the surfaces further and allows the solder to flow properly.

3. **Assemble Joint:** Assemble the joint immediately after applying flux, ensuring a snug fit.

6. OPERATING INSTRUCTIONS (SOLDERING PROCESS)

Follow these steps for effective soldering:

1. **Heat the Joint:** Using a suitable heat source (e.g., propane torch), apply heat evenly to the fitting, not directly to the solder. The goal is to bring the entire joint to the solder's melting temperature.
2. **Test Solder Flow:** Periodically touch the solder wire to the joint, opposite the heat source. When the joint reaches the correct temperature, the solder will melt and be drawn into the joint by capillary action.
3. **Apply Solder:** Once the solder begins to flow, remove the heat source and continue feeding solder into the joint until a complete bead is formed around the entire circumference. Avoid overheating, as this can burn the flux and prevent proper solder flow.
4. **Cool and Clean:** Allow the joint to cool naturally without disturbance. Do not quench with water, as this can weaken the joint. Once cool, wipe away any excess flux residue with a damp cloth.

7. MAINTENANCE

This solder product itself requires no maintenance. Store unused solder in a dry place at room temperature. Ensure soldering tools are cleaned and maintained according to their respective manuals.

8. TROUBLESHOOTING COMMON SOLDERING ISSUES

- **Solder Not Flowing:**
 - Ensure surfaces are thoroughly cleaned and fluxed.
 - Apply heat evenly to the fitting, not the solder directly. The joint may not be hot enough.
 - Check for proper heat source and technique.
- **Leaking Joint:**
 - Indicates an incomplete solder fill or improper wetting.
 - Re-clean, re-flux, and re-solder the joint, ensuring adequate heat and solder application.
 - Avoid disturbing the joint while it cools.
- **Burnt Flux:**
 - Caused by overheating the joint.
 - Reduce heat application time or intensity. Ensure heat is applied to the fitting, allowing it to transfer to the solder.

9. PRODUCT SPECIFICATIONS

Attribute	Detail
Model Number	22017
Brand	Oatey
Composition	95% Tin, 5% Antimony
Type	Lead-Free Plumbing Wire Solder
Item Weight	1.01 pounds (approx. 1 lb.)
Melting Range	450°F - 464°F (232°C - 240°C)
Certifications	NSF-Listed for potable water applications, Meets Safe Drinking Water Act requirements

Attribute	Detail
Material	Metal
Package Dimensions	1.42 x 1.34 x 1.26 inches

10. WARRANTY INFORMATION

This Oatey product comes with a **1-year limited warranty**. For specific details regarding warranty coverage, terms, and conditions, please refer to the official Oatey warranty documentation or contact Oatey customer support.

11. CUSTOMER SUPPORT

For technical assistance, product inquiries, or support, please visit the official Oatey website or contact their customer service department. Always refer to the product's packaging for the most current contact information.

Oatey Website: www.oatey.com

