Harris SSBF1

Harris SSBF1 Stay Silv Brazing Flux Instruction Manual

Model: SSBF1

Introduction

This manual provides essential instructions for the safe and effective use of the Harris SSBF1 Stay Silv Brazing Flux. Please read this manual thoroughly before use and retain it for future reference. This product is designed for silver brazing applications requiring high temperature and resistance to refractory oxides.

Safety Information

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm (Proposition 65 Warning). Always use in a well-ventilated area. Avoid contact with skin and eyes. Wear appropriate personal protective equipment (PPE), including gloves and eye protection.

- Consult the Safety Data Sheet (SDS) for complete safety information.
- Keep out of reach of children and pets.
- Do not ingest.
- Store in a cool, dry place, away from incompatible materials.
- Dispose of according to local regulations.

Product Overview

The Harris SSBF1 Stay Silv Brazing Flux is an all-purpose, high-temperature flux specifically formulated for silver brazing. It is particularly effective in applications where rapid, localized heating occurs and where significant refractory oxides may form, such as when brazing stainless steel alloys. This flux is suitable for use with stainless steel, carbide, heavy parts, and during prolonged heating cycles.

Image: Harris SSBF1 Stay Silv Brazing Flux in a 1 lb jar. The jar is black with a white label, indicating the product name and brand.

Key Features:

- High-temperature performance for silver brazing.
- Effective in preventing refractory oxide formation.
- Suitable for stainless steel, carbide, and heavy parts.
- Material Composition: Zinc Chloride, Ethylene Glycol, Ammonium Chloride.

What's in the Box:

- 1 lb Jar of Harris SSBF1 Stay Silv Brazing Flux

Setup

1. **Preparation of Workpiece:** Ensure the surfaces to be brazed are clean, free from oil, grease, dirt, and heavy oxides. Mechanical cleaning (e.g., wire brushing, grinding) or chemical cleaning may be necessary.
2. **Flux Application:** Apply a thin, even layer of Harris SSBF1 Stay Silv Brazing Flux to both mating

surfaces of the joint. The flux should cover the entire area to be brazed and extend slightly beyond.

3. **Brazing Alloy Selection:** Select a silver brazing alloy appropriate for your application and base metals.

Operating Instructions

1. **Heating the Workpiece:** Using an appropriate heat source (e.g., oxy-acetylene torch, propane/propylene torch), heat the workpiece evenly. Focus the heat on the heavier section of the joint first to ensure uniform temperature distribution.
2. **Flux Activity:** As the workpiece heats, the flux will first dry out, then turn brown, and finally become clear and fluid. This indicates that the base metal has reached the correct brazing temperature. The flux's color change provides a visual indicator for optimal brazing conditions.
3. **Applying Brazing Alloy:** Once the flux is clear and fluid, touch the brazing alloy to the joint. The heat from the base metal should melt the alloy, causing it to flow into the joint by capillary action. Do not melt the alloy directly with the torch flame.
4. **Post-Brazing:** Remove the heat once the joint is filled. Allow the assembly to cool slowly.

Maintenance

- **Flux Residue Removal:** After brazing and cooling, flux residues should be removed. This can typically be done by immersing the brazed assembly in hot water (around 120-140°F / 50-60°C) or by mechanical cleaning with a wire brush. Ensure all residue is removed to prevent corrosion.
- **Storage:** Store the Harris SSBF1 Stay Silv Brazing Flux in its original sealed container in a cool, dry place. Protect from freezing.
- **Consistency:** If the flux becomes too thick, a small amount of distilled water can be added and stirred thoroughly to restore its original consistency. Avoid adding excessive water.

Troubleshooting

Problem	Possible Cause	Solution
Brazing alloy does not flow properly.	Insufficient heat; improper flux application; dirty surfaces.	Increase heat, ensure even heating; apply a fresh, even layer of flux; thoroughly clean surfaces before fluxing.
Excessive oxidation after brazing.	Insufficient flux coverage; flux burned out prematurely; incorrect heating.	Ensure adequate flux coverage; avoid overheating the flux; maintain proper heating technique.
Flux becomes too thick or dry.	Improper storage; evaporation of water content.	Add a small amount of distilled water and stir until desired consistency is achieved. Store in a sealed container.

Specifications

- **Model:** SSBF1
- **Product Type:** Stay Silv Brazing Flux
- **Weight:** 1 pound (approx. 0.45 kg)

- **Color:** Black (as supplied)
- **Material Composition:** Zinc Chloride, Ethylene Glycol, Ammonium Chloride
- **Manufacturer:** The Harris Products Group
- **Application:** Silver brazing of stainless steel, carbide, heavy parts, and for prolonged heating cycles.

Warranty and Support

For warranty information or technical support regarding the Harris SSBF1 Stay Silv Brazing Flux, please contact The Harris Products Group directly. Refer to their official website or product packaging for contact details and specific warranty terms.
Manufacturer: The Harris Products Group
Website: www.harrisproductsgroup.com (*Note: This is a placeholder link, please refer to the official product documentation for the correct manufacturer website.*)