

Burndy PEN A13-8

Burndy PENETROX A-13 Oxide-Inhibiting Joint Compound User Manual

Model: PEN A13-8

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1. PRODUCT OVERVIEW

The Burndy PENETROX A-13 (Model PEN A13-8) is an advanced oxide-inhibiting joint compound designed for use in electrical compression terminals. This product is formulated to facilitate reliable electrical connections between aluminum-to-aluminum and aluminum-to-copper conductors, as well as for aluminum conduit threading. It is also suitable for use with insulated cables.

PENETROX A-13 contains homogeneously suspended zinc particles. These particles enhance conductivity by creating additional conductive surface area and acting as electrical bridges between conductor strands, improving the overall integrity of the connection. The compound effectively penetrates thin oxide films, seals out air and moisture, and prevents further oxidation or corrosion. It exhibits superior weathering characteristics and maintains performance across a wide range of temperatures, ensuring a high-conductivity, "gastight" joint.

This product is recommended for all voltages and is UL Listed and RoHS compliant, ensuring adherence to safety and environmental standards.



Figure 1: Burndy PENETROX A-13, 8 oz squeeze bottle. This image shows the product in its silver squeeze bottle container.

2. SAFETY INFORMATION

Always read and understand the Safety Data Sheet (SDS) for PENETROX A-13 before use. Adhere to all local and national safety regulations.

- **Personal Protective Equipment (PPE):** Wear appropriate PPE, including safety glasses or goggles and chemical-resistant gloves, to prevent skin and eye contact.
- **Ventilation:** Use in a well-ventilated area to avoid inhalation of vapors.
- **Storage:** Store the container in a cool, dry place, away from direct sunlight and incompatible materials. Keep the container tightly closed when not in use.
- **Disposal:** Dispose of used product and containers in accordance with local environmental regulations.
- **First Aid:** In case of contact, flush affected areas with plenty of water. If irritation persists or if ingested, seek immediate medical attention.

3. APPLICATION INSTRUCTIONS

3.1. Preparation

1. Ensure all electrical power to the connection point is disconnected and locked out according to safety procedures.
2. Clean the conductor surfaces thoroughly using a wire brush or abrasive pad to remove any existing oxides, dirt, or contaminants.
3. Wipe the cleaned surfaces with a clean, lint-free cloth.

3.2. Application Procedure

PENETROX A-13 is designed for use with compression and bolted connectors to improve service life for aluminum connections.

1. Apply a generous amount of PENETROX A-13 directly onto the cleaned conductor surfaces and inside the connector barrel.
2. Ensure complete coverage of all contact surfaces to maximize the oxide-inhibiting effect and electrical conductivity.
3. Insert the conductor into the connector.
4. Proceed with the compression or bolting process according to the connector manufacturer's instructions. The compound will aid in gripping the conductor and enhance the integrity of the connection.
5. Wipe away any excess compound from the exterior of the connection after assembly.

Note: PENETROX A-13 is compatible with insulating materials such as rubber or polyethylene, making it suitable for a wide range of applications.

4. STORAGE AND MAINTENANCE

Proper storage ensures the longevity and effectiveness of PENETROX A-13.

- Store the product in its original container with the cap tightly sealed.
- Keep in a cool, dry environment, away from extreme temperatures and direct sunlight.
- Avoid contamination of the product with other substances.

Once applied, the compound forms a durable, gastight seal, requiring no further maintenance for the connection itself under normal operating conditions.

5. TROUBLESHOOTING

PENETROX A-13 is a straightforward application product. Most issues arise from improper surface preparation or application.

Problem	Possible Cause	Solution
Poor connection conductivity after application	Inadequate surface cleaning; insufficient compound application; improper connector compression/bolting.	Ensure surfaces are thoroughly cleaned before application. Apply a generous amount of compound to all contact areas. Verify connector is properly installed according to manufacturer specifications.

Problem	Possible Cause	Solution
Compound appears dry or separated	Improper storage (e.g., extreme temperatures, prolonged exposure to air).	Ensure product is stored in a cool, dry place with the cap tightly sealed. If the product's consistency has significantly changed, it may need to be replaced.

6. SPECIFICATIONS

Feature	Detail
Model Number	PEN A13-8
Container Size	8 oz
Container Type	Squeeze Bottle
Base Compound	Non-petroleum base vehicle with suspended zinc particles
Recommended Use	Aluminum to aluminum, aluminum to copper connections, aluminum conduit threads
Compatibility	Compatible with insulating materials such as rubber or polyethylene
Voltage Rating	Recommended for all voltages
Certifications	UL Listed, RoHS Compliant
Item Weight	10.5 ounces
Product Dimensions	7.47 x 2.04 x 2.04 inches
Material	Aluminum (referring to application, not compound itself)
Color	Silver

7. WARRANTY AND SUPPORT

7.1. Manufacturer's Warranty

The Burndy PENETROX A-13 (Model PEN A13-8) is covered by a **2-year manufacturer's warranty**. This warranty covers defects in materials and workmanship under normal use. For specific terms and conditions, please refer to the official Burndy warranty documentation or contact Burndy customer support.

7.2. Customer Support

For technical assistance, product inquiries, or warranty claims, please contact Burndy customer support through their official website or the contact information provided on the product packaging.

Burndy Official Website: www.burndy.com



