



Pure silver filled electrically conductive epoxy. Maximum continuity of conductivity, high adhesion; can be thinned as a coating for FRI and EMI shielding.

TECHNICAL PRODUCT BULLETIN

GENERAL DESCRIPTION

E10-101 is an epoxy adhesive and coating formulation based on pure silver. This versatile silver formulation offers the maximum continuity of conductivity with an electrical resistivity value of less than 1x10^-4 ohm-cm.

E10-101 passes NASA's outgassing testing (ASTM E-595) and is listed in NASA's Outgassing Data for Selecting Spacecraft Materials list.

E10-101 is also characterized by a wide operating temperature range from -50 to +170°C.

E10-101 is recommended for electronic bonding and sealing applications that require both fine electrical and mechanical properties.

E10-101 cures at room temperature or can be accelerated with mild heat to form a tenacious bond between similar and dissimilar substrates including: aluminum, copper, magnesium, steel, bronze, nickel, kovar, ceramic, glass, phenolic and G-10 epoxy glass boards.

E10-101 has been used extensively in such diversified applications as microwave EMI & RFI shielding, in the assembly or repair of printed circuit boards, wave guides, electronic modules, flat cable, high frequency shields, connections, circuitry and as a cold solder for high-sensitive components where hot-soldering is impractical.

This unique formulation offers ease in handling due to its creamy consistency and versatility in methods of application. This high performance conductive polymer is a smooth soft paste designed for ease in handling and use. It can be applied by hand application, automatic dispensers, silk-screening, transfer or stamping techniques.

APPLICATION

- 1. Clean and remove any dirt and grease from surfaces to be bonded.
2. Mix thoroughly, by weight, 5 parts E10-101 catalyst to 100 parts E10-101 silver resin
3. Apply and cure overnight at room temperature or cure 2-3 hours at 80°C.

SPECIFICATIONS

HANDLING CHARACTERISTICS:

Table with 2 columns: Property and Value. Includes Catalyst number, Mix Ratio, Workable Pot Life, Mixed Viscosity, Color, Filler, Cure Schedule, and Shelf Life.

PHYSICAL CHARACTERISTICS

Table with 2 columns: Property and Value. Includes Shrinkage Linear, Hardness, Specific Gravity, Tensile Strength, and Compressive Strength.

THERMAL CHARACTERISTICS

Table with 2 columns: Property and Value. Includes Thermal Conductivity, Thermal Expansion Coefficient, Heat Distortion, and Operating Temperature Range.

ELECTRICAL CHARACTERISTICS

Table with 2 columns: Property and Value. Includes Volume Resistivity.

NASA OUTGASSING RESULTS

Table with 2 columns: Property and Value. Includes TML, CVCM, and WVR.

The information given and the recommendations made herein are based on our research and are believed to be accurate but no guarantee of their accuracy is made. In every case we urge and recommend that purchasers before using any product in full scale production make their own tests to determine to their own satisfaction whether the product is of acceptable quality and is suitable for their particular purposes under their own operation conditions.

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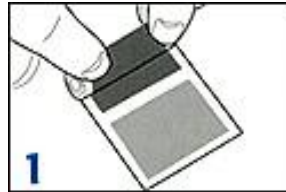
STORAGE AND HANDLING:

Since settling may occur in storage, remix each container prior to use. Refrigeration storage is recommended to minimize filler settling and to maintain viscosity and electrical conductivity. If refrigeration storage is used, to avoid condensation, allow to stabilize to room temperature before opening and removing material. OSHA Form 20 Material Safety Data Bulletins are available on request.

PACKAGING:

E10-101 is available in:

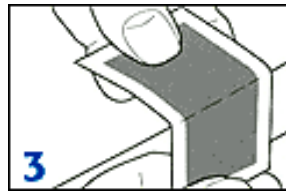
1. Burst Pouches (2.5 grams, 5 grams, 10 grams)



Roll pouch to force liquid toward burst seal.



Squeeze and apply pressure to burst through seal



Mix thoroughly on edge of desk until well mixed



Cut corner and dispense.

2. Jars Kits: (0.5Lb, 1.0Lb, 2.0Lb)

Pre-measured Catalyst 101 and Silver Resin 101 .



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