

Product
Bulletin**E-1072**

Low cost, lightweight silver coated glass sphere epoxy electrical conductor; can be used in adhesive potting, and coating applications; low volume resistivity.

GENERAL DESCRIPTION

E-1072 is a 2 part epoxy. This unique formulation is based on a silver coated ceramic that results in lower material costs without adversely sacrificing the properties obtained with a pure silver formulation. This concept opens the door to a wide range of applications previously prohibited by the much higher cost of conventional silver conductive.

E-1072 cures at room temperature or can be accelerated with mild heat to form a tenacious bond between similar and dissimilar substrates such as aluminum, copper, magnesium, steel, bronze nickel, ceramic, glass, phenolic, and G-10 epoxy glass boards.

E-1072, because of its excellent continuity, has been used extensively in such diversified applications as, microwave EMI and RFI shielding, in the assembly or repair of printed circuit boards, wave guides, electronic modules, flat cable, high frequency shields, connections, and circuitry and as a cold solder. This unique formulation offers ease in handling due to its creamy consistency and versatile application by hand, automatic dispenser, silk-screening, transfer or stamping techniques.

SPECIFICATIONSHANDLING CHARACTERISTICS

Catalyst Number: Part B, Catalyst E10-106LC
Mix Ratio, Part B: Part A , by Weight: 9:10
Workable Pot Life, 100 g @ 25°C: 1 hr.
Mixed Viscosity @ 25°C cps: paste
Recommended Cure: 8 hrs. @ room temp.
Color: Grey

PHYSICAL CHARACTERISTICS

Shrinkage Linear, in / in: 0.004
Hardness, Shore D: 82
Relative Density 3.5
Tensile Strength, psi: 8,900
Tensile Lap strength 4.5 max mpa
Compressive Strength, psi: 13,600

THERMAL CHARACTERISTICS

Thermal Conductivity, 2.2 w/m.k
Thermal Expansion Coefficient $45 \times 10^{-6} \times K^{-1}$
(cm / cm / °C · 10⁻⁵): 1.9
Heat Distortion, °C: 90
Operating Temperature Range, °C: -54 to +150

ELECTRICAL CHARACTERISTICS

Volume Resistivity, ohm · cm: 6×10^{-3}

Storage and Handling

Storage Temp: 18-25 °c
 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.

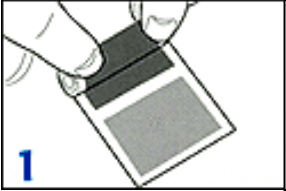

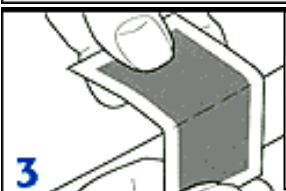

If refrigeration storage is used, to avoid condensation, allow to stabilize to room temperature before opening and removing material. OSHA Form 20 Material Safety Data Bulletins are available on request.

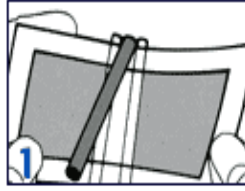


PACKAGING

E1072 is available in:

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

2- Two Chamber Pouches Separated by Plastic Clamp (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.

	Hold each end of pouch and pull firmly to remove plastic divider
	Mix thoroughly on table top or any 90° surface until well mixed.
	Cut corner and dispense. Plastic divider can also be used as an applicator

3- **Jars Kits: (0.5Lb, 1.0Lb, 2.0 Lb)**

Pre-measured part A and B



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. No representative of ours has any authority to waive or change the foregoing provisions but, subject to such provisions, our engineers are available to assist purchasers in adapting our products to their needs and to the circumstances prevailing in their business. Nothing contained herein shall be construed to imply the nonexistence of any relevant patents or to constitute a permission, inducement or recommendation to practice any invention governed by any patent, without the authority from the owner of this patent. We also expect purchasers to use our products in accordance with the guiding principles of the Chemical Manufacturers Association's Responsible Care® program.