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Innovative Chemistry For High-Tech Applications

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EP-799

TWO PART STAKING EPOXY ADHESIVE

EP-799 is a unique, two part epoxy adhesive used for potting electro/mechanical assemblies or components for protection against moisture, contamination and mechanical or thermal shock. EP-799 can also be used for component attachment, termination, staking and other applications where low temperature curing conditions are required. EP-799 exhibits excellent adhesion to most metal and plastic substrates. EP-799 has excellent temperature resistance, toughness, and allows for differences in coefficients of thermal expansion between two bonded substrates. Convenient mix ratios and packaging in pre-weighed amounts allow for ease of use in fast paced production environments. Conductive Compounds, Inc. can modify the cure speed, working time or rheology of EP-799 to make it more compatible with your unique manufacturing process.

EP-799 is compatible with all of our silver conductive inks and epoxies, UV curable encapsulants, dielectrics and conformal coatings. Contact us for suitability of use with other materials.

TYPICAL PROPERTIES

Appearance	Part 'A'	Thick black Liquid
	Part 'B'	Light Straw Colored Liquid
Mix Ratio		175 Parts 'A' (By Weight) To 100 Parts 'B'
Shelf Life (Unmixed)		6 Months In Unopened Container
Mixed Viscosity		
(Spindle SC4-14 @ shear rate 20)		<3,000 cps
Pot Life (25 Grams, Room Temperature)		20 Minutes After Mixing
Thin Film Set Time (.001" @ 25° C)		>4 Hours
Total % NV Solids		100%
Hegman Gage		<10 μ
Volume Resistivity (ref. ASTM D-257)		<1.0 x 10 ¹⁴ Ω-cm
Operating Temperature Range		
(Fully Cured)		-55° C To +125° C Continuous Intermittent at higher temperatures

CAUTION

When heating assemblies for curing, be careful to not heat larger potted assemblies above 50 degrees C. Epoxy polymers are exothermic during curing and generate heat. The heat generated causes the reaction to go at a faster rate, which in turn generates more heat, and a runaway reaction can cause damage to assemblies or parts, and in extreme cases cause fire.

MORE INFORMATION ON REVERSE SIDE

EP-799

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APPLICATION GUIDELINES

Weigh out and mix part A and B together thoroughly. Use immediately. Do not mix more material than needed and try to mix only small quantities at one time. While the expected pot life of EP-799 is 20 minutes at room temperature, if larger quantities are mixed, the pot life will be greatly reduced and the epoxy will generate extreme amounts of heat as it cures.

If vacuum degassing is required after mixing, do it immediately and use the epoxy right away.

Recommended curing schedule is room temperature for 2 to 8 hours, followed by baking at elevated temperatures up to 150 degrees C to complete curing. Applying heat to epoxy just after potting may cause a runaway exotherm which may damage assembly or components, or in extreme cases cause fire. If heat is applied immediately after potting, do not go higher than 50 degrees C and be sure to check suitability of material for your application.

PACKAGING

EP-799 is available in pre-weighed open containers. There is no minimum purchase quantity with these packaging configurations, and we can provide open containers with any specified amount of material.

The above guidelines are intended to provide a starting point for evaluation. Conductive Compounds, Inc. recognizes that each customer's manufacturing process is unique, and we can customize the rheology of EP-799 to conform to the process parameters. We are also available to provide technical assistance to resolve your processing issues. Call us to discuss your application in more detail.

NOTE: Although the above properties are accurate to the best of our knowledge, Conductive Compounds, Inc. makes no guarantees for customer specifications established in applications where this product is used. Customer assumes responsibility for determining fitness of use in their particular application.