



TECHNICAL DATA SHEET

EP-799 Black Potting Compound

EP-799 is used for **potting electro/mechanical assemblies or components** for protection against **moisture, contamination, and mechanical or thermal shock.**

It can also be used for component attachment, termination, staking, and other applications in which **low temperature curing conditions** are required.

DESCRIPTION

- Excellent temperature resistance, toughness, and allows for differences in coefficients of thermal expansion between two bonded substrates
- Can be applied by syringe
- Convenient mix ratios and packaging in pre-weighed amounts allow for ease of use in fast paced production environments. EP-799 is also available in dual, pre-weighed and sealed plastic pouches.
- Applied Ink Solutions 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, 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 (by weight)		175 Parts 'A' (by weight) to 100 Parts 'B'
Mix Ratio (by volume)		1.6 Parts 'A' (by volume) to 1 Part 'B'
Shelf Life (Unmixed)		6 months in unopened container
Pot Life (25 Grams, Room Temperature)		20 minutes after mixing
Thin Film Set Time (.001" @ 25°C)		>4 hours
Total % NV Solids		100%
Hegman Gauge		<50 μ
Volume Resistivity (ref. ASTM D-257)		<1.0 x 10 ¹⁴ Ω -cm
Operating Temperature Range		-55°C To +125°C continuous
(Fully Cured)		Intermittent at higher temperatures

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Guidelines are intended to provide a starting point for evaluation. Applied Ink Solutions recognizes that each customer's manufacturing process is unique, and we are available to provide technical assistance to resolve your processing issues. Call us to discuss your application in more detail.

The properties are accurate to the best of our knowledge and Applied Ink Solutions 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.

CAUTION

When heating assemblies for curing, be careful to not heat larger potted assemblies above 50°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.

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.

Curing

Recommended curing schedule is room temperature for 2 to 8 hours, followed by baking at elevated temperatures up to 150°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°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.

Health & Safety

Products manufactured by Applied Ink Solutions are intended for use in an industrial environment by trained personnel. Please follow proper health/safety processes regarding storage, handling and processing of the products.