



AA-DUCT 2902 Pure Silver Filled Electrically Conductive Epoxy

AA-DUCT 2902 is a **pure silver-filled, two-component epoxy adhesive** designed for applications requiring maximum electrical conductivity and strong mechanical and thermal properties. This versatile formulation offers exceptional continuity of conductivity with a low electrical resistivity value of less than 1×10–4 ohm-cm. It is a solvent-free adhesive with excellent adhesion to a wide range of substrates and can be cured at room temperature or with heat for a faster bond.

This product is ideal for electronic bonding and sealing, including applications like **EMI/RFI shielding**, circuit repair, and bonding heat-sensitive components as a cold solder. Its robust performance is maintained over a wide operating temperature range from **–50 to +170°C**.

Product Properties

Property	Value
Appearance	Silver
Cure Type	Room Temperature or Heat Cure
Mix Ratio (by weight)	100:6 (Resin:Hardener)
Substrates	Aluminum, Copper, Magnesium, Steel, Bronze, Nickel, Kovar, Ceramic, Glass, Phenolic, G-10 Epoxy Glass Boards
Operating Temperature	–50 to +170°C
Typical Applications	Electrical, Conductive, EMI/RFI Shielding, Circuitry, Printed Circuit Board and Electronics Repair

Uncured Properties

Property	Value
Specific Gravity (mixed)	2.79
Reactive Solids Content	100%
Pot Life	1 Hour
Shelf Life	6 months (Bi-pax), 1 year (Jars & Syringes)
Viscosity	Paste (20,000 CPS)

Cure Schedule

Cure Time	Temperature
15 minutes	100°C
1-4 hours	65°C
24 hours	Room Temperature

Cured Properties

Property	Value
Hardness (Shore D)	80
Lap Shear Strength	5 N/mm2 (700 psi)
Volume Resistivity	\$< 0.0001 ohm-cm}
Thermal Conductivity	2.99 W/mK
Tensile Strength	9,500 psi
Compressive Strength	14,000 psi
NASA Outgassing	Passed (TML: 0.64%, CVCM: 0.05%)

General Information

For safe handling, always consult the **Material Safety Data Sheet (MSDS)** for this product.

How to Use

- Preparation:** Ensure all surfaces are thoroughly cleaned and dried before application.
- Mixing:** Some settling of components may occur during storage. Mix the contents of the container thoroughly before use to ensure a uniform consistency and optimal performance.
- Application:** Apply the fully mixed adhesive to the prepared surfaces and gently press them together. Light contact pressure is sufficient.
- Curing:** Maintain contact between the surfaces until the adhesive is fully cured according to the recommended cure schedule.
- Crystallization:** If the product is stored at low temperatures, crystallization may occur. Gentle warming at 52°C for 30 minutes can re-dissolve the components, restoring them to a liquid state for best results.

Availability AA-DUCT 2902 is available in various packaging options. Technical Data Sheets (TDS) and Material Safety Data Sheets (MSDS) are available upon request.