

AA-DUCT AD1 ELECTRICALLY CONDUCTIVE ONE PART LOW COST EPOXY

Technical Product Bulletin

PRODUCT DESCRIPTION:

AA-DUCT AD1 is a single component epoxy, formulated with pure silver power combined with organic binders and solvents to produce electrically conductive paths, films or patterns over non-conductive substrates.

AA-DUCT AD1 shows slight settling when stored for a long period of time, no caking and will re disperse to a smooth homogeneous state. AA-DUCT AD1 formulation produces electrically conductive paths on a wide variety of surfaces including plastics, rubber, cloth, thermoplastic, paper, wood and many others.

AA-DUCT AD1 designed for use in diversified applications as microwave EMI & RFI shielding, in the assembly or repair of printed circuit boards, wave-guides, electronic modules, flat cable, static shielding, connections, and circuitry.

PRODUCT PROPERTIES:

Appearance	Silver	
Cure Type	Heat cure	
Benefits	 High strength Perfect bond EMI & RFI shielding Wave guides 	
Substrates	Excellent choice for Integrated Circuits, aluminum, copper, magnesium, steel, bronze, nickel, kovar, ceramic, glass, phenolic and G- 10 epoxy glass boards.	
Catalyst	Anhydride	
Hardness, Shore D	83	
Typical Applications	Microwave EMI & RFI shielding, in the assembly or repair of printed circuit boards, wave-guides, electronic modules, flat cable, static shielding, connections, and circuitry.	

GENERAL INFORMATION:

This product contains organic solvent. The following precautions should be exercised:

Use with adequate ventilation. Avoid prolonged contact with skin, if contact with skin occurs, wash area immediately with a soap and water avoid prolonged breathing of vapor. Dangerous if swallowed. Refer to MSDS for more details.

CURE SCHEDULE:

0.7 hours	@ 200°C, 392°F
1.5 hours	@ 180°C, 356°F
2.5 hours	@ 160°C, 320°F

PHYSICAL CHARACHTERISTICS:

Sheet Resistivity:	10-12 mΩ/sq
Adhesion Tensile Strength:	1000 N/cm2
	(1500 lb/in2)
Lap shear Strength:	1400 N/cm2
	(2000 lb/in2)
Thermal Conductivity:	0.04J/(cm.s. °C):[0.01cal/
	(cm.s. °C)]
Specific heat:	0.30J/(g. °C) :[0.07 cal/g. °C]
Coefficient of Thermal	3x10-5 (m/m)/ °C
Expansion:	
Modulus of elasticity	4x10*10 Pa (6x105lb/in2)
Poisson's Ratio:	0.35

UNCURED PROPERTIES:

Viscosity @ 25 °C cps	6,800
Density gm/cc	2.35
Silver , %	70-72
Shelf life	6 Months
Operating Temperature	-45°C to 170°C
Pot Life @ 25 °C	6 months @ 25°C
	9 months refrigerated

HOW TO USE:

AA-DUCT AD1 conductive silver coated is formulated For application by brushing, spraying, dipping, bandingor stylus. Recommended thinners may be added for individual compositions, to replace solvent losses or to make slight adjustments. Only the recommended thinner should be used.

In handling and using organic solvents, the safety precautions recommended by the solvent supplier should be observed.

AVAILABILITY:

This epoxy can be supplied in many different packages.

Atom Adhesives

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