

# AA-DUCT AD1 ELECTRICALLY CONDUCTIVE ONE PART LOWCOST 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 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, waveguides, electronic modules, flat cable, static shielding, connections, and circuitry.

AA-DUCT AD1 shows slight settling when stored for a long period of time, no caking and will redisperse to a smooth homogeneous state.

# PRODUCT PROPERTIES:

Color	Silver
Cure Type	Heat cure
	• EMI & RFI shielding
	• No mixing required.
Benefits	• Die Attach
	• High strength
	• Wave guides
	Excellent choice for Integrated Circuits,
Substrates	aluminum, steel, bronze, nickel, ceramic, glass,
	Etc.
Operating	-40°C to 175°C (347°F)
Temperature	, , , , , , , , , , , , , , , , , , ,
Pot Life	6 months at $25^{\circ}$ C (77°F)
	9 months at -40°C

# **UNCURED PROPERTIES:**

Viscosity @ 25 °C, cps	$20,000 \pm 1,000$
Shelf Life	6 months at 25°C (77°F)
Density	9 months at -40°C 2.65

# **CURE SCHEDULE:**

60 minutes	@ 120°C (248°F)
30 minutes	@ 150°C (302°F)
10 minutes	@ 175°C (347°F)

#### **CURED PROPERTIES:**

Hardness, Shore D	83
Volume Resistivity ohm-cm	2.5 x 10 <sup>-3</sup>
Adhesive Bond Strength psi	1500
Thermal Conductivity, W/m.K	2.1
Coefficient of Thermal Expansion (in/in) C	57x 10 <sup>-5</sup>
Lap Shear Strength, psi	9200

#### **GENERAL INFORMATION:**

For safe handling information on this product, consult the Safety Data Sheet, (SDS).

# **HOW TO USE:**

- 1. Carefully clean and dry all surfaces to be bonded.
- 2. Apply AA-DUCT AD1 to the prepared surfaces.
- 3. Some separation of components is common during shipping and storage. For this reason, it is recommended. that the contents of the shipping container be thoroughly mixed prior to use.

# **AVAILABILITY:**

This epoxy can be supplied in many different packages.



# **Atom Adhesives**

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