



# Silver Filled Electrically Conductive Epoxy Technical Product Bulletin

## PRODUCT DESCRIPTION:

AA-DUCT 900 is a single component, heat cure, micro particle filled silver conductive epoxy that was designed for very small applications requiring particle sizes no larger than 2 micron. This high performance conductive epoxy cures at elevated temperatures making it ideally suited for applications requiring the smaller possible conductive particles.

AA-DUCT 900 offers excellent mechanical, electrical, and physical properties at continuous operating temperatures up to 180°C

AA-DUCT 900 is a smooth, soft paste that can be applied by hand application, automatic dispensers, screen-printing, transfer or stamping techniques.

#### **CURED PROPERTIES:**

Hardness, Shore D 81
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#### **PRODUCT PROPERTIES:**

Appearance	Silver
Cure Type	Heat cure For The optimum time and temperature will depend on the mass of compound. Longer cure schedules may be needed when curing very minute amounts.
Benefits	<ul> <li>High strength</li> <li>Excellent mechanical, electrical properties</li> </ul>
Substrates	Excellent choice for Integrated Circuits, aluminum, magnesium, steel, bronze, nickel, ceramic, glass.

#### **AVAILABILITY:**

This epoxy can be supplied in many different packages.

## **GENERAL INFORMATION:**

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

#### **CURE SCHEDULE:**

2-3 hours	@ 120°C
1 hour	@ 150°C
1/2 hours	@ 175°C

#### **UNCURED PROPERTIES:**

Viscosity @ 25 °C cps	150,000±10000
Shelf life	1 Months
Density	3.6

#### **THERMAL PROPERTIES:**

Thermal Conductivity, btu/hr/ft2/°F/in:	14.1
Coefficient of Thermal Expansion	60x 10^-6 (in/in) C
Operating Temperature	-55°C to +180°C
	Intermit. to 300

#### **ELECTRICAL PROPERTIES:**

Volume Resistivity ohm. cm	0.001
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#### **HOW TO USE:**

- 1. Carefully clean and dry all surfaces to be bonded.
- 2. Apply AA-DUCT 900 adhesive to the prepared surfaces.
- 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.
- 4. Heat cure according to the cure schedule above.

# **Atom Adhesives**

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