

# AA-DUCT 902LP

# Pure silver filled electrically conductive epoxy Long Pot Life Epoxy Adhesive

**Technical Product Bulletin** 

Optically Transparent Low Viscosity Epoxy Adhesive

# **PRODUCT DESCRIPTION:**

AA-DUCT 902LP is an epoxy adhesive and coating formulation based on pure silver. This versatile silver formulation offers the maximum continuity of conductivity with an electrical resistivity value of less than 1x10-4 ohm-cm.

AA-DUCT 902LP is also characterized by a wide operating temperature range from -50 to +170°C.

AA-DUCT 902LP is recommended for electronic bonding and sealing applications that require both fine electrical and mechanical properties.

#### **PRODUCT PROPERTIES:**

Appearance	Silver	
Cure Type	Heat cure or Room temperature	
Benefits	<ul> <li>High strength</li> <li>Perfect bond</li> <li>Cold solder for heat sensitive components</li> </ul>	
Mix Ratio by weight	100:6 / Resin:Hardener	
Substrates	Excellent choice aluminum, copper, magnesiur steel, bronze, nickel, kovar, ceramic, glass, phenolic and G-10 epoxy glass boards.	
Typical Applications	Electrical, conductive, rmi/efi shielding, circuiti printed circuit board and electronics repair	

## **UNCURED PROPERTIES:**

Viscosity @ 25 °C cps	Paste
Specific Gravity, mixed	2.79
Reactive solids contents, %	100
Pot Life	3 hours
Shelf life	1 Year

## **CURE SCHEDULE:**

2 minutes	@ 120°C
5 minutes	@ 100°C
24 hours	Room temperature

# **CURED PROPERTIES:**

Hardness, Shore D	85
Shrinkage linear in/in	0.003
Tensile Strength, psi	9500
Volume Resistivity ohm. cm	< 0.0001
Compressive Strength, psi	14,000
Lap Shear Strength, PSI	9400

#### **THERMAL PROPERTIES:**

Thermal Conductivity, btu / hr / ft2 / °F / in	100
Thermal Expansion Coefficient	1.5
(cm / cm / °C · 10-5)	
Heat Distortion, °C:	170
Operating Temperature Range, °C:	-50 to +170

## **GENERAL INFORMATION:**

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

#### **HOW TO USE:**

- 1. Carefully clean and dry all surfaces to be bonded.
- Apply AA-DUCT 902LP completely mixed adhesive to the prepared surfaces, and gently press these surfaces together. Contact pressure is adequate for strong, reliable bonds; however, maintain contact until adhesive is completely cured.
- 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. Some ingredients in this formulation provided may crystallize when subjected to low temperature storage. A gentle warming cycle of 52°C for 30 minutes prior to mixing components may be necessary. Crystallized epoxy components do not react as well as liquid components and should be re-dissolved prior to use for best results.

# **AVAILABILITY:**

This epoxy can be supplied in many different packages.

## **Atom Adhesives**

Email: <u>info@atomadhesives.com</u> 200 Allens Ave, Providence, RI 02903