



## CW2400 - CircuitWorks Conductive Epoxy



### PRODUCT DESCRIPTION

CircuitWorks Conductive Epoxy is a two part, silver epoxy used in prototype, repair, and general conductive bonding applications. CW2400 features strong mechanical bonds, excellent electrical conductivity, and quick room temperature curing. CircuitWorks Conductive Epoxy bonds aggressively to a wide variety of materials.

- Two-component product
- Simple mixing ratios
- Excellent electrical conductivity
- Fast curing
- High strength bond
- Bonds dissimilar surfaces
- Operating temperature range from 91<sup>o</sup>C (-131<sup>o</sup>F) to 100<sup>o</sup>C (212<sup>o</sup>F)

### TYPICAL APPLICATIONS

CircuitWorks Conductive Epoxy may be used for electronics applications including:

- Conductive bonds between heat sensitive components
- Solderless surface mount connections
- Circuit board trace repair
- Static discharge and grounding
- Solder repair
- Conductive structural adhesions

### COMPATIBILITY

CircuitWorks Conductive Epoxy is generally compatible with most materials used in printed circuit board fabrication. As with any adhesive/sealant, compatibility with substrate should be determined on a non-critical area prior to use.

### USAGE INSTRUCTIONS

**Read MSDS carefully prior to use.**

**Cleaning:** For best results, clean the board with one of All-Spec's Electro-Wash or Pow-R-Wash cleaners in order to remove any surface contamination, which may prevent adequate material contact.

**Mixing:** Mix equal amounts (1:1) by weight or volume of Part A and Part B. Mix thoroughly for 2 minutes and apply within 8 minutes.

**Thinning:** Do not attempt to thin.

**Curing:** Curing times and electrical conductivity depend primarily on temperature. For fastest curing times, maximum conductivity and adhesion, cure the bond between 150-250<sup>o</sup>F (65-121<sup>o</sup>C) for 5-10 minutes.

CircuitWorks Conductive Epoxy can be room temperature cured at or above 75<sup>o</sup>F (25<sup>o</sup>C), for 4 hours. Maximum conductivity and bond strength are achieved in 24 hours. *Curing at temperatures below 75<sup>o</sup>F (25<sup>o</sup>C) will result in a loss of conductivity and adhesion.*

**Pot Life:** 8-10 minutes at 75<sup>o</sup>F (25<sup>o</sup>C) after mixing.

### AVAILABILITY

<b>CW2400</b>	7g/0.25 oz. Adhesive & 7g/0.25 oz. Hardener
<b>CW2400BLK</b>	50g. Adhesive, Bulk & 50g. Hardener, Bulk

5228 US HWY 421 N • WILMINGTON, NC 28401

800-537-0351 (tel) • 800 -379-9903 (fax) • sales@allspec.com (email) • www.allspec.com (web)



**TYPICAL PRODUCT DATA AND PHYSICAL PROPERTIES**

<b>Composition</b>		
Material	Part A	Epoxy
	Part B	Hardener
Color	Part A	Bright Silver
	Part B	Gray Silver
Specific Gravity (Parts A & B Mixed)	2.85	
<b>Cured Compound</b>		
Volume Resistivity	<0.001 ohms-cm	
Thermal Conductivity	11 BTU-in/ft <sup>2</sup> -hr- <sup>0</sup> F	
Operating Temperature Range	-131 to 212 <sup>0</sup> F (-91 to 100 <sup>0</sup> C)	
Lap Shear (ASTM D-1002)	>1200 lbs/in	
Shore Hardness	>70	
Dropping Point (ASTM D-2266)	None @ 650 <sup>0</sup> F (343 <sup>0</sup> C)	
Adhesion	Excellent	
Cured Flexibility	Excellent	
Chemical Resistance	Excellent	
Moisture Resistance	Good	
Typical Thickness	5 mil	

5228 US HWY 421 N • WILMINGTON, NC 28401  
 800-537-0351 (tel) • 800 -379-9903 (fax) • sales@allspec.com (email) • www.allspec.com (web)

---

**“The Customer Company”™**