CHEMTRONICS Technical Data Sheet

TDS # CW2200

CircuitWorks[®] Conductive Pen

PRODUCT DESCRIPTION

CircuitWorks[®] Conductive Pen makes instant highly conductive silver traces on circuit boards. CW2200 is used in prototype, rework, and repair of circuit boards by linking components, repairing defective traces, and making smooth jumpers. The silver traces dry in minutes and have excellent adhesion to most electronic materials. Engineers, repair technicians, and manufacturers will find that the CircuitWorks[®] Conductive Pen speeds project completion and cuts rework time.

- Single component system
- High electrical conductivity
- Fast drying
- Highly adherent to circuit boards
- Operating temperature to 400°F (205°C)

TYPICAL APPLICATIONS

CircuitWorks[®] Conductive Pen may be used for electronics applications including:

- Circuit Trace Repair
- Solderless Linking of Components
- EMI Shielding
- Solderable Terminations
- Quick Prototype Modifications

TYPICAL PRODUCT DATA AND PHYSICAL PROPERTIES

Composition

-	
Material	Silver Filled Polymer
Silver Particle Size	10-15 microns
Color	Silver Gray
Setting Rate	<2mm/hr.
Properties	
Conductivity	0.02-0.05 ohms/sq/mil 0.00005-0.000125 ohm cm
Max. Temperature	400°F (205°C)
Tack-Free Time @ 2	25°C 3 to 5 Minutes
Cure Time @ 25°C	20 to 30 Minutes
Solder Wetting	2 to 3 Seconds
Electrical Conductiv	ity Excellent
Adhesion	Excellent
Flexibility	Good
Chemical Resistance	e Good
Tip Diameters	
MTP	0.8 mm (0.03 inches)
STP	1.2 mm (0.05 inches)
Shelflife	16 months

COMPATIBILITY

CircuitWorks[®] Conductive Pen material has excellent compatibility with materials used in printed circuit board fabrication. As with any chemical system, compatibility with the substrate must be determined on a noncritical area prior to use.

USAGE INSTRUCTIONS Read MSDS carefully prior to use.

Cleaning: For best adhesion, clean board with one of Chemtronics Electro-Wash[®] or Pow-R-Wash[®] solvents in order to remove any surface contamination which may prevent adequate material contact.

Mixing: Although this system has been formulated to resist hard-packing, it should be shaken vigorously for 30 seconds to insure the proper dispersion of the silver flakes. If pen has been allowed to sit idle for a long period of time, the mixing ball may seize in the barrel. To free the ball use force to tap the barrel end of the pen until the ball begins to move inside the pen.

Application: The conductive ink is dispensed through the CircuitWorks[®] Conductive Pen. Squeezing the pen body while pressing down on the surface will allow the material to flow, enabling the trace to be drawn. Practice with the pen before attempting detail work. The bulk form of this material may be applied by brushing, banding, or automatic dispensing equipment.

Thinning: The conductive ink has been optimized for the CircuitWorks[®] Conductive Pen and thinning is not normally necessary. However, Butyl Acetate may be added with thorough mixing to make slight adjustments for ease of application in the bulk form.

Clean-up/Removal: The conductive ink may be cleaned or removed using a strong organic solvent such as Chemtronics[®] Electro-Wash[®] PX.

Curing: Tack-free in 3 to 5 minutes at room temperature. Achieves electrical conductivity within 30 minutes. Heat cure for 5 minutes at 250 to 300°F (120 to 150°C) for maximum conductivity, durability and chemical resistance.

Soldering: Low temperature soldering is possible to the *heat-cured* silver conductive traces if done at 350° F (177°C) for <5 seconds.

AVAILABILITY

CW2200STP 8.5 g (0.3 oz.), Standard 1.2 mm tip CW2200MTP 8.5g (0.3 oz.), MicroTip 0.8 mm tip

TECHNICAL & APPLICATION ASSISTANCE

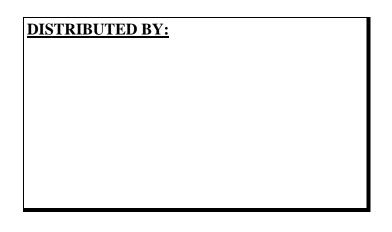
Chemtronics[®] provides a technical hotline to answer your technical and application related questions. The toll free number is: **1-800-TECH-401.**

NOTE:

This information is believed to be accurate. It is intended for professional end users having the skills to evaluate and use the data properly. CHEMTRONICS does not guarantee the accuracy of the data and assumes no liability in connection with damages incurred while using it.

CHEMTRONICS 8125 COBB CENTER DRIVE KENNESAW, GA 30152 1-770-424-4888 R

REV. H (01/17)



X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for Solder category:

Click to view products by Chemtronics manufacturer:

Other Similar products are found below :

 600YSY
 701-2758
 707-1746
 707-1811
 707-1813
 707-1831
 707-1850
 707-1852
 13-217-3-01
 P10695
 SN63WRAP3

 .022-1-LB
 24-6040-0007
 DAC-061
 701-2089
 707-0285
 707-0366
 707-0441-26
 707-1810
 24-6337-9727
 601Y
 24-9574-7619

 24-4060-2437
 14-6040-0125
 04-0595-0000
 5901003
 631960
 SW02-10
 S2626-O-T
 8055
 5760140
 TRWR-204
 1152
 EC2002M-1
 WPT17

 WS6016
 760-2028
 8001115
 8001073
 8001495
 41-096-0202N
 41-096-0203N
 ART.AGT-030
 389289
 54068
 ECO 1 (SNCU1) FLUX B2.1

 0,8 MM 250G
 ECO3 (SNCU3) FLUX B2.1
 0,8 MM 250 G.
 ECO3 (SNCU3) FLUX B2.1
 0,8 MM 1000 G.