CHEMTRONICS
Technical Data Sheet

TDS # CW3300

CircuitWorks® Overcoat Pen

PRODUCT DESCRIPTION

CircuitWorks® Overcoat Pen is ideal for protecting and insulating circuit board traces, components, and other delicate electronics. This highly effective acrylic conformal coating provides excellent protection against shorts, moisture, abrasion, fungus, and other environmental hazards. Allows for easy repair of solder mask in prototype, manufacture and repair of circuit boards.

- Simple to use, single component system
- Hard, durable coating
- High dielectric strength
- Helps prevent arcing and shorts
- Contains fluorescent indicator
- Protects against moisture damage
- Meets requirements of MIL-I-46058C and IPC-A-610D
- Helps prevent static discharge problems on sensitive components

TYPICAL APPLICATIONS

CircuitWorks® Overcoat Pen may be used for electronics applications in:

- Circuit Board Manufacturing
- Data Communications
- Aerospace
- Instrumentation
- Controls
- General Maintenance and Repair

TYPICAL PRODUCT DATA AND PHYSICAL PROPERTIES

Composition

Material	Polymeric Conformal Coat
Color	Clear, Green, Blue, Black, White
VOC Content	630 g/L

Cured Compound

Temperature Range	-67 to 255°F (-55 to 125°C)
Tack-Free Time	< 5 Minutes
Resistivity	$>10^{12}$ ohm-cm @ 50 VDC
Dielectric Breakdown	>500 volts/mil DC
Dielectric Constant	3 - 4
Dissipation Factor	< .001 @ 1 KHz
Thermal Shock Resistance @ -55 to 155°C	Pass, 10 Cycles
Flexibility	Excellent
Moisture Resistance	Excellent
Adhesion	Good to Excellent
Typical Thickness	2 - 3 mil
Shelflife	2 years

CHEMICAL RESISTANCE

CircuitWorks® Overcoat Pen has excellent resistance to water based cleaners and limited resistance to aggressive organic solvents such as acetone. The chemical resistance of CW3300 can be enhanced by heat curing.

COMPATIBILITY

The CircuitWorks® Overcoat Pen material is generally compatible with 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 adhesion, clean the board with a Chemtronics® Electro-Wash® cleaner in order to remove any surface contamination which may prevent adequate material contact.

Application: The overcoat material is dispensed throughout the CircuitWorks® Overcoat Pen. Squeezing the pen body while pressing down on the surface will allow the material to flow.

Thinning: The overcoat material has been optimized for the CircuitWorks® Overcoat Pen and thinning is not normally necessary. However, propyl acetate may be added with thorough mixing to make slight adjustments for ease of application in the bulk form.

Drying: The overcoat material dries in 5 to 10 minutes at room temperature. A heat cure of 5 - 10 minutes at 200°F (93°C) is recommended for more demanding applications and for enhancing the chemical resistance.

Clean-Up/Removal: The overcoat material can be removed from surfaces using acetone.

AVAILABILITY

CW3300C	4.9g / 0.16 oz. Clear
CW3300G	4.9g / 0.16 oz. Green
CW3300B	4.9g / 0.16 oz. Blue
CW3300BLACK	4.9g / 0.16 oz. Black
CW3300WHITE	4.9g / 0.16 oz. White

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 REV. J (08/13)

DISTRIBUTED BY: