

Technical Data Sheet

CircuitWorks® Epoxy Overcoat

PRODUCT DESCRIPTION

CircuitWorks® Epoxy Overcoat is a two component, 100% solids, high temperature resistant, permanent epoxy coating for electronics circuit and component protection. When properly cured, CircuitWorks® Epoxy Overcoat yields a chemically inert film which prevents the effects of corrosion, moisture, oxidation, abrasion, and thermal shock. The cured film can withstand brief exposure to high temperatures up to 600°F.

- Provides a hard, durable, protective coating
- Protects against moisture and abrasion
- Outstanding high temperature resistance
- Excellent dielectric properties; helps prevent electrical discharge
- Ideal for pre-reflow solder resist repair
- Meets the requirements of IPC-7721, 2.4.1

TYPICAL APPLICATIONS

CircuitWorks® Epoxy Overcoat 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	Two Part Epoxy coating
Color	Epoxy - Transparent Green Hardener - Amber

Solids	100%
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Viscosity	11,000 cps
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(Brookfield RVT, spindle #7, 20 rpm, 25°C)

Cured Compound

Service Temperature	-55 to 192°F
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Short Term Exposure	≤ 600°F (1 minute)
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Tack Free	30 minutes
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Pot Life	15-20 minutes 10-15 minutes @ 100°C
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Cure Schedule	24 hours @ 25°C
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Dielectric Breakdown	>400 volts/mil DC
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Insulation Resistance	>1 x 10 ⁴
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Shelf life	12 months @ 25 °C
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RoHS Compliant**CHEMICAL RESISTANCE**

CircuitWorks® Epoxy Overcoat has excellent resistance to water based cleaners and most organic solvents.

COMPATIBILITY

CircuitWorks® Epoxy Overcoat is generally compatible with materials used in printed circuit board fabrication. As with any production material, compatibility with substrate should be determined on a non-critical area prior to use.

USAGE INSTRUCTIONS

Read MSDS carefully prior to use.

Surface Preparation: For best adhesion, clean the area with Electro-Wash® PX precision cleaner to remove any surface contamination.

Application: Use brushing, rolling, or doctor blade. Pot life is 15-20 minutes at room temperature.

Curing: Tack free time is 30 minutes at room temperature. Excellent results have been obtained by curing for 10 minutes @ 100°C. Optimum cure cycles using radiant or convection conveyor ovens are best determined experimentally. Product may also be cured for 24 hours @ 77 °F (25°C).

Clean-Up/Removal (uncured): Use isopropanol, acetate, or MEK to clean-up uncured resin. Cured Epoxy Overcoat cannot be removed using solvents.

AVAILABILITY

CW2500 12 g (0.42 oz) total
 - 6g (0.21 oz) Adhesive
 - 6g (0.21 oz) Hardener

TECHNICAL & APPLICATION ASSISTANCE

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

ENVIRONMENTAL IMPACT DATA

ODP	None	VOC	None
HCFC	None	HFC	None

Ozone depletion potential (ODP) is determined in accordance with the Montreal Protocol and U.S. Clean Air Act of 1990. Hydrochlorofluorocarbons (HCFCs) are regulated under the Montreal Protocol as Class II ozone depleting substances. Volatile Organic Compound (VOC) information is calculated on a weight basis using the VOC definition of California Air Resources Board (CARB) Consumer Product Regulations, South Coast Air Quality Management District (SCAQMD) Rule 102 and the Federal definition published in 40 CFR 51.100(s). Hydrofluorocarbons (HFCs) are not currently regulated.

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. ITW CHEMTRONICS® does not guarantee the accuracy of the data and assumes no liability in connection with damages incurred while using it.

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