CHEMTRONICS
Technical Data Sheet

TDS # CTFC1

Konform® Flexcoat
Flexible Conformal Coating

PRODUCT DESCRIPTION

Konform® Flexcoat Conformal Coating is designed for applications where flexibility and protection are paramount. This material is as flexible as an RTV silicone, but without the disadvantages of a silicone. Providing a soft, rubbery protective coating, this material will coat evenly and provide a flexible and durable protective barrier against humidity, salt, corrosive vapors and fungus for printed circuit board and electronic assemblies. This coating can be removed by cutting a small section and peeling the coating away from the surface, or by solvent immersion of the whole board. Coating meets IPC-CC-830B Class B.

- Extremely flexible silicone free conformal coating
- Clear, durable coating
- Very good dielectric strength prevents arcing and current leakage
- Increases life of electronic assemblies
- Will not discolor over time under normal use
- Contains a UV indicator for Quality Control inspection using medium intensity light at 265-335 nm

TYPICAL APPLICATIONS

Konform® Flexcoat Conformal Coating is ideal for applications in:

- Data Communications
- Instrumentation
- Automotive Manufacturing
- Marine Manufacturing
- Process Control

TYPICAL PRODUCT DATA AND PHYSICAL PROPERTIES

Usable Temp. Range of Cured Coatings		-31°F to 212°F (-35°C to 100°C)
Tack Free Time		30 min.
Curing Conditions (@ 80% R.H.)		24 Hours @ 77°F (25°C) 8 Hours @ 150°F (65°C)
Quick Cure		10 min. @RT followed by 10 min @ 80°C
Specific Gravity (Water=1) @ 68°F		0.72 (Liquid Only)
Viscosity (cps @ 77°F)		24± 5 cps
Flash Point (TCC)		30°F
Dielectric Strength		956 volts/mil
Dielectric Breakdown (volts/mil)		2550
Coverage ($1 mil/ft^2$)	1 gallon 12oz	254.0 20.2
Shelf life		2 years
RoHS Compliant		
CARB & OTC VOC Content		88.9% VOC
SCAQMD VOC Content		640 g/L (liquid)

*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).

COMPATIBILITY

Konform® Flexcoat Conformal Coating is generally compatible with most materials found on printed circuit boards. As with any chemical product,

product/component compatibility must be determined on a non-critical area prior to use.

Performance	
Moisture Resistance	Good
Removability	Excellent
Ease of Repair	Excellent
Flexibility	Excellent
Adhesion	Good
Abrasion Resistance	Fair
Solvent Resistance	Fair

USAGE INSTRUCTIONS

For industrial use only.
Read MSDS carefully prior to use.
Before applying Konform® Flexcoat Conformal Coating, clean circuit boards thoroughly to remove oil, grease, dirt, flux and all other types of contamination. Allow to dry. Cleaning may be performed with Chemtronics® Electro-Wash® or Eco-Rite™ degreasing products.

SPRAY APPLICATION: Apply top to bottom, allowing coating to flow evenly around components. Rotate PCB 90° and repeat application. Rotate and apply coating two additional times, then allow board to cure. If additional thickness is desired, apply additional coatings. When using liquid spray with automatic dispensing equipment, adjustments may be required in application rate and viscosity.

DIP APPLICATION: Using automatic equipment or hand immersion technique, slowly immerse PCB into the coating and remove slowly. Use an average rate of approximately 1 foot per minute. After allowing the board to cure, process may be repeated to achieve desired thickness.

BRUSH APPLICATIONS: Evenly apply coating to areas desired at thickness required. Allow time for curing before reapplying to achieve a thick coating. Use Chemask® to protect components during conformal coating process.

CURING: Tack free time is 30 minutes at room temperature. Accelerated curing can be obtained by heating for 10 minutes @ 80°C in well ventilated environments. Optimum cure cycles using radiant or convection conveyer ovens are best determined experimentally. Product may also be cured for 24 hours @ 77 °F (25°C). **NOTE: Care must taken with accelerated cures as the product solvents are flammable.**

REMOVAL: After application, cured Konform® Flexcoat Conformal Coating may be removed by peeling, or soaking in Chemtronics Electro-Wash® Two Step.

AVAILABILITY

CTFC-12	11.5 oz. Aerosol
CTFC1	1 Gallon Liquid
CTFC5	5 Gallon Liquid
CTFC55	55 Gallon Liquid

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.

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