TDS# CTURA1

CHEMTRONICS Technical Data Sheet

Konform® UR-A Water Based Urethane Conformal Coating

PRODUCT DESCRIPTION

Konform® UR-A water-based urethane conformal coating is designed to deliver outstanding conformal coating protection using a water-based carrier. It is engineered for applications where durability and environmental protection against moisture and air-borne contaminants are required, while minimizing the use and impact of VOC's. This extremely effective conformal coating provides protective barrier against humidity, salt, corrosive vapors and fungus for printed circuit board and electronic assemblies. Coating meets IPC-CC-830B Class B and sections of MIL-I-46058C, Type UR.

- Outstanding barrier and moisture protection
- Water-based material with a low odor, easy to apply
- Dries to a clear, highly durable coating
- Effective abrasion and solvent resistance
- 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® UR-A water-based conformal coating is ideal for applications in:

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

TYPICAL PRODUCT DATA AND PHYSICAL PROPERTIES

Usable Temp. Rang	e 85°F to 257°F	
of Cured Coatings	(-65°C to 125°C)	
Tack Free Time	1 hour	
Curing Conditions	24 Hours @ 77°F (25°C)	
(@ 60% R.H.)	8 Hours @ 170°F (77°C)	
Specific Gravity	1.03	
(Water=1) @ 68°F		
Viscosity (cps @ 77°	$^{\circ}$ F) 500± 5 cps	
Dielectric Strength (volts / mil) 89 volts / mil		
Coefficient of Therr	nal 1.5 x 10 ⁻⁴	
Expansion		
Flash Point (TCC)	None	
Dielectric Breakdov	vn (volts) 3340 volts	
Coverage	577 mil sq. ft	
Shelf life	2 years	
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RoHS Compliant		
CARB & OTC	16% VOC	
VOC Content		
SCAQMD	334 g/L	
VOC Content		
*Volatile Organic Compound (VOC) information is calculated on a		

*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).

Konform® UR-A 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. Do not use on bare, untreated iron and steel.

<u>Performance</u>		
Moisture Resistance	Excellent	
Removability	Fair	
Ease of Repair	Good	
Flexibility	Excellent	
Adhesion	Excellent	
Abrasion Resistance	Excellent	
Solvent Resistance	Good	

USAGE INSTRUCTIONS

For industrial use only.

Read MSDS carefully prior to use.

Before applying Konform® UR-A water-based 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. Do not apply to iron or untreated steel.

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: For the best coating appearance and adhesion, cure in conditions with good air flow and a relative humidity below 70%. Accelerated cure may be accomplished by lowering ambient humidity, or elevating temperature up to 170°F (77°C).

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

CTURA1	1 Gallon Liquid
CTURA5	5 Gallon Liquid
CTURA55	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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