# **CHEMTRONICS® Technical Data Sheet**

### TDS # CTAR

## Konform® AR

### PRODUCT DESCRIPTION

Konform® AR is ideal for providing insulation against high-voltage arcing and corona shorts. This extremely effective acrylic conformal coating provides a hard, durable protective barrier against humidity, salt, corrosive vapors and fungus for printed circuit board and electronic assemblies. Konform® AR resin meets MIL-I-46058C, Type AR.

- Clear transparent coating
- Excellent dielectric strength
- Helps prevent arcing and shorts
- Increases life of electronic assemblies
- Will not discolor over time under normal use
- Contains a UV indicator for thorough Quality Control inspection
- UL Recognized, File E76307

### TYPICAL APPLICATIONS

Konform® AR is ideal for applications in:

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

# TYPICAL PRODUCT DATA AND PHYSICAL PROPERTIES

<b>Usable Temp. Range</b>	-75°F to 270°F				
of Cured Coatings	(-59°C to 132°C)				
Tack Free Time	30 min.				
<b>Curing Conditions</b>	24 Hours @ 77°F (25°C)				
(@ 80% R.H.)	8 Hours @ 170°F (77°C)				
Specific Gravity	0.93				
(Water=1) @ 68°F	(Liquid Only)				
Viscosity (cps @ 77°I	70 $\pm$ 5 cps				
Flash Point (TCC)	30°F				
<b>Volume Resistivity</b>	$1 \times 10^{14}$				
(ohm/cm)					
Dielectric Breakdown (volts/mil) 8300					
Comparative Tracking	<b>ng</b> 250				
Index (CTI)	(PLC of 2)				
<b>Coefficient of Therms</b>	al $5 \times 10^{-5}$				
Expansion (in/in/°C)					
Coverage	CTAR-1 254.0				
(1 mil/ft <sup>2</sup> )	CTAR-12 20.2				
Shelflife	2 years				
RoHS/WEEE	RoHS				
Status	Compliant				

### **COMPATIBILITY**

Konform® AR 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.

# PerformanceMoisture ResistanceGoodRemovabilityExcellentEase of RepairExcellentFlexibilityFairAdhesionExcellentAbrasion ResistanceExcellentSolvent ResistanceFair

### **USAGE INSTRUCTIONS**

For industrial use only.

Read MSDS carefully prior to use.

Before applying Konform<sup>®</sup> AR conformal coatings, clean circuit boards to remove contamination and allow to dry. Cleaning may be performed with Chemtronics<sup>®</sup> Electro-Wash<sup>®</sup> NX or Electro-Wash<sup>®</sup> PX.

**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.

**REMOVAL:** After application, cured Konform<sup>®</sup> AR may be removed by soaking in Chemtronics<sup>®</sup> Electro-Wash<sup>®</sup> Two Step or an aromatic solvent (such as xylene), or a short chain ketone (such as acetone).

### **AVAILABILITY**

CTAR-12 11.5 oz. Aerosol CTAR-1 1 Gal. Liquid

### **ENVIRONMENTAL IMPACT DATA**

(For Aerosol Product)

ENVIRONMENTAL IMPACT DATA					
CFC	0.0%	VOC	88.9%		
HCFC	0.0%	HFC	0.0%		
Cl. Solv.	0.0%	ODP	0.00		

CFC, HCFC, CL. SOLV., VOC, and HFC numbers shown are the content by weight. Ozone depletion potential (ODP) is determined in accordance with the Montreal Protocol and U.S. Clean Air Act of 1990.

### TECHNICAL & APPLICATION ASSISTANCE

Chemtronics<sup>®</sup> 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.

### **MANUFACTURED BY:**

ITW CHEMTRONICS 8125 COBB CENTER DRIVE KENNESAW, GA 30152

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