

# CHEMTRONICS

## Technical Data Sheet

**TDS # CTAR**

### Konform<sup>®</sup> AR

#### PRODUCT DESCRIPTION

Konform<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> 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 of Cured Coatings</b>        | -75°F to 270°F<br>(-59°C to 132°C)               |       |
| <b>Tack Free Time</b>                              | 30 min.                                          |       |
| <b>Curing Conditions (@ 80% R.H.)</b>              | 24 Hours @ 77°F (25°C)<br>8 Hours @ 170°F (77°C) |       |
| <b>Specific Gravity (Water=1) @ 68°F</b>           | 0.93<br>(Liquid Only)                            |       |
| <b>Viscosity (cps @ 77°F)</b>                      | 70± 5 cps                                        |       |
| <b>Flash Point (TCC)</b>                           | 30°F                                             |       |
| <b>Volume Resistivity (ohm/cm)</b>                 | 1 x 10 <sup>14</sup>                             |       |
| <b>Dielectric Breakdown (volts/mil)</b>            | 8300                                             |       |
| <b>Comparative Tracking Index (CTI)</b>            | 250<br>(PLC of 2)                                |       |
| <b>Coefficient of Thermal Expansion (in/in/°C)</b> | 5 x 10 <sup>-5</sup>                             |       |
| <b>Coverage (1 mil/ft<sup>2</sup>)</b>             | CTAR-1                                           | 254.0 |
|                                                    | CTAR-12                                          | 20.2  |
| <b>Shelflife</b>                                   | 2 years                                          |       |

#### COMPATIBILITY

Konform<sup>®</sup> 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.

### Performance

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

## 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 Flux-Off<sup>®</sup> 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<sup>®</sup> to protect components during conformal coating process.

**REMOVAL:** After application, cured Konform<sup>®</sup> AR may be removed by soaking in Chemtronics Electro-Wash<sup>®</sup> Two Step.

## AVAILABILITY

CTAR-12 11.5 oz. Aerosol

CTAR-1 1 Gallon 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 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

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