UR Urethane Conformal Coating
Product# 2104



Product Description

Techspray® offers a variety of coating formulas to match field and engineering requirements. Specifications generally depend on the type of protection needed. E.g. thermal, moisture, and static resistance.

Coatings contain Opti/Scan to allow quality control inspection of coverage and evenness of the coating on a PCB. A coated board can be passed under a standard, low-cost UV (short-wave black) light, and the coated areas glow. The brighter the glow, the thicker the coating.

Features / Benefits

- **Thermal resistance - to 248°F (120°C)**
- **Dielectric strength - 380 volts/mil**
- **Moisture resistant**
- **Chemically resistant**
- **Abrasion resistant**
- **UL94 V-0 – nonflammable final coat**
- **IPC-CC-830B qualified**
- **UV indicator for black light QC inspection**

Specifications

- IPC-CC-830B

Usage Instructions

For industrial use only. Read MSDS carefully prior to use. Before applying Fine-L-Kote™ conformal coatings, clean circuit boards to remove contamination and allow to dry. Cleaning may be performed with Techspray G3, E-LINETM and Precision-V defluxers.

Spray Application: Apply top to bottom, allowing coating to flow evenly around components. Rotate PCB 90º 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 Application: Evenly apply coating to areas desired at thickness required. Allow time for curing before reapplying to achieve a thick coating. Use WonderMASK to protect components during conformal coating process. After application, cured Fine-L-Kote™ may be removed using Techspray Conformal Coating Removal Pen (2510-N or 2510-P).

Typical Product Data and Physical Properties

Physical state:	Liquid
Flash point:	Closed cup: 81ºF (27.2ºC)
Flammable limits:	Lower 1% Upper 7%
Color:	Colorless
Odor:	Aromatic
Boiling/condensation point:	300.2ºF (149ºC)
Relative density:	0.93
Volatility:	86% (w/w)
Shelf life:	1 year

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Performance & Application Data

Cure type	Thermal/air
Tack-free time (min)	15
Accelerated cure time/temp	2 Step: 20 Min. @ 49°C, 30 Min. @ 82°C
Ambient cure time	24 hrs
Viscosity (bulk)	10-20 cps
Operating temperature range	-65° to 125°C
Dielectric strength	380 V/Mil
Insulation resistance (ohms)	1.78×10^{16}
Coverage (1 mil dry film)	1 gal. liquid = 880 ft^2 (81.8M^2)

Packaging and Availability

2104-12S	12 Ounce Liquid
2104-G	1 Gallon Liquid
2104-5G	5 Gallon Liquid

Environmental Policy

Techspray® is committed to developing products to ensure a safer and cleaner environment. We will continue to meet and sustain the regulations of all federal, state and local government agencies.

Resources

Techspray® products are supported by global sales, technical and customer services resources.

For additional technical information on this product or other Techspray® products in the United States, call the technical sales department at 800-858-4043, email tsales@techspray.com or visit our web site at: www.techspray.com.

Important Notice to Purchaser/User: The information in this publication is based on tests that we believe are reliable. The results may vary due to differences in tests type and conditions. We recommend that each user evaluate the product to determine its suitability for the intended application. Conditions of use are outside our control and vary widely. Techspray's only obligation and your only solution is replacement of product that is shown to be defective when you receive it. In no case will Techspray® be liable for any special, incidental, or consequential damages based on breach of warranty, negligence or any other theory.

TECHSPRAY

Corporate Office
8125 Cobb Center Drive
Kennesaw, GA 30152
800-858-4043
tsales@techspray.com

Europe
ITW Contamination Control BV
Saffierlaan 5, 2132 VZ Hoofddorp
The Netherlands
+31 88 1307 400
info@itw-cc.com

China
ITW Specialty Materials (Suzhou) Co., Ltd
Hengqiao Road, Wujiang Economic
Development Zone, Suzhou,
Jiangsu Province, China 215200
+6019-2184801
chinasales@itwsms.com