UV/Heat Curable, Low Shrink High Quality PCBA Conformal Coating

PRODUCT DESCRIPTION
Incure Ultra-Illumina™ 3552 is a UV-compliant, 100% solids true UV light curable black conformal coating used on PCB assembly. It is designed for use in high volume spray system, does not clog valves as it contains no volatiles and is environmentally-friendly. With full cure, Incure 3552 forms a glossy and hard and resilient protective opaque coating of up to 600 microns thickness and works as a moisture barrier with excellent adhesion in harsh environments. Formulated to meet UL 746C, rated indoor/outdoor, to 120°C and 94V-0 flame class.

UNCURED PROPERTIES
- Chemical Type: Urethane Acrylate, 100% Solids, No Solvents
- Appearance: Single Component Clear, Fluorescing
- Flash Point, °C > 93
- Viscosity, cP (rpm) 20: 300 - 500
- Other viscosities are available upon request. If the viscosity requested is not our standard offering, this product may be produced with a small lab fee.

CURED PROPERTIES
- Shore Hardness, Durometer: D75 to D85
- Linear Shrinkage / Expansion (ve): 0.20%
- Water Absorption at 24hrs: 0.50%
- Tensile (PSI): PC-PO / SS-SS; N.A. / 4400*
- PC-PO / SS-SS; 5.600 / 5.700*
- Surface After Full Cure: Sleek
- Elongation at Break: 15%
- Thermal Range (Brittleness / Degrades) °C: -55 to 155
- Young’s Modulus of Elasticity, MPa (PSI): 693 (100,800)
- Average Linear CTE, ppm/°C: 101
- *ASTM D2565
- #ASTM D836

RECOMMENDED UV CURE SCHEDULE (FULL CURE)

<table>
<thead>
<tr>
<th>Fixture Time between glass slides</th>
<th>UVA</th>
<th>UBV</th>
<th>UVC</th>
<th>UVV</th>
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<tr>
<td>Exposure Time (s)</td>
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<tr>
<td>F200™ @9.25” Dist</td>
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<tr>
<td>Belt Speed (rpm)</td>
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<tr>
<td>F500™ @9.25” Dist</td>
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<tr>
<td>Belt Speed (rpm)</td>
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<tr>
<td>S20™</td>
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</table>

SECONDARY HEAT CURE SCHEDULE
Continuous Oven Bake
- 95°C (203°F) 120 mins
- 110°C (230°F) 60 mins
- 125°C (257°F) 30 mins

SHELF-LIFE, STORAGE, USE AND HANDLING OF THIS PRODUCT
- Shelf-Life of this unopened product is a minimum of ONE (1) year from date of manufacture. Avoid direct exposure of bottle to visible light at all times. Containers should remain covered when not in use. Product should be stored in a dark cool place of 2°C to 20°C. Transfer of product into other packages void all warranties. Users should ensure all bonding surfaces are free of grease, mold release, or any contaminants, as bonding performance will be compromised. All tests for cured bonds should be carried out at ambient temperature. For safe handling of this product, please read Material Safety Data-Sheet (MSDS) prior to use. Organic solvents, such as IPA, may be used to wipe away uncured material from surfaces.

NOTE
- The data contained in this document are furnished for information only. We cannot assume responsibility for the results obtained by others over whose methods we have no control. It is the user’s responsibility to determine suitability for the user’s purpose of any production methods mentioned herein. INCURE will not be liable for any indirect, special, incidental or consequential loss or damage arising from this INCURE product, regardless of the legal theory asserted. INCURE recommends that each user adequately test its proposed use and application before repetitive use, using this data as a guide.