**Technical Data Sheet**

**Litemask™ 8177G**

**UV/Visible Light/LED Curable Protective Peel-able Temporary Blue Mask**

**PRODUCT DESCRIPTION**

Incure Litemask™ 8177G UV/Visible Light/LED Curable mask is a 100% solids, high strength peel-able, easy temperature high intensity mask used widely in the electronics and aerospace industry. Cures tack-free in seconds, it forms a tough yet soft peel-able mask for surface protection against chemical stains and burnt marks on metals, glass and ceramics. Contains no VOCs or acids, its ultra-clean formulation does not affect masked surfaces before cure and leaves no residue or contamination after removal. Incure 8177G is ideal for protection of critical surfaces during manufacturing, such as wave soldering process.

**UNCURED PROPERTIES**

- **Chemical Type**: Urethane Acrylate, 100% Solids, No Solvents
- **Appearance**: Single Component, Transparent Blue
- **Density, g/ml**: 1.12
- **Refractive Index**: N.A. @20°C
- **Flash Point, °C**: > 93
- **Toxicity**: Low (Refer to MSDS)
- **Viscosity, cp (rpm)**: > 1,000,000 @0.5 rpm

**CURED PROPERTIES**

- **Shore Hardness, Durometer**: D10 to D20
- **Linear Shrinkage / Expansion (ø)**: 2.15%
- **Water Absorption at 24hrs**: 0.07%
- **Tensile (PSI)**: PC-PC / PC-SS 3,360 / 1,300
- **Surface After Full Cure**: Grippy

Other viscosities are available upon request. If the viscosity range requested is not our standard offering, this product may be produced with a small lab fee.

Email us at: support@uv-incure.com or your nearest local distributor for more information.

**NOTE**

1. Viscosity (cp) taken at 25°C - Call to enquire for other viscosities.

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**RECOMMENDED UV CURE SCHEDULE (FULL CURE)**

<table>
<thead>
<tr>
<th>Incure UV Curing Lamp Model</th>
<th>Full Cure Exposure Time</th>
<th>UVA</th>
<th>UVB</th>
<th>UVC</th>
<th>UVV</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Spot Curing (Diameter)</strong></td>
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<tr>
<td>0.5&quot; (12.7mm)</td>
<td>2.0</td>
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<tr>
<td>1&quot; (25.4mm)</td>
<td>3.0</td>
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<tr>
<td>1.5&quot; (38.1mm)</td>
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<tr>
<td>2&quot; (50.8mm)</td>
<td>5.0</td>
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<tr>
<td>2.5&quot; (63.5mm)</td>
<td>6.0</td>
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<tr>
<td><strong>Fluorescent Lamp (Area)</strong></td>
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<tr>
<td>100W T8 Spiral</td>
<td>12.0</td>
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<tr>
<td>150W T8 Spiral</td>
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<tr>
<td>200W T8 Spiral</td>
<td>18.0</td>
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**TENSILE STRENGTH VS TEMPERATURE**

- **At 10min**: 3.50
- **At 30min**: 3.40
- **At 60min**: 3.30

**LINEAR CTE (α1 & α2), ppm/°C**

- **95°C (203°F)**: 120 mins
- **110°C (230°F)**: 60 mins
- **125°C (257°F)**: 30 mins

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**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 materials 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.

**EIO and GAMMA STERILIZATION (Not Applicable for this Product)**

All Incure medical products are formulated to subject to standard sterilization methods, such as EIO and Gamma Radiation of 25 to 50 kGrays (cumulative). Enhanced moisture and thermal resistance of this product show excellent adhesion and bonding strength after one cycle of steam auto-clave test. Depending on bond design and structure of the application, users should test specific assemblies after subjecting them to sterilisation. Consult Incure Support Team for assistance, if your devices are subjected to more than one sterilization cycles.

**NOTE**

The data contained in this document are furnished for information only. We cannot assume responsibility for the results obtained by others under 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.