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• Mission Statement
• Core Competencies

Section Two  Advancement in UV Technology
• Wide Offerings & Specialty Chemicals
• UV curing Equipment, Measurement & Control
• Matching Chemistry

Section Three  The Incure Experience
• IncureDirect™
• IncureConsult™
• IncureCollaborate™
• IncureLab™
• IncureRental™ Program
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• IncureDirect™
• IncureConsult™
• IncureCollaborate™
• IncureLab™
• IncureRental™ Program
Incure, Inc
1 Hartford Square, Box 16 West, Suite C-3
New Britain, CT 06052, USA
Tel: (860) 748-2979
email: support@uv-incure.com

Incure Adhesives Manufacturing Pte Ltd
33 Ubi Avenue 3 #04-23
Vertex Tower B
Singapore 408868
Tel: (65) 6270-2188
email: support@incurelab.com
Mission Statement

We listen to you, deliberate and understand your needs before making every attempt to solve your application needs.

Chemistry-match the right material, equipment and process to your application matters to us and gives us our sense of achievement.

We are a research company committed to the development of advanced UV technologies for bonding, coating and sealing solutions.

We are committed to produce the highest quality and service for our clients and to dedicate ourselves to integrity, honesty, fairness and responsibility.
Core Competencies

- More than 50 years of combined experience in the formulation of advanced UV/visible light curing adhesives. Team of certified application consultants and experienced applications development engineers to support end-users, partners and distribution networks.

- **Wide selection** of products available for Medical, optical, electronics, automotive, jewelry, aerospace, construction and industrial use. Specific applications - bonding, coating, encapsulating, gasketing, sealing and masking.

- **Matching-Chemistry™**
  A practical and professional approach to successful implementation of UV curing in terms of cost, efficiency and quality excellence and environmental consciousness. Adhesive selection, Curing equipment, Dispensing and Curing processes, Maintenance and Control are all instrumental in designing a robust solution to complicated/unique applications.
Section One  Company Profile
• Mission Statement
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Section Two  Advancement in UV Technology
• Wide Offerings & Specialty Chemicals
• UV curing Equipment, Measurement & Control
• Matching Chemistry

Section Three  The Incure Experience
• IncureDirect™
• IncureConsult™
• IncureCollaborate™
• IncureLab™
• IncureRental™ Program
Advancement in UV Technology

1. Rapid fixture and full cure in seconds
2. Tack-free time
3. Choice of sleek, tack-free or tacky surface
4. Ease of shipment (Non-DG) & storage (room temperature)
5. Cost savings (energy, process time, space, manpower)
6. In-line inspection, fluorescing and color-change capabilities
7. Cure-On-Demand facilitates alignment positioning
8. 100% solids, solvent-free, no volatiles
9. Viscosity variation (25 - 2,000,000 cP)
10. Tensile: Up to 12,000 psi (substrates failure for plastics)
11. Elongation: Up to 1,500%
12. Hardness Range: A5 to D95
13. Quad-Cure™ for 4 different cure methods
14. Multi-Substrates for bonding dissimilar substrates (metals, plastics etc)
15. Low surface energy (30 - 36 dynes) material (thermoplastic elastomers (TPE) bonding
Wide Offering of Bonders, Sealants and Coating Materials

Incure manufacture and offer a wide range of medical grade (compliant to ISO 10993-5) and industrial grade (UL & RoHS compliant) adhesives, epoxies, encapsulates, masks and coatings

- BlueBond™ Low-energy UV cure bonders
- Cast-Max™ Stereolithography Adhesive (SLA) 3D Resins
- Cyro-Weld™ Medical Grade UV/Visible Light Curing Adhesives & Cyanoacrylates
- Encap™ Encapsulant for electronics assemblies
- Epo-Weld™ Single Component & Two-Part Epoxies
- LiteMask™ UV Masks - Acrylic Urethanes Ultra-clean, Temporary/Permanent Masks
- Optik™ UV/Visible Light Curing Optical Adhesives
- Pyra-Sil™ UV and UV/Moisture Dual-cure Silicones
- UHTE™ Ultra-High Temperature Epoxies
- Ultra-Illumina™ Dual-Cure Conformal Coatings
- Uni-Seal™ Form-In-Place Gaskets (FIPG) and Sealants
# Specialty Chemicals

## Section Two

### Advancement in UV Technology

<table>
<thead>
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<th>Cyro-Weld™ 5000 Medical Series</th>
<th>Web Highlights</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type of Bonding</td>
<td>High Performance Plastics</td>
<td></td>
</tr>
<tr>
<td>Type of Care</td>
<td>UV/Laser/Cureable High-Strength Low Shrink Medical Bonding</td>
<td></td>
</tr>
<tr>
<td>Competitive Products</td>
<td>Dynax 181-M Tangent 7551 Vitril 9181-4000</td>
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</tr>
<tr>
<td>Surface After Cure</td>
<td>Tack-Free</td>
<td></td>
</tr>
<tr>
<td>Glass Transition Tg (°C) D966</td>
<td>N.A.</td>
<td>N.A.</td>
</tr>
<tr>
<td>Elongation at Break ASTM D638</td>
<td>60%</td>
<td>N.A.</td>
</tr>
<tr>
<td>Temperature Resistance - ASTM D966</td>
<td>-55 to 150</td>
<td>N.A.</td>
</tr>
<tr>
<td>Water Absorption ASTM D670</td>
<td>1.10%</td>
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<tr>
<td>Viscosity (Pa.s) / ASTM D2846</td>
<td>1.560 - 3.500</td>
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<tr>
<td>Linear Shrinkage ASTM D566</td>
<td>0.60%</td>
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<tr>
<td>Tensile Strength (PSI) ASTM D338</td>
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<tr>
<td>Elongation %</td>
<td>N.A.</td>
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</tr>
<tr>
<td>Water Absorption %</td>
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</tr>
<tr>
<td>Glass Transition Tg °C</td>
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<td>N.A.</td>
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<tr>
<td>Average Linear CTE (°C) D666</td>
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<td>N.A.</td>
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</table>

### Cyro-Weld™ 5000 Medical Series

<table>
<thead>
<tr>
<th>Product Highlights (Functions/Specialty)</th>
<th>Cyro-Weld™ 5004</th>
<th>Cyro-Weld™ 5004F</th>
<th>Cyro-Weld™ 5005</th>
<th>Cyro-Weld™ 5013F</th>
<th>Cyro-Weld™ 5017</th>
<th>Cyro-Weld™ 5020</th>
<th>Cyro-Weld™ 5020F</th>
<th>Cyro-Weld™ 5021F</th>
<th>Cyro-Weld™ 5040</th>
</tr>
</thead>
</table>

**Product Highlights (Functions/Specialty)**


**Medical Grade, Low Viscosity Binder for Respiratory Face Masks and Needle-Needle Bonding**


**Medical Grade, Low Viscosity Binder for Respiratory Face Masks and Needle-Needle Bonding**

# Litemask™ Mask & Gasket Series

<table>
<thead>
<tr>
<th>Flag-Ship Products</th>
<th>Litemask™ 4139VT</th>
<th>Litemask™ 4139G</th>
<th>Litemask™ 4153</th>
<th>Litemask™ 4201</th>
<th>Litemask™ 4272</th>
<th>Litemask™ 8108</th>
<th>Litemask™ 8114</th>
<th>Litemask™ 8114T</th>
<th>Litemask™ 8114VT</th>
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</thead>
<tbody>
<tr>
<td><strong>Web Highlights</strong></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Type of Bonding</strong></td>
<td>High Performance Metal/Glass/Ceramics</td>
<td>High Performance Metal/Glass/Ceramics</td>
<td>High Strength Metal/Glass/Ceramics</td>
<td>High Performance Metal/Glass/Ceramics</td>
<td>High Performance Metal/Glass/Ceramics</td>
<td>Low Strength Multi-Substrates</td>
<td>Peelable</td>
<td>Peelable</td>
<td>Peelable</td>
</tr>
<tr>
<td><strong>Competitive Products</strong></td>
<td>Tangent 6108-IT</td>
<td>Tangent 2010I</td>
<td>Tangent 6138</td>
<td>Tangent 20105</td>
<td>Tangent 6142</td>
<td>Dymax 734-BT</td>
<td>Dymax 738</td>
<td>Dymax 8114T</td>
<td></td>
</tr>
<tr>
<td><strong>Surface After Full Cure</strong></td>
<td>Tack-Free</td>
<td>Tack-Free</td>
<td>Tack-Free</td>
<td>Tack-Free</td>
<td>Tack-Free</td>
<td>Tack-Free</td>
<td>Tack-Free</td>
<td>Tack-Free</td>
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<tr>
<td><strong>Gasket Fixure Time</strong></td>
<td>1s</td>
<td>1s</td>
<td>1s</td>
<td>1s</td>
<td>1s</td>
<td>1s</td>
<td>1s</td>
<td>1s</td>
<td></td>
</tr>
<tr>
<td><strong>Viscosity @80ºF (ASTM D2005)</strong></td>
<td>18,000 - 30,000</td>
<td>&gt; 1,000,000</td>
<td>&gt; 1,000,000</td>
<td>&gt; 1,000,000</td>
<td>&gt; 1,000,000</td>
<td>&gt; 1,000,000</td>
<td>&gt; 1,000,000</td>
<td>&gt; 1,000,000</td>
<td>&gt; 1,000,000</td>
</tr>
<tr>
<td><strong>Shore Hardness (ASTM D2240)</strong></td>
<td>D75 to D80</td>
<td>D76 to D80</td>
<td>D76 to D80</td>
<td>D76 to D80</td>
<td>D76 to D80</td>
<td>D78 to D80</td>
<td>D78 to D80</td>
<td>D78 to D80</td>
<td></td>
</tr>
<tr>
<td><strong>Linear Shrinkage (ASTM D2566)</strong></td>
<td>2.0%</td>
<td>2.0%</td>
<td>2.0%</td>
<td>2.0%</td>
<td>2.0%</td>
<td>2.0%</td>
<td>2.0%</td>
<td>2.0%</td>
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</tr>
<tr>
<td><strong>Water Absorption (ASTM D570)</strong></td>
<td>0.50%</td>
<td>0.50%</td>
<td>0.50%</td>
<td>0.50%</td>
<td>0.50%</td>
<td>0.50%</td>
<td>0.50%</td>
<td>0.50%</td>
<td></td>
</tr>
<tr>
<td><strong>Tensile Strength (Psi) (ASTM D638)</strong></td>
<td>PC-PC</td>
<td>PC-PP</td>
<td>PC-S</td>
<td>PC-S</td>
<td>PC-AL</td>
<td>Good</td>
<td>Fair</td>
<td>Good</td>
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<tr>
<td><strong>Elongation at Break (ASTM D412)</strong></td>
<td>55%</td>
<td>55%</td>
<td>55%</td>
<td>55%</td>
<td>55%</td>
<td>55%</td>
<td>55%</td>
<td>55%</td>
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</tr>
<tr>
<td><strong>Young’s Modulus (MPa, ASTM D396)</strong></td>
<td>130</td>
<td>130</td>
<td>130</td>
<td>130</td>
<td>130</td>
<td>130</td>
<td>130</td>
<td>130</td>
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</tr>
<tr>
<td><strong>Glass Transition Tg (°C) (ASTM D366)</strong></td>
<td>N.A.</td>
<td>N.A.</td>
<td>N.A.</td>
<td>N.A.</td>
<td>N.A.</td>
<td>N.A.</td>
<td>N.A.</td>
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</tr>
<tr>
<td><strong>Average Linear CTE (°C) (ASTM D696)</strong></td>
<td>88</td>
<td>88</td>
<td>88</td>
<td>88</td>
<td>88</td>
<td>88</td>
<td>88</td>
<td>88</td>
<td></td>
</tr>
</tbody>
</table>

**Product Highlights (Functions/Specialty)**

- **Cures with UV/Visible/Heat or Actif 396:** Very good adhesion to metals and glass. Used in aerospace industry for the effective protection of turbine blades against chemicals during clearing.
- **Cures with UV/Visible/Light/LED/Activator/Heat curing:** High strength metal/glass mask for protection of turbine blades against chemicals during clearing. Used in aerospace industry for the effective protection of turbine blades against chemicals during clearing.
- **Ultra-fast low viscosity UV/Visible Light/LED/Activator/Heat curing:** Low in鲱 shine, high temperature and moisture resistance.
- **Aerospace Grade, Cures with UV/Visible/Light/LED/Activator (Actif 396):** Very low viscosity, high strength metal/glass/ceramic masking material. Low In鲱 shine, good temperature and moisture resistance.
- **Aerospace Grade, Cures with UV/Visible/Light/LED/Activator (Actif 396):** Very low viscosity, high strength metal/glass/ceramic masking material. Low In鲱 shine, good temperature and moisture resistance.
- **High viscosity peelable mask for protection of metallic and glass components such as engine blades/valves in chemical etching and sand-blasting:** Medium viscosity, ultra-clean peelable high temp mask for electronics and aerospace industries. Soft, tough and flexible for surface protection against chemical stains and burnt marks during manufacturing processes.
- **Medium viscosity, ultra-clean peelable high temp mask for electronics and aerospace industries:** Very high viscosity, ultra-clean peelable high temp mask for electronics and aerospace industries. Soft, tough and flexible for surface protection against chemical stains and burnt marks during manufacturing processes.

**Specialty Chemicals**

- **Listen • Understand • Solve**
- **Section Two: Advancement in UV Technology**
# Optik™ Optical Series

## Section Two: Advancement in UV Technology

### Specialty Chemicals

<table>
<thead>
<tr>
<th>Flag-Ship Products</th>
<th>Optik™ 7313</th>
<th>Optik™ 7648</th>
<th>Optik™ 7664</th>
<th>Optik™ 7675</th>
<th>Optik™ 7722</th>
<th>Optik™ 7731</th>
<th>Optik™ 7760</th>
<th>Optik™ 7763</th>
<th>Optik™ 7795</th>
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<tbody>
<tr>
<td><strong>Web Highlights</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</table>

<table>
<thead>
<tr>
<th><strong>Type of Binder</strong></th>
<th>Multi-Substrate (Low Strength Plastics)</th>
<th>High Strength Metal/Glass/Ceramics</th>
<th>High Performance Metal/Glass/Ceramics</th>
<th>Multi-Substrate (Low Adhesion)</th>
<th>High Performance Metal/Glass/Ceramics</th>
<th>High Performance Metal/Glass/Ceramics</th>
<th>High Performance Metal/Glass/Ceramics</th>
<th>High Performance Metal/Glass/Ceramics</th>
<th>High Performance Metal/Glass/Ceramics</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Type of Cure - Product Title</strong></td>
<td>UV/Vis/LED Curable Multi-Substrate Optical Binder/Sealant</td>
<td>UV/Vis/LED Curable High Strength Metal-Glass Optical Binder</td>
<td>UV/Vis/LED Curable High Performance Metal/Glass Optical Binder</td>
<td>UV/Vis/LED Curable High Performance Metal/Glass Optical Binder</td>
<td>UV/Vis/LED Curable High Performance Metal/Glass Optical Binder</td>
<td>UV/Vis/LED Curable High Performance Metal/Glass Optical Binder</td>
<td>UV/Vis/LED Curable High Performance Metal/Glass Optical Binder</td>
<td>UV/Vis/LED Curable High Performance Metal/Glass Optical Binder</td>
<td>UV/Vis/LED Curable High Performance Metal/Glass Optical Binder</td>
</tr>
<tr>
<td><strong>Competitive Products</strong></td>
<td>Tangent 514</td>
<td>New</td>
<td>-</td>
<td>Delo OM-514</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Dymax 40200</td>
<td>-</td>
</tr>
<tr>
<td><strong>Surface After Full Cure (RSTM D199)</strong></td>
<td>Tack-Free</td>
<td>Grippy</td>
<td>Sticky</td>
<td>Sticky</td>
<td>Sticky</td>
<td>Sticky</td>
<td>Sticky</td>
<td>Sticky</td>
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<tr>
<td><strong>Tack-Free/Full Cure Surface Using 3000 Low VOC Cumulative Exposure Equivalent</strong></td>
<td>60/64</td>
<td>6/16</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
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<tr>
<td><strong>Glass Flatness (RSTM D348)</strong></td>
<td>1a</td>
<td>2a</td>
<td>3a</td>
<td>2a</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Viscosity @25°C (ASTM D3965)</strong></td>
<td>600 - 1,000</td>
<td>15,000 - 24,000</td>
<td>2,000 - 4,000</td>
<td>2,300 - 3,700</td>
<td>400 - 700</td>
<td>150 - 350</td>
<td>60 - 120</td>
<td>800 - 1,500</td>
<td>5,000 - 8,000</td>
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<tr>
<td><strong>Shore Hardness (ASTM D2240)</strong></td>
<td>D45 to D65</td>
<td>D75 to D85</td>
<td>D85 to D95</td>
<td>D95 to D96</td>
<td>D85 to D96</td>
<td>D95 to D96</td>
<td>D95 to D96</td>
<td>D95 to D96</td>
<td>D95 to D96</td>
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<tr>
<td><strong>Linear Shrinkage (RSTM D5466)</strong></td>
<td>0.3%</td>
<td>0.09%</td>
<td>0.1%</td>
<td>1.1%</td>
<td>1.1%</td>
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<td>1.1%</td>
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<tr>
<td><strong>Water Absorption (ASTM D870)</strong></td>
<td>2.0%</td>
<td>0.1%</td>
<td>0.4%</td>
<td>0.5%</td>
<td>0.1%</td>
<td>0.2%</td>
<td>0.2%</td>
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<td>0.2%</td>
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<tr>
<td><strong>Tensile Strength (PSI) (ASTM D383)</strong></td>
<td>PC-PC</td>
<td>1,800</td>
<td>1,900</td>
<td>10,000</td>
<td>1,100</td>
<td>10,400</td>
<td>10,500</td>
<td>8,700</td>
<td>10,700</td>
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<tr>
<td><strong>Shore A</strong></td>
<td>PC/PC</td>
<td>4,800</td>
<td>5,900</td>
<td>6,400</td>
<td>7,700</td>
<td>8,600</td>
<td>13,100</td>
<td>7,400</td>
<td>13,100</td>
</tr>
<tr>
<td><strong>Shore D</strong></td>
<td>PC/PC</td>
<td>4,500</td>
<td>5,700</td>
<td>10,000</td>
<td>2,900</td>
<td>10,000</td>
<td>8,000</td>
<td>9,500</td>
<td>10,000</td>
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<tr>
<td><strong>Elongation at Break (ASTM D503)</strong></td>
<td>433%</td>
<td>76%</td>
<td>1%</td>
<td>32%</td>
<td>11%</td>
<td>11%</td>
<td>17%</td>
<td>24%</td>
<td>24%</td>
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<tr>
<td><strong>Temp. Resistance (RSTM D266)</strong></td>
<td>-55 to 150°C</td>
<td>-55 to 150°C</td>
<td>-55 to 150°C</td>
<td>-55 to 150°C</td>
<td>-55 to 150°C</td>
<td>-55 to 150°C</td>
<td>-55 to 150°C</td>
<td>-55 to 150°C</td>
<td>-55 to 150°C</td>
</tr>
<tr>
<td><strong>Young’s Modulus (MPa) (ASTM D383)</strong></td>
<td>13</td>
<td>89</td>
<td>365</td>
<td>204</td>
<td>668</td>
<td>855</td>
<td>627</td>
<td>353</td>
<td>206</td>
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<tr>
<td><strong>Glass Transition Tg°C (RSTM D366)</strong></td>
<td>N.A.</td>
<td>50</td>
<td>N.A.</td>
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<tr>
<td><strong>Average Linear CTE (RSTM D366)</strong></td>
<td>119</td>
<td>53</td>
<td>116</td>
<td>116</td>
<td>116</td>
<td>116</td>
<td>116</td>
<td>116</td>
<td>116</td>
</tr>
</tbody>
</table>

## Product Highlights (Functions/Specialty)

- **Optical grade, very low viscosity multi-substrate bonders**: Very clear and tough multi-material. Good vibration isolation capability and extremely low shrinkage. Suitable for use as a sealant and gasket material.
- **Optical grade, very low viscosity multi-substrate bonders**: Very high strength metal/glass bonders. Painted or clear. Thin film and thin layers in the electronics industry, such as code-wires manufacturing.
- **Medium viscosity active alignment optical bonders**: Used in optical/medical devices for bonding of metals, glass and ceramics. Very low shrinkage and water absorption. Ability to withstand stringent thermal cycling.
- **Low viscosity active alignment optical bonders**: Used in optical/medical devices for bonding of metals, glass and ceramics. Very low shrinkage and water absorption. Ability to withstand stringent thermal cycling.
- **Very low viscosity active alignment optical bonders**: Used in optical/medical devices for bonding of metals, glass and ceramics. Very low shrinkage and water absorption. Ability to withstand stringent thermal cycling.
- **Medium low viscosity active alignment optical bonders**: Used in optical/medical devices for bonding of metals, glass and ceramics. Very low shrinkage and water absorption. Ability to withstand stringent thermal cycling.
- **Medium high viscosity, superior high strength optical bonders**: Used for bonding of metals, glass and ceramics in electronics/optical/medical devices. Very low shrinkage and water absorption. Ability to withstand stringent thermal cycling.

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# Quad-Cure™ Series

## Flag-Ship Products

<table>
<thead>
<tr>
<th>Flag-Ship Products</th>
<th>Quad-Cure™</th>
<th>Quad-Cure™</th>
<th>Quad-Cure™</th>
<th>Quad-Cure™</th>
<th>Quad-Cure™</th>
<th>Quad-Cure™</th>
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<tbody>
<tr>
<td>Web Highlights</td>
<td>8053</td>
<td>8116</td>
<td>9218</td>
<td>9245</td>
<td>9254</td>
<td>9255G</td>
<td>9263</td>
<td>9273</td>
<td>9933</td>
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</table>

### Type of Binder
- High Performance Metal/Glass/Ceramics
- High Performance Metal/Glass/Ceramics
- High Performance Metal/Glass/Ceramics
- High Performance Metal/Glass/Ceramics
- High Performance Metal/Glass/Ceramics
- High Performance Metal/Glass/Ceramics
- High Performance Metal/Glass/Ceramics
- High Performance Metal/Glass/Ceramics
- High Performance Metal/Glass/Ceramics

### Type of Cure - Product Title
- UV/Visible/Heat/Cure Flexible Metal-Glass Bonders
- UV/Visible/Heat/Cure Flexible Metal-Glass Bonders
- UV/Visible/Heat/Cure Flexible Metal-Glass Bonders
- UV/Visible/Heat/Cure Flexible Metal-Glass Bonders
- Multi-cure/UV/Visible/Heat/Cure Flexible Metal-Glass Bonders
- UV/Visible/Heat/Cure Flexible Metal-Glass Bonders
- Multi-cure, High Performance, Moisture-Resistant Metal/Glass Bonders

### Competitive Products
- New
- MB-5000UV
- Dynax 625
- Tangent 934
- 3092
- (94-13-204)
- Viscrit 6128
- Dynax 625
- Tangent 934
- Tangent 6398
- Tangent 6441

### Surface After Full Cure - ISTM C118
- Sleek
- Tack-Free
- PSA Feel
- PSA Feel
- PSA Feel
- Sleek
- PSA Feel
- PSA Feel
- PSA Feel

### Tack-Free/Bulk Cure Surface using CP3100/UV16: 20" / 40" 20 ETA: 0.25 ETA: 0.25 ETA: 0.25 ETA: 0.25 ETA: 0.25 ETA: 0.25 ETA: 0.25 ETA: 0.25 ETA: 0.25

### Glass Fixure Time ( min )
- 2s
- 1s
- 15s
- 6s
- 1s
- 15s
- 6s
- 1s

### Color / Appearance
- Single Component Clear, Slight Translucent
- Single Component, Slight Transparent
- Single Component, Slight Transparent
- Single Component, Slight Transparent
- Single Component, Slight Transparent
- Single Component, Slight Transparent
- Single Component, Slight Transparent
- Single Component, Slight Transparent
- Single Component, Clear

### Viscosity (cps/100mL ASTM D3165)
- 90 to 1,900
- 56,000 - 90,000
- 16,000 - 25,000
- 2,000 - 4,800
- 1,299 - 2,400
- > 1,000,000
- 500 - 1,200
- 700 - 1,200
- 400 - 800

### Shore Hardness ASTM D2240
- D76 to D89
- D56 to D67
- D43 to D56
- D65 to D75
- D66 to D76
- D76 to D86
- D67 to D77
- D49 to D59
- D68 to D78

### Linear Shrinkage ASTM D2566
- 0.10%
- 0.80%
- 0.10%
- 1.22%
- 1.32%
- 0.31%
- 1.32%
- 0.10%
- 2.20%

### Water Absorption ASTM D570
- 0.80%
- 1.30%
- 0.80%
- 0.80%
- 0.70%
- 0.70%
- 0.70%
- 0.70%
- 0.70%

### Tensile Strength (PSI) ASTM D501
- PC-PC
- 9.500
- 5.500
- 8.200
- 19.000
- 19.000
- 200
- 600
- 1,500
- 200

### Elongation at Break ASTM D338
- 17%
- 36%
- 44%
- 82%
- 60%
- 33%
- 51%
- 54%
- 55%

### Temp. Resistance - ASTM D266
- -55 to 155
- -55 to 150
- -55 to 150
- -55 to 150
- -55 to 150
- -55 to 150
- -55 to 150
- -55 to 150
- -55 to 150

### Young’s Modulus MPa ASTM D338
- 402
- 689
- 12
- 8
- 3,618
- 7
- Not Available
- N.A.
- N.A.

### Glass Transition Tg ( °C ) - ASTM D536
- 54
- 84
- 84
- 84
- 84
- 84
- 84
- 84
- 84

### Average Linear CTE - ASTM D536
- 54
- 84
- 84
- 84
- 84
- 84
- 84
- 84
- 84

### Product Highlights
- Thixotropic, non-sticky<br>Good control of tackiness<br>Good adhesion to glass<br>Excellent moisture resistance<br>Excellent resistance to low and high water absorption
- Cures with UV/Visible/Heat or Actil 366
- Very high strength, high<br>viscosity metal/glass<br>bonder<br>Low shrinkage<br>and good<br>passive<br>resistance<br>to<br>moisture<br>and<br>low<br>water<br>absorption
- Cures with UV/Visible/Heat or Actil 366<br>Very<br>high<br>strength,<br>medium<br>viscosity<br>metal/glass<br>bonder<br>Low shrinkage<br>and good<br>passive<br>resistance<br>to<br>moisture<br>and<br>low<br>water<br>absorption
- Ultra low shrinkage for<br>used in<br>optical<br>positioning<br>adhesive<br>UV/Visible<br>Light/LED<br>Active/Heat-curing<br>strong<br>metal-glass<br>bonder<br>for<br>electronics,<br>optics and<br>medical<br>devices
- Cures with UV/Visible/Heat or Actil 366<br>Very high<br>strength, high<br>viscosity<br>metal/glass<br>bonder<br>Low shrinkage<br>and good<br>passive<br>resistance<br>to<br>moisture<br>and<br>low<br>water<br>absorption
- Cures with UV/Visible/Heat or Actil 366<br>Very high<br>strength, high<br>viscosity<br>metal/glass<br>bonder<br>Low shrinkage<br>and good<br>passive<br>resistance<br>to<br>moisture<br>and<br>low<br>water<br>absorption
- Cures with UV/Visible/Heat or Actil 366<br>Very good<br>clarity, heat<br>and<br>moisture<br>resistance,<br>Excellent<br>bonding<br>strength<br>for<br>metal-glass<br>applications
## Uni-Seal™ Series

### Flag-Ship Products

<table>
<thead>
<tr>
<th>Flag-Ship Product</th>
<th>Uni-Seal™ 1822</th>
<th>Uni-Seal™ 3203</th>
<th>Uni-Seal™ 3339</th>
<th>Uni-Seal™ 3368</th>
<th>Uni-Seal™ 3368B</th>
<th>Uni-Seal™ 3368G</th>
<th>Uni-Seal™ 3368GB</th>
<th>Uni-Seal™ 3393</th>
<th>Uni-Seal™ 3393L</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type of Binder</td>
<td>Multi-Substrates</td>
<td>Low Strength Multi-Substrates</td>
<td>Very Low Strength Multi-Substrates</td>
<td>Very Low Strength Multi-Substrates</td>
<td>Very Low Strength Multi-Substrates</td>
<td>Very Low Strength Multi-Substrates</td>
<td>Very Low Strength Multi-Substrates</td>
<td>Very Low Strength Multi-Substrates</td>
<td>Very Low Strength Multi-Substrates</td>
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<tr>
<td>Type of Cure - Product Title</td>
<td>UV/Visible/LED Curable Multi-Substrate Bond/</td>
<td>UV/Visible/LED Curable Rapid-Cure Metal-Glass Bond</td>
<td>UV/Visible/LED Curable Electronics Touchscreen/</td>
<td>UV/Visible/LED Curable Electronics Gasket/Mask/</td>
<td>UV/Visible/LED Curable Electronics Gasket/Mask/</td>
<td>UV/Visible/LED Curable Electronics Gasket/Mask/</td>
<td>UV/Visible/LED Curable Electronics Gasket/Mask/</td>
<td>UV/Visible/LED Curable Multi-Substrate Medical Gasket Sealant</td>
<td>UV/Visible/LED Curable Multi-Substrate Medical Gasket Sealant</td>
</tr>
<tr>
<td>Competitive Products (Products offered with similar properties. Users should test to confirm suitability)</td>
<td>Dieo 4436</td>
<td>Swilux Photocure A</td>
<td>Tangent 2568G</td>
<td>Tangent 2568G</td>
<td>Dymas GA-145</td>
<td>Tangent 2568G</td>
<td>Dymas GA-145</td>
<td>Tangent 2568G</td>
<td>Tangent 2568G</td>
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<tr>
<td>Surface Cure Time/Full Cure Surface using PPF0100 (100°C, 2 Lb)</td>
<td>Tack-Free</td>
<td>Tack-Free</td>
<td>Tack-Free</td>
<td>Tack-Free</td>
<td>Tack-Free</td>
<td>Tack-Free</td>
<td>Tack-Free</td>
<td>Tack-Free</td>
<td>Tack-Free</td>
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<tr>
<td>Viscosity (PPG/200 rpm) ASTM D2265</td>
<td>200 - 500</td>
<td>780 - 1,200</td>
<td>&gt; 1,000,000</td>
<td>25,000 - 36,000</td>
<td>25,000 - 36,000</td>
<td>&gt; 1,000,000</td>
<td>400 - 800</td>
<td>400 - 800</td>
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<tr>
<td>Shore Hardness ASTM D2240</td>
<td>A95 to A69</td>
<td>D71 to D81</td>
<td>A27 to A37</td>
<td>A27 to A37</td>
<td>A27 to A37</td>
<td>A27 to A37</td>
<td>A27 to A37</td>
<td>A27 to A37</td>
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<td>Liner Shrinkage ASTM D2696</td>
<td>0.10%</td>
<td>1.00%</td>
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<td>1.00%</td>
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<td>Water Absorption ASTM D670</td>
<td>0.00%</td>
<td>0.40%</td>
<td>1.50%</td>
<td>1.00%</td>
<td>1.50%</td>
<td>1.50%</td>
<td>1.00%</td>
<td>0.10%</td>
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<tr>
<td>Tensile Strength (PSI) ASTM D3538</td>
<td>PC-PC</td>
<td>4,900</td>
<td>800</td>
<td>3,500</td>
<td>3,500</td>
<td>3,500</td>
<td>3,500</td>
<td>3,000</td>
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<tr>
<td>Substrate Failure</td>
<td>PC-PC</td>
<td>2,700</td>
<td>2,900</td>
<td>2,000</td>
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<td>1,500</td>
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<td>PC-PC</td>
<td>2,600</td>
<td>4,000</td>
<td>1,300</td>
<td>1,300</td>
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<td>1,300</td>
<td>1,300</td>
<td>1,000</td>
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<tr>
<td>PC-AL</td>
<td>2,400</td>
<td>2,900</td>
<td>1,500</td>
<td>1,500</td>
<td>1,500</td>
<td>1,500</td>
<td>1,500</td>
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<tr>
<td>Elongation at Break ASTM D638</td>
<td>250%</td>
<td>13%</td>
<td>400%</td>
<td>400%</td>
<td>400%</td>
<td>400%</td>
<td>400%</td>
<td>374%</td>
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<td>Young’s Modulus ASTM D408</td>
<td>33</td>
<td>668</td>
<td>34</td>
<td>34</td>
<td>34</td>
<td>34</td>
<td>34</td>
<td>34</td>
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<td>Glass Transition Tg °C ASTM D361</td>
<td>N.A.</td>
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<td>N.A.</td>
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<td>N.A.</td>
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<tr>
<td>Average Linear CTE °C ASTM D696</td>
<td>188</td>
<td>51</td>
<td>103</td>
<td>119</td>
<td>119</td>
<td>119</td>
<td>85</td>
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</tbody>
</table>

### Specialty Chemicals

- Very thick, low water absorption electronics black sealant. Provides air-tight seal with ease of peel for rework. Tough yet elongating. Widely use for automotive and electronics industries for its low CTE properties.
- Gel, low water absorption electronics black sealant. Provides air-tight seal with ease of peel for rework. Tough yet elongating. Widely use for automotive and electronics industries for its low CTE properties.
- Gel, low water absorption electronics black sealant. Provides air-tight seal with ease of peel for rework. Tough yet elongating. Widely use for automotive and electronics industries for its low CTE properties.
- Low viscosity and low water absorption electronics sealant. Provides air-tight seal with ease of peel for rework. Tough yet elongating. Widely use for automotive and electronics industries for its low CTE properties.
# Uni-Weld™ Series

<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td>Web Highlights</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Type of Binder</td>
<td>High Performance Metal/Glass/Ceramics</td>
<td>High Performance Metal/Glass/Ceramics</td>
<td>High Strength Metal/Glass/Ceramics</td>
<td>Low Strength Multi-Substrates</td>
<td>Multi-Substrates</td>
<td>High Performance Metal/Glass/Ceramics</td>
<td>High Performance Metal/Glass/Ceramics</td>
<td>High Performance Metal/Glass/Ceramics</td>
<td>Multi-Substrates (High Strength Plastics)</td>
</tr>
<tr>
<td>Type of Cure - Product Title</td>
<td>UV/Visible Curable High Strength Metal-Glass/Ceramics</td>
<td>UV/Visible Curable High Strength Metal-Glass/Ceramics</td>
<td>UV/Visible Curable High Strength Low Shrink Metal-Glass/Ceramics</td>
<td>UV/Visible LED Curable Mobile Protective Screen Border</td>
<td>UV/Visible LED Curable Multi-Substrates (Glass)</td>
<td>High Performance, Very Low Shrink Stained/ Laminated Glass Repair</td>
<td>High Performance, Very Low Shrink Stained/ Laminated Glass Repair</td>
<td>High Performance, Very Low Shrink Stained/ Laminated Glass Repair</td>
<td>UV/Visible/LED Curable Low Shrink Multi-Substrate Superior Border</td>
</tr>
<tr>
<td>Competitive Products</td>
<td>Dymax 428</td>
<td>-</td>
<td>Dymax 1184M</td>
<td>-</td>
<td>-</td>
<td>Tangent 20106</td>
<td>Vitrail 6127</td>
<td>Tangent 628-UV</td>
<td>Tangent 20106</td>
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<tr>
<td>Surface After Cure (ASTM D189)</td>
<td>Tack-Free</td>
<td>Tack-Free</td>
<td>Tack-Free</td>
<td>Tacky</td>
<td>Tacky</td>
<td>Tacky</td>
<td>Tacky</td>
<td>Tacky</td>
<td>Tacky</td>
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<tr>
<td>tack-free/full cure surface using PPO/POY HARDENER</td>
<td>40s / 2s</td>
<td>40s / 2s</td>
<td>50s / 1s</td>
<td>30s / 1s</td>
<td>30s / 1s</td>
<td>50s / 1s</td>
<td>50s / 1s</td>
<td>50s / 1s</td>
<td>1s / 1s</td>
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<tr>
<td>Glass Fixtures Table (Imperial units)</td>
<td>1s</td>
<td>5s</td>
<td>1s</td>
<td>1s</td>
<td>1s</td>
<td>1s</td>
<td>1s</td>
<td>1s</td>
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<tr>
<td>Viscosity</td>
<td>1.000 - 2.000</td>
<td>0.500 - 1.000</td>
<td>1.000 - 2.000</td>
<td>1.000 - 2.000</td>
<td>1.000 - 2.000</td>
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<tr>
<td>Shore Hardness (ASTM D2240)</td>
<td>D66 to D79</td>
<td>D73 to D83</td>
<td>D69 to D79</td>
<td>A2 to A13</td>
<td>A1 to A11</td>
<td>D75 to D85</td>
<td>D75 to D85</td>
<td>D75 to D85</td>
<td>D75 to D85</td>
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<tr>
<td>Linear Shrinking (ASTM D2566)</td>
<td>0.03%</td>
<td>0.09%</td>
<td>0.16%</td>
<td>0.20%</td>
<td>0.23%</td>
<td>0.25%</td>
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<tr>
<td>Water Absorption ASTM D570</td>
<td>0.90%</td>
<td>0.90%</td>
<td>0.90%</td>
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<tr>
<td>Tensile Strength (PSI) ASTM D3568</td>
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<td>1. - Substrate Failure</td>
<td>PC-SS</td>
<td>8.500&quot;</td>
<td>8.500&quot;</td>
<td>8.500&quot;</td>
<td>8.500&quot;</td>
<td>8.500&quot;</td>
<td>8.500&quot;</td>
<td>8.500&quot;</td>
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<tr>
<td>2. - PC-88-SS/8SS/F/A/AL</td>
<td>PC-S</td>
<td>5.000&quot;</td>
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<td>5.000&quot;</td>
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<tr>
<td>PC-NL</td>
<td>7.000&quot;</td>
<td>7.000&quot;</td>
<td>7.000&quot;</td>
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<tr>
<td>Elongation at Break ASTM D438</td>
<td>850%</td>
<td>850%</td>
<td>850%</td>
<td>850%</td>
<td>850%</td>
<td>850%</td>
<td>850%</td>
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<tr>
<td>Young’s Modulus MPa ASTM D638</td>
<td>17</td>
<td>400</td>
<td>188</td>
<td>188</td>
<td>188</td>
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<tr>
<td>Glass Transition Tg (°C) ASTM D596</td>
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<td>Not Available</td>
<td>Not Available</td>
<td>Not Available</td>
<td>Not Available</td>
<td>Not Available</td>
<td>Not Available</td>
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</tbody>
</table>

**Product Highlights**

- **Clear and medium viscosity** metal, glass, ceramic, or ceramic composite or ceramic composite binder. Extraordinary high bonding strength, low shrinkage with enhanced moisture and temperature resistance. No drift™ on cure, ideal for precise positioning of optical devices.
- **Low-medium viscosity** metal, glass, or ceramic composite binder. Extraordinary high bonding strength, very low linear shrinkage and low water absorption with good thermal and moisture resistance.
- **Low viscosity glass;borderer/laminator.** High in clarity, easier to work with. Use for direct application on glass.
- **Low viscosity glass borderer/laminator.** High in clarity, Letters and lines can be drawn with low UV intensity. Bonding of glass panels on mobile devices for screen protection. Removal by hand/PAI wipes.
- **Low viscosity borderer/laminator.** Strong adhesion to many substrates. Very low shrinkage and water absorption. Air-tight sealing, easy to handle. Can be used for glass repair.
- **Cures with UV/Visible** LED or activator (Acft 338). Low viscosity. High strength metal/glass/ceramics border. Use in car windscreen, window and laminated glass repair.
- **Cures with UV/Visible** LED or activator (Acft 338). Medium-low viscosity. High strength metal/glass/ceramics border. Use in car windscreen, window and laminated glass repair.
- **Cures with UV/Visible** LED or activator (Acft 338). Very low viscosity, high strength metal/glass/ceramics border. Use in car windscreen, window and laminated glass repair.

**Bonding of various plastic substrates in seconds.** Used in high volume productions. Provides good moisture and temperature resistance.

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UV Curing Equipment

UV Measurement & Control

Left: LED L-395
L395 (370-422 nm)

Right: Broad Band
UVA (320-390nm)
UVB (280-320nm)
UVC (250-260nm)
UVV (395-445nm)
What is Chemistry-matching?

- **Adhesive selection** - Industry, desired uncured and cured properties.
- **Substrates used** - Metal, glass, plastics, ceramics, etc
- **Test requirements** - Bond, potting, sealing or coating performance. Reliability tests (thermal-cycling, EtO, gamma etc).
- **Equipment** - Halogen Arc Lamps or UV LED Spot Lamps or Small Area Curing (up to ø12mm) Flood Lamps for Large Area Curing (up to 150x200mm) Flood or Focused on Conveyor for Very Large Area Curing
Section One  Company Profile
- Mission Statement
- Core Competencies

Section Two  Advancement in UV Technology
- Wide Offerings & Specialty Chemicals
- UV curing Equipment, Measurement & Control
- Matching Chemistry

Section Three  The Incure Experience
- IncureDirect™
- IncureConsult™
- IncureCollaborate™
- IncureLab™
- IncureRental™ Program
Section Three
The Incure Experience

Five Pillars of Incure Success

**IncureDirect™**
Provides an open channel for end-users to work directly with Incure on all applications. Quick and easy access to working solutions for all bonding needs. Minimizes indirect costs associated distribution channels.

**IncureConsult™**
Take advantage of direct professional advice from Incure Product Development Consultant. IncureConsult™ embraces matching-chemistry in 3 simple steps:
1. Understanding your application, choice of substrates and test requirements
2. Recommending the most suitable adhesive and best-matched UV curing equipment
3. Establish a reliable and controlled manufacturing process

**IncureCollaborate™**
Faster turn-around for evaluation samples, coupled with enhanced confidentiality for customized solutions.

**IncureLab™**
Conduct your design-on-experiment (DOEs) with the use of Incure laboratory facility and equipment at a small fee. Easy access to a wide range of adhesives and coatings, curing lamps and testing equipment for your application needs.

**IncureRental™**
Use of Incure curing equipment on weekly rental basis. Choice of purchase of curing system by offsetting rental charges at the end of trial period.
Who can benefit from Incure Experience Centre (IEC)?

- Product Research & Development
- Design Engineering
- Manufacturing
- Engineering

How can you benefit from Incure Experience Centre (IEC)?

- Tap on the expertise and experience of our Applications Consultants
- Select and match an adhesive product of your choice of substrates
- Know what you are in for when you can have hands-on access to a wide range of UV curing system
- In-house equipment to support full cure test, hardness, elongation and tensile tests, viscosity measurement, strength validation etc.
- DOE at our laboratory for your bonding needs at a nominal fee.
- 24-hr R&D centers work on customized formulations