High Temperature Laminating Adhesives

Brake pads, flex circuits, labels, and more...

efficient attachment with the strength to take the stress and the heat
3M™ Adhesive Series 100: choice of characteristics for performance at temperatures ranging from 450°F to 540°F

Series 100 Adhesives are pressure sensitive formulations that perform reliably at various high temperatures. Each combines different characteristics for specific end use and processing requirements.

All attach immediately and invisibly without the work and appearance of mechanical fasteners or the dripping and drying of liquid adhesives.

100 High Temperature Acrylic
• Up to 450°F short term heat resistance
• Excellent solvent resistance
• High peel strength compared to other acrylic formulations
• Exceptional shear strength even at high temperatures
• Low outgassing

100MP High Performance Acrylic
• Up to 500°F short term heat resistance
• Outstanding solvent resistance
• Higher peel strength than 100
• Exceptional shear strength even at elevated temperatures

100HT Ultra High Temp Acrylic
• Similar to 100MP but with up to 540°F heat resistance and higher peel strength

100HTL Ultra High Temp Acrylic
• Similar to 100HT but with high temperature resistant liner and carrier

Adhesive Peel Strength
Heat Resistance °F
300 350 400 450 500 540
100 100MP 100HT

3M™ Adhesive Transfer Tapes are rolls of pressure sensitive adhesive pre-applied to a release liner. For bonding, the tape is simply pressed, adhesive side down, to a surface and the release liner is peeled off. The exposed adhesive is ready to hold the mating surface.

3M™ Double-coated Tape with 100HTL

Double-coated tape features adhesive on both sides of a heat-resistant carrier. The carrier provides stability for handling. The liner used with 100HTL is also heat resistant for use in processing such as lead-free solder reflow.

Application Ideas
• Flexible circuit assembly and rigidizing
• Attachment of heat-generating components and heat sinks to PCBs
• Appliance electronics
• High temperature labels for appliances and under the hood in vehicles
• High temperature performance for military applications
• PCB tracking labels
• Battery pack assembly and labels
• Fixture assemblies for automotive and other lighting
• LED back planes
• Automotive brake pad and shim assembly
• Audio system electronics and speaker assembly
• Window blind attachment
• Machine bearing gasket attachment

See more on back cover
## Product Selection Guide

### 3M™ Adhesive Transfer Tapes

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>100 High Temperature</td>
<td>941</td>
<td>Graphic attachment for low odor appliance applications.</td>
<td>2</td>
<td>58# PCK</td>
<td>4.2 x 180 yd</td>
<td>UL</td>
<td>9</td>
<td>1</td>
<td>-40 450</td>
</tr>
<tr>
<td>Acrylic</td>
<td>941N</td>
<td>Same as 941 on a heavy, lay-flat liner for kiss-cutting.</td>
<td>2</td>
<td>63# PCK</td>
<td>6.2 x 180 yd</td>
<td>UL</td>
<td>9</td>
<td>1</td>
<td>-40 450</td>
</tr>
<tr>
<td>965</td>
<td></td>
<td>Fuel line labels, excellent chemical resistance. Aerospace.</td>
<td>2</td>
<td>62# DK</td>
<td>3.2 x 180 yd</td>
<td>UL</td>
<td>M</td>
<td></td>
<td></td>
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<tr>
<td>966</td>
<td></td>
<td>Meets NASA low volatility specs. Flex circuit attachment. High temp.</td>
<td>2</td>
<td>62# DK</td>
<td>3.8 x 180 yd</td>
<td>UL</td>
<td>M</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9461P</td>
<td></td>
<td>Thinner version of laminating adhesive 9462P.</td>
<td>1</td>
<td>55# DK</td>
<td>3.2 x 360 yd</td>
<td>UL</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9462P</td>
<td></td>
<td>Laminating adhesive 966 on a caliper-controlled liner for rotary die-cutting.</td>
<td>2</td>
<td>55# DK</td>
<td>4.8 x 360 yd</td>
<td>UL</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>100MP High Performance</td>
<td>F9460PC</td>
<td>High performance for flex circuit rigidizing, aerospace and industrial joining, and high temp labels.</td>
<td>2</td>
<td>58# PCK</td>
<td>4.2 x 180 yd</td>
<td>UL</td>
<td>10</td>
<td>7</td>
<td>-40 500</td>
</tr>
<tr>
<td>Acrylic</td>
<td>F9469PC</td>
<td>High performance for PCB component and heat sink attachment, flex circuit assembly, brake shims, battery pack assembly, window blind labels.</td>
<td>5</td>
<td>58# PCK</td>
<td>6.0 x 180 yd</td>
<td>UL</td>
<td>10</td>
<td>7</td>
<td>-40 500</td>
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<tr>
<td>F9473PC</td>
<td></td>
<td>High performance for gasket attachment, metal fabrication, brake pads, LED back planes, lighting fixtures, PCB component attachment.</td>
<td>10</td>
<td>58# PCK</td>
<td>6.0 x 180 yd</td>
<td>UL</td>
<td>10</td>
<td>7</td>
<td>-40 540</td>
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<tr>
<td>100HT Ultra High Temperature Acrylic</td>
<td>9082</td>
<td>Excellent heat resistance in high temp environments. For applications that require both higher processing and operating temperatures.</td>
<td>2</td>
<td>White DK Liner</td>
<td>3.2 x 180 yd</td>
<td>UL</td>
<td>10</td>
<td>7</td>
<td>-40 540</td>
</tr>
<tr>
<td>9085</td>
<td></td>
<td>Thicker version of 9082</td>
<td>5</td>
<td>White DK Liner</td>
<td>3.2 x 180 yd</td>
<td>UL</td>
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### 3M™ Double-coated Tape

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<tbody>
<tr>
<td>100HTL Ultra High Temperature Acrylic</td>
<td>Same as 9082 but with heat-resistant liner and carrier for use in lead-free solder reflow.</td>
<td>2</td>
<td>White DK Liner</td>
<td>3.2 x 180 yd</td>
<td>UL</td>
<td>10</td>
<td>7</td>
<td>-40 530</td>
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</table>

### 3M™ Performance Label Materials

<table>
<thead>
<tr>
<th>Facestock</th>
<th>Product</th>
<th>Typical Performance Characteristics</th>
<th>Construction Specifications</th>
<th>Roll Width Minimum Pre-Slit sizes (shown in red)</th>
<th>Print Method</th>
<th>specs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polyimide White</td>
<td>7811</td>
<td>Offers ultra-high temperature performance. Easy readability of variable information and bar codes.</td>
<td>2.0 2.0 Matte Kapton® TC 100 50# Densified Kraft</td>
<td>12&quot; 500' 6&quot;</td>
<td>DMI</td>
<td>UL CSA RoHS</td>
</tr>
<tr>
<td>7812</td>
<td>Offers ultra-high temperature performance. Easy readability of bar codes. Thermal transfer printable.</td>
<td>3.0 2.0 Kapton®, Matte White 100 50# Densified Kraft</td>
<td>12&quot; 6&quot;</td>
<td>TT</td>
<td>UL CSA RoHS</td>
<td></td>
</tr>
</tbody>
</table>

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