3M Industrial Adhesives and Tapes

Specialty Six

3M™ Specialty Tape Solutions meeting application challenges for appliances, aerospace, automotive, construction, MRO, electronics, commercial transport, marine and more...
Specialty Six

3M™ Aluminum Foil Tape 425

Key Characteristics
- High thermal conductivity enhances heating or cooling efficiency
- High heat reflectivity and flame resistance protects temperature-sensitive materials against heat and flame damage and hot spots
- Reflect light
- Seal and protect against moisture, solvents and dust
- Resist outdoor weathering and UV degradation for long term performance

Use For
- Heat shielding of delicate parts
- Aircraft chemical paint strip masking
- Refrigerator and freezer copper coil attachment
- Reflective layer for lighting
- Sealing out air and moisture

Technical Parameters
<table>
<thead>
<tr>
<th>Adhesive</th>
<th>Acrylic (transparent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Backing</td>
<td>Aluminum (dead soft)</td>
</tr>
<tr>
<td>Backing Thickness</td>
<td>2.8 mils (0.07mm)</td>
</tr>
<tr>
<td>Total Thickness</td>
<td>4.6 mils (0.12mm)</td>
</tr>
<tr>
<td>Temperature Use Range</td>
<td>-65°F to 300°F (−54°C to 149°C)</td>
</tr>
</tbody>
</table>

3M™ Glass Cloth Tape 361

Key Characteristics
- High temperature resistance
- Very high tensile strength
- Protects surfaces against abrasion
- Protect against high temperature to pass FAA flame resistance regulations
- Meets F.A.R. 25.853 specification

Use For
- Splicing of fabrics and textured surfaces
- Aerospace panel sealing
- Welding backup
- Wire harness protection

Technical Parameters
<table>
<thead>
<tr>
<th>Adhesive</th>
<th>Silicone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Backing</td>
<td>Glass Cloth</td>
</tr>
<tr>
<td>Backing Thickness</td>
<td>5.4 mils (0.14mm)</td>
</tr>
<tr>
<td>Total Thickness</td>
<td>7.5 mils (0.19mm)</td>
</tr>
<tr>
<td>Temperature Use Range</td>
<td>-65°F to 450°F (−54°C to 232°C)</td>
</tr>
</tbody>
</table>

3M™ Vinyl Tape 471*

Key Characteristics
- “Color throughout” resists scrapes, wear and weathering
- Clean removal
- Extreme conformability and dead stretch means tape stays locked in place
- Chemical resistant
- Wide color variety

Use For
- Durable marking of aisles and corridors in factories, warehouses, hospitals and retail spaces
- Marking of safety hazards on walls, stairs and pipes
- Fine line paint masking
- Sealing
- High visibility splicing
- Decorative trim
- Surface protection

Technical Parameters
<table>
<thead>
<tr>
<th>Adhesive</th>
<th>Synthetic rubber</th>
</tr>
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<tbody>
<tr>
<td>Backing</td>
<td>Vinyl</td>
</tr>
<tr>
<td>Backing Thickness</td>
<td>4.1 mils (0.10mm)</td>
</tr>
<tr>
<td>Total Thickness</td>
<td>5.2 mils (0.13mm)</td>
</tr>
<tr>
<td>Temperature Use Range</td>
<td>40°F to 170°F (4°C to 77°C)</td>
</tr>
</tbody>
</table>
Bringing better ideas to the surface with a wide variety of tape solutions.

**3M™ Polyester Tape 850**

**Key Characteristics**
- Thin caliper, high tensile strength and elongation at break for reliable butt and other splices
- Seal, protect and reinforce
- Color code or decorate with long term holding
- Maintains color after long term aging
- Transparent option for virtually invisible splices

**Use For**
- Film splicing
- Defect marking
- Edge reinforcement
- Sealing
- Color coding

**Technical Parameters**

<table>
<thead>
<tr>
<th>Adhesive</th>
<th>Acrylic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Backing</td>
<td>Polyester</td>
</tr>
<tr>
<td>Backing Thickness</td>
<td>0.9 mils (0.02mm)</td>
</tr>
<tr>
<td>Total Thickness</td>
<td>1.9 mils (0.05mm)</td>
</tr>
<tr>
<td>Temperature Use Range</td>
<td>-60°F to 300°F (-50°C to 150°C)</td>
</tr>
</tbody>
</table>

**3M™ PTFE Film Tape 5490**

**Key Characteristics**
- Slippery, low energy surface for smoother material movement
- High temperature resistance
- Chemical resistant
- Conformable
- Protects surfaces
- Non-stick backing

**Use For**
- Wrapping web rollers to reduce friction
- Covering web former edges to minimize friction during folding
- Noise reduction of parts where surfaces rub together
- Increasing wear life of parts
- Providing excellent mold release in composite bonding

**Technical Parameters**

<table>
<thead>
<tr>
<th>Adhesive</th>
<th>Silicone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Backing</td>
<td>PTFE</td>
</tr>
<tr>
<td>Backing Thickness</td>
<td>2.0 mils (0.05mm)</td>
</tr>
<tr>
<td>Total Thickness</td>
<td>3.7 mils (0.09mm)</td>
</tr>
<tr>
<td>Temperature Use Range</td>
<td>-65°F to 500°F (-54°C to 260°C)</td>
</tr>
</tbody>
</table>

**3M™ UHMW-PE Tape 5423**

**Key Characteristics**
- Excellent abrasion resistance provides long wear life
- Low coefficient of friction
- Effective solution for noise and vibration problems
- Chemical resistant backing
- Anti-stick/release properties

**Use For**
- Reducing squeaks and rattles in automotive and transportation assemblies
- Lining of conveyors, chutes, blades, slides and guide rails
- Noise reduction in escalators and elevators
- Separating dissimilar parts to reduce noise and friction

**Technical Parameters**

<table>
<thead>
<tr>
<th>Adhesive</th>
<th>Rubber</th>
</tr>
</thead>
<tbody>
<tr>
<td>Backing</td>
<td>UHMW-PE</td>
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<tr>
<td>Backing Thickness</td>
<td>10.0 mils (0.25mm)</td>
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<tr>
<td>Total Thickness</td>
<td>11.7 mils (0.30mm)</td>
</tr>
<tr>
<td>Temperature Use Range</td>
<td>-30°F to 225°F (-34°C to 107°C)</td>
</tr>
</tbody>
</table>

For more information, call 1-800-362-3550 or visit 3M.com/IATD
3M has one of the most comprehensive sets of technologies for tape and adhesive products on the planet.

The SCALE program was developed to generate customized solutions by allowing for the mixing and matching of 3M adhesives, backings and liners from our vast tape portfolio. We can use this world-class capability to design a unique single coated tape solution for your specialized needs.

### Adhesives
- Acrylics
- Rubber and rubber blends
- Silicones

### Backings
- Metal foils
- Glass cloth
- PTFE/UHMW
- Vinyl
- Polyester
- Polyethylene
- Polypropylene
- Paper
- Foam

### Liners
- Films:
  - Polyester
  - HDPE
- Papers:
  - DK and PCK

### Custom Solution

Here’s how this fast-track process works:

- Customer request identified
- Something not currently offered in 3M line
- 3M Rep inputs request into SCALE product request database
- Generates request to St. Paul, MN
- Tech Service, Marketing, Sales discuss opportunity for clarification
- Capability, timing, pricing established and samples delivered
- Trial order placed and production run begins

To see if the SCALE program can help you, contact your local 3M sales representative.