Permabond manufactures flexible adhesives to meet the growing demands of industrial engineers. Modified Epoxies and MS Polymers offer flexibility and each provides unique benefits. The flexibility combined with low shrinkage make them ideal for bonding thin substrates with no read-through or witness marks and for potting without exerting stress on sensitive components.

**Permabond MS Polymers**
Permabond MS Polymers are single component, hybrid technology adhesives that moisture cure at ambient temperature. The high elongation and flexible nature of these strong bonds meet the demands of stress from impact, peel and expansion that can occur when bonding dissimilar materials. They have excellent environmental resistance and remain very flexible.

**Permabond Modified Epoxies**
Permabond Modified Epoxies are two component hybrid technology adhesives that cure at ambient temperature. Products are available in 10:1 and 2:1 dual cartridges for dispensing through static mix tips. The range includes fast-setting products as well as slow curing grades to suit production line requirements.

Permabond MS polymers and Modified Epoxies form strong bonds to:
- Composites
- Metals
- Wood
- FRP
- Glass
- Plastics
- Concrete
- Masonry
- Brick
- Stone

The high elongation and flexible nature of these strong bonds meet the demands of stress from impact, peel and expansion that can occur when bonding dissimilar materials. They have excellent environmental resistance and remain very flexible.

**Benefits of Permabond MS Polymers and Modified Epoxies include:**
- Paintable
- Non-corrosive
- Fast Tack Free Time
- Adhesion to a Variety of Substrates
- No primer needed
- Weather Resistant - No Cracking or Splitting
- Ease of Application - Use in Most Weather Conditions
Permabond Flexible Adhesives Comparison Chart

This table represents a selection of the complete range of Permabond adhesives. For more detailed technical information and product Material Safety Data Sheets, visit www.permabond.com. To discuss your specific application requirements, please call the Permabond Helpline and our technical advisors will recommend the best adhesive for you or discuss the development of a new grade or product modification to meet your technical requirements.

<table>
<thead>
<tr>
<th>Description</th>
<th>Product</th>
<th>Appearance</th>
<th>Viscosity cP (mPa.s)</th>
<th>Cure Mechanism</th>
<th>Elongation</th>
<th>Hardness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single component MS Polymers. Very soft and flexible, low shrinkage, and low read through. Ideal for exterior applications.</td>
<td>MS359 Grey</td>
<td>Grey</td>
<td>Non-Sag</td>
<td>Single component, 15 min skin over time</td>
<td>250%</td>
<td>50 Shore A</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Cure rate 5mm / 24 hrs</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>MS359 A Grey</td>
<td>Grey</td>
<td>Self-Levelling</td>
<td>Single component, 15 min skin over time</td>
<td>135%</td>
<td>45 Shore A</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Cure rate 3-4mm / 24 hrs</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>MS359 Clear</td>
<td>Transparent</td>
<td>Non-Sag</td>
<td>Single component, 15 min skin over time</td>
<td>90%</td>
<td>45 Shore A</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Cure rate 4mm / 24 hrs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Two component Modified Epoxies. Soft and flexible with low shrinkage and low read through. Excellent potting compound for sensitive electronic components, low shrinkage provides less stress on sensitive components. Faster set time than MS Polymers</td>
<td>MT382</td>
<td>Charcoal Black</td>
<td>Self-Levelling</td>
<td>2:1 mix ratio, 20-50 min pot life</td>
<td>175%</td>
<td>70 Shore A</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Handling Strength ≤ 2 hrs</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>MT3821</td>
<td>Black</td>
<td>Thixotropic Paste</td>
<td>2:1 mix ratio, 10-20 min pot life</td>
<td>125%</td>
<td>70 Shore A</td>
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<tr>
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<td></td>
<td></td>
<td></td>
<td>Handling Strength ≤ 90 mins</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>MT3809</td>
<td>Black</td>
<td>Self-Levelling</td>
<td>10:1 mix ratio, 10-12 min pot life</td>
<td>150%</td>
<td>80 Shore A</td>
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<tr>
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<td></td>
<td></td>
<td></td>
<td>Handling Strength ≤ 30 mins</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

For full technical information, please refer to the TDS (Technical Data Sheet)

Permabond Worldwide

Wherever your manufacturing or R&D site may be located, Permabond representatives can be called upon to assist you. We have an extensive network of trained distributors worldwide.

www.permabond.com

The information given and the recommendations made herein are based on our experience and are believed to be accurate. No guarantee as to, or responsibility for, their accuracy can be given or accepted, however, and no statement herein is to be treated as a representation or warranty. In every case we urge and recommend that purchasers, before using any product, make their own tests to determine, to their own satisfaction, its suitability for their particular purposes under their own operating conditions.

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