MAX BOND Thixotropic A/B

**Physical Properties**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mixed Density</td>
<td>1.10 gm/cc</td>
</tr>
<tr>
<td>Form and Color</td>
<td>Thixotropic Gel</td>
</tr>
<tr>
<td>Part A – Resin</td>
<td>White Thixotropic Liquid</td>
</tr>
<tr>
<td>Part B – Curing Agent</td>
<td>Amber Gel</td>
</tr>
<tr>
<td>Viscosity Mixed</td>
<td>135,624 cPs @ 77°F (25ºC)</td>
</tr>
<tr>
<td>Mix Ratio</td>
<td>Equal parts by volume or weight</td>
</tr>
<tr>
<td>Working Time (200 gram mass)</td>
<td>85 Minutes @ 77°F (25ºC)</td>
</tr>
<tr>
<td>Peak Exotherm (200 gram mass)</td>
<td>160°F</td>
</tr>
<tr>
<td>Cure Time</td>
<td>24 Hrs. Minimum</td>
</tr>
<tr>
<td>Accelerated Cure</td>
<td>2 Hours Room TemperaturePlus 1 hour 212°F</td>
</tr>
</tbody>
</table>

**Mechanical Properties**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hardness</td>
<td>85 ± 5 Shore D</td>
</tr>
<tr>
<td>Tee-Peel Strength</td>
<td>4 Lbs. per inch Width</td>
</tr>
<tr>
<td>Compressive Strength</td>
<td>15,800 psi @ 77°F (25ºC)</td>
</tr>
<tr>
<td>Tensile Shear Strength</td>
<td>3,700 psi @ 77°F (25ºC)</td>
</tr>
<tr>
<td></td>
<td>2,200 psi @ -112°F (-80ºC)</td>
</tr>
<tr>
<td></td>
<td>1,450 psi @ 212°F (100ºC)</td>
</tr>
<tr>
<td>Elongation Maximum Yield</td>
<td>2.3%</td>
</tr>
<tr>
<td>Tensile Strength</td>
<td>8,800 psi</td>
</tr>
<tr>
<td>Service Temperature</td>
<td>-67°F to 250°F</td>
</tr>
<tr>
<td>Thin Film Set Time</td>
<td>120 minutes</td>
</tr>
</tbody>
</table>

**Electrical Properties**

<table>
<thead>
<tr>
<th>Property</th>
<th>Test Method</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dielectric Constant</td>
<td>ASTM-D-159-47-T</td>
<td>3.243.21</td>
</tr>
<tr>
<td>60 Cycles – RT</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1000 Cycles – RT</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Volume Resistivity</td>
<td>ASTM-D-257-252T</td>
<td>1.25 x 1014 ohms-cm</td>
</tr>
<tr>
<td>Arc Resistance</td>
<td>ASTM-D-47T</td>
<td>78 seconds</td>
</tr>
<tr>
<td>Power Factor</td>
<td>ASTM-D-150-47T</td>
<td>0.00870.0106</td>
</tr>
<tr>
<td>60 Cycles – RT</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1000 Cycles – RT</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dielectric Strength</td>
<td>ASTM-D-149-44</td>
<td>460 to 500 volts/mil</td>
</tr>
<tr>
<td>Loss Factor</td>
<td>ASTM-D-150-47T</td>
<td>0.03370.0341</td>
</tr>
<tr>
<td>60 Cycles – RT</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1000 Cycles – RT</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Chemical Resistance Test – 10 Day Soak Test @ 77°F (25°C)

<table>
<thead>
<tr>
<th>Test Solvent</th>
<th>% Change in weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distilled Water</td>
<td>1.23</td>
</tr>
<tr>
<td>Sulfuric Acid 30%</td>
<td>1.9</td>
</tr>
<tr>
<td>Nitric Acid</td>
<td>3.8</td>
</tr>
<tr>
<td>Toluene</td>
<td>3.7</td>
</tr>
<tr>
<td>Sodium Hydroxide</td>
<td>10.00</td>
</tr>
<tr>
<td>Anti-Freeze</td>
<td>No Effect</td>
</tr>
<tr>
<td>Motor Oil soak</td>
<td>No Effect</td>
</tr>
</tbody>
</table>

Viscosity Comparison Chart

<table>
<thead>
<tr>
<th>MATERIAL</th>
<th>VISCOSITY (centipoises)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water @ 70° F</td>
<td>1-5</td>
</tr>
<tr>
<td>Blood or Kerosene</td>
<td>10</td>
</tr>
<tr>
<td>Anti-Freeze or Ethylene Glycol</td>
<td>15</td>
</tr>
<tr>
<td>Motor Oil SAE 10 or Corn Syrup</td>
<td>50-100</td>
</tr>
<tr>
<td>Motor Oil SAE 30 or Maple Syrup</td>
<td>150-200</td>
</tr>
<tr>
<td>Motor Oil SAE 40 or Castor Oil</td>
<td>250-500</td>
</tr>
<tr>
<td>Motor Oil SAE 60 or Glycerin</td>
<td>1,000-2,000</td>
</tr>
<tr>
<td>Corn Syrup or Honey</td>
<td>2,000-3,000</td>
</tr>
<tr>
<td>Blackstrap Molasses</td>
<td>5,000-10,000</td>
</tr>
<tr>
<td>Hershey Chocolate Syrup</td>
<td>10,000-25,000</td>
</tr>
<tr>
<td>Heinz Ketchup or French’s Mustard</td>
<td>50,000-70,000 THIXOTROPIC</td>
</tr>
<tr>
<td>Tomato Paste or Peanut Butter</td>
<td>150,000-200,000 THIXOTROPIC</td>
</tr>
<tr>
<td>Crisco Shortening or Lard</td>
<td>1,000,000-2,000,000</td>
</tr>
<tr>
<td>Caulking Compound</td>
<td>5,000,000-10,000,000</td>
</tr>
<tr>
<td>Window Putty</td>
<td>100,000,000</td>
</tr>
</tbody>
</table>
### Tensile Shear Strength and Peel Adhesion of MAX BOND THIXOTROPIC to other substrates

<table>
<thead>
<tr>
<th>Substrate</th>
<th>Surface Treatment</th>
<th>Cure Condition</th>
<th>Shear Strength @ 77°F</th>
<th>Shear Strength @ -319°F</th>
<th>T-peel Per Inch Width @ 77°F</th>
<th>T-peel Per Inch Width @ 319°F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teflon -TFE</td>
<td>Naphthalene Wipe</td>
<td>48 Hrs, @ 77°F</td>
<td>2300</td>
<td>1800</td>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td>Teflon -TFE</td>
<td>Naphthalene Wipe</td>
<td>1 Hr. @ 250°F</td>
<td>2800</td>
<td>3200</td>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td>Teflon – FEP</td>
<td>Naphthalene Wipe</td>
<td>48 Hrs, @ 77°F</td>
<td>12</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teflon – FEP</td>
<td>Naphthalene Wipe</td>
<td>1 Hr. @ 250°F</td>
<td>3000</td>
<td>5300</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>KE L- F</td>
<td>Solvent Wipe</td>
<td>1 Hr. @ 250°F</td>
<td>2600</td>
<td>5000</td>
<td>10</td>
<td>17</td>
</tr>
<tr>
<td>Tedlar</td>
<td>Solvent Wipe</td>
<td>48 Hrs, @ 77°F</td>
<td>2300</td>
<td>1600</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>Nylon FM63</td>
<td>Solvent Wipe</td>
<td>48 Hrs, @ 77°F</td>
<td>1000</td>
<td>700</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Zytel 61</td>
<td></td>
<td>48 Hrs, @ 77°F</td>
<td>1500</td>
<td>700</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Zytel 61</td>
<td>Solvent Wipe</td>
<td>48 Hrs, @ 77°F</td>
<td>1200</td>
<td>800</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Chloro-Butyl Rubber</td>
<td>Solvent Wipe</td>
<td>48 Hrs, @ 77°F</td>
<td>320</td>
<td>2300</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Viton A-HY</td>
<td>Solvent Wipe</td>
<td>1 Hr. @ 250°F</td>
<td>1400</td>
<td>4800</td>
<td>19</td>
<td>7</td>
</tr>
<tr>
<td>Adiprene C</td>
<td>Solvent Wipe</td>
<td>1 Hr. @ 250°F</td>
<td>2600</td>
<td>3800</td>
<td>15</td>
<td>10</td>
</tr>
<tr>
<td>Thiokol FA</td>
<td>Solvent Wipe</td>
<td>1 Hr. @ 250°F</td>
<td>130</td>
<td>1300</td>
<td>7</td>
<td>2</td>
</tr>
<tr>
<td>Hypalon 40</td>
<td>Solvent Wipe</td>
<td>1 Hr. @ 250°F</td>
<td>2800</td>
<td>4400</td>
<td>15</td>
<td>4</td>
</tr>
<tr>
<td>Copper Foil</td>
<td>Dilute Nitric Acid Etch</td>
<td>48 Hrs, @ 77°F</td>
<td>1400</td>
<td>1000</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>Lead Foil</td>
<td>Dilute Nitric Acid Etch</td>
<td>48 Hrs, @ 77°F</td>
<td>1700</td>
<td>700</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Tin Foil</td>
<td>Dilute Nitric Acid Etch</td>
<td>48 Hrs, @ 77°F</td>
<td>2400</td>
<td>2200</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Cadmium Foil</td>
<td>Dilute Nitric Acid</td>
<td>48 Hrs, @ 77°F</td>
<td>1500</td>
<td>900</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>