**Bayblend® T65 XF**

*Covestro - Polycarbonates - Polycarbonate + ABS*

**General Information**

**(PC+ABS)-Blend; Vicat/B 120 temperature = 120°C; improved flow compared with T65**

### General

<table>
<thead>
<tr>
<th>Material Status</th>
<th>Commercial: Active</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regional Availability</td>
<td>Africa &amp; Middle East, Asia Pacific, Europe, Latin America, North America</td>
</tr>
<tr>
<td>Features</td>
<td>Good Flow</td>
</tr>
<tr>
<td>RoHS Compliance</td>
<td>RoHS Compliant</td>
</tr>
</tbody>
</table>

### Automotive Specifications

- **FORD WSS-M4D684-B1**
- **FORD WSS-M4D924-B1**
- **GM GMW15581P-ABS+PC-T2**
- **GM GMW15581P-ABS+PC-T5**
- **GM QK 000195 Type B Color: 901510 Black**
- **GM QK 002412 Color: 901510 Black**

### ASTM & ISO Properties

<table>
<thead>
<tr>
<th>Physical Property</th>
<th>Typical Value (English)</th>
<th>Typical Value (SI)</th>
<th>Test Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Density (73°F (23°C))</td>
<td>1.13 g/cm³</td>
<td>1.13 g/cm³</td>
<td>ISO 1183</td>
</tr>
<tr>
<td>Melt Volume-Flow Rate (MVR) (260°C/5.0 kg)</td>
<td>18 cm³/10min</td>
<td>18 cm³/10min</td>
<td>ISO 1133</td>
</tr>
<tr>
<td>Molding Shrinkage ²</td>
<td>0.50 to 0.70 %</td>
<td>0.50 to 0.70 %</td>
<td>ISO 2577</td>
</tr>
<tr>
<td>Water Absorption</td>
<td>0.70 %</td>
<td>0.70 %</td>
<td>ISO 62</td>
</tr>
<tr>
<td>Mechanical Properties</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Mechanical Property</th>
<th>Typical Value (English)</th>
<th>Typical Value (SI)</th>
<th>Test Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tensile Modulus (73°F (23°C))</td>
<td>341000 psi</td>
<td>2350 MPa</td>
<td>ISO 527-2/1</td>
</tr>
<tr>
<td>Tensile Stress Yield, 73°F (23°C)</td>
<td>7830 psi</td>
<td>54.0 MPa</td>
<td>ISO 527-2/50</td>
</tr>
<tr>
<td>Break, 73°F (23°C)</td>
<td>6820 psi</td>
<td>47.0 MPa</td>
<td></td>
</tr>
<tr>
<td>Tensile Strain Yield, 73°F (23°C)</td>
<td>4.4 %</td>
<td>4.4 %</td>
<td>ISO 527-2/50</td>
</tr>
<tr>
<td>Break, 73°F (23°C)</td>
<td>&gt; 50 %</td>
<td>&gt; 50 %</td>
<td></td>
</tr>
<tr>
<td>Flexural Modulus ³ (73°F (23°C))</td>
<td>341000 psi</td>
<td>2350 MPa</td>
<td>ISO 178</td>
</tr>
<tr>
<td>Flexural Stress 3.5% Strain, 73°F (23°C)</td>
<td>10600 psi</td>
<td>73.0 MPa</td>
<td>ISO 178</td>
</tr>
<tr>
<td>73°F (23°C)</td>
<td>12200 psi</td>
<td>84.0 MPa</td>
<td></td>
</tr>
</tbody>
</table>

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# Bayblend® T65 XF

**Covestro - Polycarbonates - Polycarbonate + ABS**

<table>
<thead>
<tr>
<th>Impact</th>
<th>Typical Value (English)</th>
<th>Typical Value (SI)</th>
<th>Test Method</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Impact</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Charpy Notched Impact Strength</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-22°F (-30°C)</td>
<td>17 ft·lb/in²</td>
<td>36 kJ/m²</td>
<td>ISO 179/1eA</td>
</tr>
<tr>
<td>73°F (23°C)</td>
<td>24 ft·lb/in²</td>
<td>50 kJ/m²</td>
<td></td>
</tr>
<tr>
<td>Notched Izod Impact Strength</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-22°F (-30°C)</td>
<td>17 ft·lb/in²</td>
<td>35 kJ/m²</td>
<td>ISO 180/A</td>
</tr>
<tr>
<td>73°F (23°C)</td>
<td>23 ft·lb/in²</td>
<td>48 kJ/m²</td>
<td></td>
</tr>
<tr>
<td>Unnotched Izod Impact Strength</td>
<td></td>
<td></td>
<td>ISO 180</td>
</tr>
<tr>
<td>-22°F (-30°C)</td>
<td>No Break</td>
<td>No Break</td>
<td></td>
</tr>
<tr>
<td>73°F (23°C)</td>
<td>No Break</td>
<td>No Break</td>
<td></td>
</tr>
<tr>
<td><strong>Thermal</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heat Deflection Temperature</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>66 psi (0.45 MPa), Unannealed</td>
<td>252 °F</td>
<td>122 °C</td>
<td>ISO 75-2/B</td>
</tr>
<tr>
<td>264 psi (1.8 MPa), Unannealed</td>
<td>216 °F</td>
<td>102 °C</td>
<td>ISO 75-2/A</td>
</tr>
<tr>
<td>Vicat Softening Temperature</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-</td>
<td>248 °F</td>
<td>120 °C</td>
<td>ISO 306/B120</td>
</tr>
<tr>
<td>-</td>
<td>244 °F</td>
<td>118 °C</td>
<td>ISO 306/B50</td>
</tr>
<tr>
<td><strong>CLTE</strong></td>
<td></td>
<td></td>
<td>ISO 11359-2</td>
</tr>
<tr>
<td>Flow : 73 to 131°F (23 to 55°C)</td>
<td>4.4E-5 in/in°F</td>
<td>8.0E-5 cm/cm°C</td>
<td></td>
</tr>
<tr>
<td>Transverse : 73 to 131°F (23 to 55°C)</td>
<td>4.7E-5 in/in°F</td>
<td>8.5E-5 cm/cm°C</td>
<td></td>
</tr>
<tr>
<td><strong>Electrical</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surface Resistivity</td>
<td>1.0E+16 ohms</td>
<td>1.0E+16 ohms</td>
<td>IEC 60093</td>
</tr>
<tr>
<td>Volume Resistivity (73°F (23°C))</td>
<td>1.0E+16 ohms·cm</td>
<td>1.0E+16 ohms·cm</td>
<td>IEC 60093</td>
</tr>
<tr>
<td>Electric Strength</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>73°F (23°C), 0.0394 in (1.00 mm)</td>
<td>890 V/mil</td>
<td>35 kV/mm</td>
<td>IEC 60243-1</td>
</tr>
<tr>
<td>Relative Permittivity</td>
<td></td>
<td></td>
<td>IEC 60250</td>
</tr>
<tr>
<td>73°F (23°C), 100 Hz</td>
<td>3.10</td>
<td>3.10</td>
<td></td>
</tr>
<tr>
<td>73°F (23°C), 1 MHz</td>
<td>3.00</td>
<td>3.00</td>
<td></td>
</tr>
<tr>
<td>Dissipation Factor</td>
<td></td>
<td></td>
<td>IEC 60250</td>
</tr>
<tr>
<td>73°F (23°C), 100 Hz</td>
<td>3.0E-3</td>
<td>3.0E-3</td>
<td></td>
</tr>
<tr>
<td>73°F (23°C), 1 MHz</td>
<td>8.5E-3</td>
<td>8.5E-3</td>
<td></td>
</tr>
<tr>
<td>Comparative Tracking Index (Solution A)</td>
<td>250 V</td>
<td>250 V</td>
<td>IEC 60112</td>
</tr>
<tr>
<td><strong>Flammability</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flame Rating (0.03 in (0.9 mm))</td>
<td>HB</td>
<td>HB</td>
<td>UL 94</td>
</tr>
<tr>
<td>Oxygen Index</td>
<td>24 %</td>
<td>24 %</td>
<td>ISO 4589-2</td>
</tr>
<tr>
<td><strong>Fill Analysis</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Melt Viscosity (500°F (260°C))</td>
<td>200 Pa·s</td>
<td>200 Pa·s</td>
<td>ISO 11443-A</td>
</tr>
<tr>
<td><strong>Additional Information</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ISO Shortname</td>
<td>PC+ABS</td>
<td>PC+ABS</td>
<td></td>
</tr>
</tbody>
</table>

## Processing Information

<table>
<thead>
<tr>
<th>Injection</th>
<th>Typical Value (English)</th>
<th>Typical Value (SI)</th>
<th>Test Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drying Temperature - Dry Air Dryer</td>
<td>203 to 230 °F</td>
<td>95 to 110 °C</td>
<td></td>
</tr>
<tr>
<td>Drying Time - Dry Air Dryer</td>
<td>4.0 hr</td>
<td>4.0 hr</td>
<td></td>
</tr>
<tr>
<td>Suggested Max Moisture</td>
<td>&lt; 0.020 %</td>
<td>&lt; 0.020 %</td>
<td></td>
</tr>
<tr>
<td>Suggested Shot Size</td>
<td>30 to 70 %</td>
<td>30 to 70 %</td>
<td></td>
</tr>
<tr>
<td>Rear Temperature</td>
<td>428 to 446 °F</td>
<td>220 to 230 °C</td>
<td></td>
</tr>
</tbody>
</table>

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Covestro - Polycarbonates - Polycarbonate + ABS

<table>
<thead>
<tr>
<th>Injection</th>
<th>Typical Value (English)</th>
<th>Typical Value (SI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Middle Temperature</td>
<td>437 to 455 °F</td>
<td>225 to 235 °C</td>
</tr>
<tr>
<td>Front Temperature</td>
<td>446 to 464 °F</td>
<td>230 to 240 °C</td>
</tr>
<tr>
<td>Nozzle Temperature</td>
<td>491 to 509 °F</td>
<td>255 to 265 °C</td>
</tr>
<tr>
<td>Processing (Melt) Temp</td>
<td>464 to 518 °F</td>
<td>240 to 270 °C</td>
</tr>
<tr>
<td>Mold Temperature</td>
<td>158 to 194 °F</td>
<td>70 to 90 °C</td>
</tr>
<tr>
<td>Back Pressure</td>
<td>725 to 2180 psi</td>
<td>5.00 to 15.0 MPa</td>
</tr>
<tr>
<td>Vent Depth</td>
<td>9.8E-4 to 3.0E-3 in</td>
<td>0.025 to 0.075 mm</td>
</tr>
</tbody>
</table>

Injection Notes
- Peripheral Screw Speed: 0.05 - 0.2 m/s
- Standard Melt Temperature: 260°C
- Hold Pressure (% of Injection Pressure): 50 - 75%

Notes
1. Typical properties: these are not to be construed as specifications.
2. 150x105x3mm., MT 80°C
3. 0.079 in/min (2.0 mm/min)
4. Procedure A
5. 1000s-1

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