

Bayblend® T90 XG

 Covestro - Polycarbonates - *Polycarbonate + ABS*
General Information
Product Description

(PC+ABS)-Blend; Vicat/B 120 temperature = 135°C; easy flowing; optimized surface quality for metallization (steam treatment)

General

| | | | |
|-----------------|------------------------|-----------------------|-----------------|
| Material Status | • Commercial: Active | | |
| Availability | • Africa & Middle East | • Europe | • North America |
| | • Asia Pacific | • Latin America | |
| Features | • Good Flow | • Good Surface Finish | • Metallizable |
| RoHS Compliance | • RoHS Compliant | | |
| ISO Designation | • PC+ABS | | |

Properties ¹

| Physical | Nominal Value | Unit | Test Method |
|---|---------------|------------------------|--------------|
| Density (73°F) | 1.15 | g/cm ³ | ISO 1183 |
| Melt Volume-Flow Rate (MVR) (260°C/5.0 kg) | 26 | cm ³ /10min | ISO 1133 |
| Molding Shrinkage ² | | | ISO 294-4 |
| Across Flow : 500°F, 0.0787 in | 0.55 to 0.75 | % | |
| Flow : 500°F, 0.0787 in | 0.55 to 0.75 | % | |
| Water Absorption (Saturation, 73°F) | 0.50 | % | ISO 62 |
| Water Absorption (Equilibrium, 73°F, 50% RH) | 0.20 | % | ISO 62 |
| Mechanical | Nominal Value | Unit | Test Method |
| Tensile Modulus (73°F) | 348000 | psi | ISO 527-1/1 |
| Tensile Stress (Yield, 73°F) | 8850 | psi | ISO 527-2/50 |
| Tensile Stress (Break, 73°F) | 8120 | psi | ISO 527-2/50 |
| Tensile Strain (Yield, 73°F) | 5.1 | % | ISO 527-2/50 |
| Tensile Strain (Break, 73°F) | > 50 | % | ISO 527-2/50 |
| Impact | Nominal Value | Unit | Test Method |
| Notched Izod Impact Strength | | | ISO 180/A |
| -22°F | 8.6 | ft·lb/in ² | |
| 73°F | 25 | ft·lb/in ² | |
| Unnotched Izod Impact Strength (73°F) | No Break | | ISO 180 |
| Multi-Axial Instrumented Impact Energy | | | ISO 6603-2 |
| -22°F | 42.0 | ft·lb | |
| 73°F | 37.6 | ft·lb | |
| Thermal | Nominal Value | Unit | Test Method |
| Deflection Temperature Under Load (66 psi, Unannealed) | 266 | °F | ISO 75-2/B |
| Deflection Temperature Under Load (264 psi, Unannealed) | 234 | °F | ISO 75-2/A |
| Vicat Softening Temperature | | | |
| -- | 275 | °F | ISO 306/B120 |
| -- | 273 | °F | ISO 306/B50 |
| CLTE - Flow (73 to 131°F) | 3.9E-5 | in/in/°F | ISO 11359-2 |
| CLTE - Transverse (73 to 131°F) | 3.9E-5 | in/in/°F | ISO 11359-2 |
| Electrical | Nominal Value | Unit | Test Method |
| Surface Resistivity | 1.0E+16 | ohms | IEC 60093 |
| Volume Resistivity (73°F) | 1.0E+16 | ohms·cm | IEC 60093 |
| Electric Strength (73°F, 0.0394 in) | 890 | V/mil | IEC 60243-1 |
| Relative Permittivity | | | IEC 60250 |
| 73°F, 100 Hz | 3.10 | | |



| | | |
|-------------------------------------|---------------------------|--------------------|
| 73°F, 1 MHz | 3.00 | |
| Dissipation Factor | | IEC 60250 |
| 73°F, 100 Hz | 2.5E-3 | |
| 73°F, 1 MHz | 0.010 | |
| Fill Analysis | Nominal Value Unit | Test Method |
| Melt Viscosity ³ (500°F) | 225 Pa·s | ISO 11443-A |

Processing Information

| Injection | Nominal Value Unit |
|------------------------------------|---------------------------|
| Drying Temperature - Dry Air Dryer | 203 to 230 °F |
| Drying Time - Dry Air Dryer | 4.0 hr |
| Suggested Max Moisture | < 0.020 % |
| Suggested Shot Size | 30 to 70 % |
| Rear Temperature | 446 to 464 °F |
| Middle Temperature | 455 to 473 °F |
| Front Temperature | 464 to 518 °F |
| Nozzle Temperature | 509 to 527 °F |
| Processing (Melt) Temp | 500 to 536 °F |
| Mold Temperature | 158 to 194 °F |
| Back Pressure | 725 to 2180 psi |
| Vent Depth | 9.8E-4 to 3.0E-3 in |

Injection Notes

Standard Melt Temperature: 270°C
 Hold Pressure (% of Injection Pressure): 50 - 75%
 Peripheral Screw Speed: 0.05 - 0.2 m/s

Notes

¹ Typical properties: these are not to be construed as specifications.

² 60x60x2mm, MT 80°C

³ 1000s-1

