



| PBT 3030-104                                                                                                   |                                    |        |                 |
|----------------------------------------------------------------------------------------------------------------|------------------------------------|--------|-----------------|
| PBT-GF30                                                                                                       |                                    |        | ChangChun Group |
| Processing/Physical Characteristics                                                                            | Value                              | Unit   | Test Standard   |
| ASTM Data                                                                                                      |                                    |        |                 |
| Mold Shrinkage, MD                                                                                             | 0.0035                             | mm/mm  | ASTM D 955      |
| Mold Shrinkage, TD                                                                                             | 0.011                              | mm/mm  | ASTM D 955      |
| Density, 73°F                                                                                                  | 1510                               | kg/m³  | ASTM D 792      |
| Water Absorption, 24hr                                                                                         | 0.04                               | %      | ASTM D 570      |
|                                                                                                                |                                    |        |                 |
| Mechanical properties                                                                                          | Value                              | Unit   | Test Standard   |
| ASTM Data                                                                                                      |                                    |        |                 |
| Tensile Strength                                                                                               | 118                                | MPa    | ASTM D 638      |
| Flexural Modulus                                                                                               | 7848.01                            | MPa    | ASTM D 790      |
| Flexural Strength                                                                                              | 182                                | MPa    | ASTM D 790      |
| Rockwell Hardness                                                                                              | M 90                               | -      | ASTM D 785      |
| Izod Impact notched, 1/4 in                                                                                    | 0.0801                             | kJ/m   | ASTM D 256      |
|                                                                                                                |                                    |        |                 |
| Thermal properties                                                                                             | Value                              | Unit   | Test Standard   |
| ASTM Data                                                                                                      |                                    |        |                 |
| UL 94 Flame rating                                                                                             | HB                                 | -      | UL 94           |
| Thickness tested                                                                                               | 0.8                                | mm     | -               |
| Coefficient of Thermal Expansion, MD                                                                           | 30                                 | E-6/K  | ASTM D 696      |
| DTUL @ 66 psi                                                                                                  | 220                                | °C     | ASTM D 648      |
| DTUL @ 264 psi                                                                                                 | 200                                | °C     | ASTM D 648      |
| Melting Temperature                                                                                            | 225                                | °C     | ASTM D 3418     |
|                                                                                                                |                                    |        |                 |
| Electrical properties                                                                                          | Value                              | Unit   | Test Standard   |
| ASTM Data                                                                                                      |                                    |        |                 |
| Dielectric Strength, Short Time                                                                                | 20                                 | kV/mm  | ASTM D 149      |
| Dissipation Factor, 60 Hz                                                                                      | 0.001                              | -      | ASTM D 150      |
| Dielectric Constant, 60 Hz                                                                                     | 3.5                                | -      | ASTM D 150      |
| Surface Resistivity                                                                                            | 1E13                               | Ohm    | ASTM D 257      |
| Volume Resistivity                                                                                             | 1E15                               | Ohm*cm | ASTM D 257      |
| Arc Resistance                                                                                                 | 100                                | s      | ASTM D 495      |
|                                                                                                                |                                    |        |                 |
| Characteristics                                                                                                |                                    |        |                 |
|                                                                                                                |                                    |        |                 |
| Processing                                                                                                     | Chemical Resistance                |        |                 |
| Injection Molding                                                                                              | Solvent Resistance, Oil Resistance |        |                 |
| Special Characteristics                                                                                        | Applications                       |        |                 |
| U.V. stabilized or stable to weather, Heat stabilized or stableAutomotive, Electrical and Electronical to heat |                                    |        |                 |