

| Properties | Test Method | Terms | Units | GF Reinforced Alloy |
|--|--------------|---------------|--|---|
| | | | | 5810G30X4 |
| | | | | Low Warpage Low Density Hydrolytic Resistance |
| | | | | GF30 |
| Physical properties | | | | |
| Density | ISO 1183 | – | g/cm ³ | 1.44 |
| Dimensional properties | | | | |
| Moulding shrinkage (2mmt) | – | MD TD | % | 0.3 0.5 |
| Rheological properties | | | | |
| Melt Volume flow Rate | ISO 1133 | – | cm ³ /10min – | 30 250°C × 5kg |
| Mechanical properties | | | | |
| Yield stress | ISO 527-1,2 | – | MPa | – |
| Stress at break | ISO 527-1,2 | – | MPa | 125 |
| Strain at break | | % | 2 | |
| Flexural strength | ISO 178 | – | MPa | 185 |
| Flexural modulus | | MPa | 8,800 | |
| Charpy impact | ISO 179-1, 2 | – | kJ/m ² kJ/m ² | 59 |
| | | notched | | 10 |
| Thermal properties | | | | |
| Melting temperature | ISO 11357-3 | – | °C | 224 |
| Temperature of deflection under load | ISO 75-1, 2 | 1.80MPa | °C | 190 |
| | | 0.45MPa | | >200 |
| Coefficient of Linear thermal expansion | ISO 11359-2 | MD: -30~120°C | 1E-5/°C | 2.0 |
| | | MD: -30~35°C | | 2.0 |
| | | MD: 35~120°C | | 2.0 |
| | | TD: -30~120°C | | 10.4 |
| | | TD: -30~35°C | | 8.3 |
| | | TD: 35~120°C | | 11.9 |
| Flammability | UL94 | – | – | – |
| Electrical properties | | | | |
| Volume resistivity | IEC 60093 | – | Ω·m | >1E12 |
| Surface resistivity | IEC 60093 | – | Ω | >1E14 |
| Electric strength | IEC 60243-1 | 1mmt | MV/m | 40 |
| | | 2mmt | | 30 |
| | | 3mmt | | – |
| CTI | UL746A | – | – | – |
| RTI(Elec) | UL746B | – | – | – |
| RTI(Imp) | UL746B | – | – | – |
| RTI(Str) | UL746B | – | – | – |
| Molding Conditions (Standard example) | | | | |
| Pre-drying Temperature | – | – | °C | 120 / 140 |
| Pre-drying Time | – | – | h | 5-8 / 4-6 |
| Cylinder temperature | – | – | °C | 240-265 |
| Mold temperature | – | – | °C | 50-90 |
| Injection speed | – | – | – | Middle-High |
| Injection pressure | – | – | MPa | 20-150 |
| Screw speed | – | – | rpm | 80-150 |

The values described are typical values only.