

| Properties | Test Method | Terms | Units | GF Reinforced Alloy |
|--|--------------|---------------|--|------------------------------|
| | | | | 5820G30 |
| | | | | H |
| | | | | Low Warpage High Strength |
| GF30 | | | | |
| Physical properties | | | | |
| Density | ISO 1183 | – | g/cm ³ | 1.50 |
| Dimensional properties | | | | |
| Moulding shrinkage (2mmt) | – | MD TD | % | 0.4 1.0 |
| 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 | 145 |
| Strain at break | – | – | % | 2 |
| Flexural strength | – | – | MPa | 210 |
| Flexural modulus | ISO 178 | – | MPa | 9,500 |
| Charpy impact | ISO 179-1, 2 | – | kJ/m ² kJ/m ² | 50 |
| | | notched | | 7 |
| Thermal properties | | | | |
| Melting temperature | ISO 11357-3 | – | °C | 224 |
| Temperature of deflection under load | ISO 75-1, 2 | 1.80MPa | °C | >200 |
| | | 0.45MPa | | >200 |
| Coefficient of Linear thermal expansion | ISO 11359-2 | MD: -30~120°C | 1E-5/°C | 1.9 |
| | | MD: -30~35°C | | 2.4 |
| | | MD: 35~120°C | | 1.6 |
| | | TD: -30~120°C | | 10.9 |
| | | TD: -30~35°C | | 7.5 |
| | | TD: 35~120°C | | 13.6 |
| 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 | 33 |
| | | 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.