



FibreX™ Glass Fiber Reinforced Nylon 12 [PA12+GF30]

| Physical Properties | Standard | Unit | Typical Value |
|---------------------|----------|------|---------------|
| Density | ISO 1183 | g/cc | 1.23 |

| Mechanical Properties | Standard | Unit | Typical Value |
|---------------------------|----------|------|---------------|
| Tensile Strength, Break | ISO 527 | MPa | 82 |
| Tensile Modulus | ISO 527 | MPa | 7800 |
| Tensile Elongation, Break | ISO 527 | % | 4.5 |
| Flexural Strength | ISO 178 | MPa | 94 |
| Flexural Modulus | ISO 178 | MPa | 7550 |

| Thermal Properties | Standard | Unit | Typical Value |
|--|----------|------|---------------|
| Glass Transition Temperature (Tg) | DSC | °C | 158 |
| Deflection Temperature at 0.45 MPa (66psi) | ISO 75 | °C | 150 |

| Electrical Property | Standard | Unit | Typical Value |
|---------------------|-----------|--------|-------------------|
| Surface Resistance | ASTM D257 | Ohm/sq | >10 ¹³ |

| Printed Specimen Conditions |
|-------------------------------|
| Printer: Open Source FDM/FFF |
| Nozzle: 0.4mm |
| Layer Height: 0.25mm |
| Infill: 100%, +/- 45° |
| Extrusion Temp: 285°C |
| Bed Temp: 110°C |
| Specimen Orientation: XY Flat |