

FGF DURABIO™

DURABIO, a partially bio-based polymer combines the advantageous properties of polycarbonate and acrylic. It has outstanding UV resistance, scratch resistance and exceptional clarity. When printing via FGF, people think it is glass.

Material Features:

- Scratch resistant
- Excellent impact resistance
- Good layer adhesion
- Can be 2nd Op Machined
- BPA Free



Colors:

CL1

Material Properties

*Testing based off injection molded sample.

Description	Test Method	Typical value
Specific Gravity [g/cc]	ISO 1183	1.31
MFR 230°C/2.16 kg - g/10min	ISO 1133	13
Tensile Modulus [Mpa]	ISO 527	2300
Tensile Stress at break [Mpa]	ISO 527	110
Elongation at break	ISO 527	130%
Flexural Modulus [MPa]	ISO 178	2100
Impact Strength - Charpy Method 23°C [kJ/m ²]	ISO 180	9
Melting Temp. °C	ISO 527	210
Heat Deflection Temperature °C	ISO 75 @ 1.8 Mpa	81
Heat Deflection Temperature °C	ISO 75 @ 0.45 Mpa	91
Luminous Transmittance	ISO 13648 @ 3mm	92%



8851



8C316

biobased 

DIC-00028



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FGF DURABIO™ Cont...

Format: Pellet | General Print Parameters

Actual Melt [°C]	210 - 220
Nozzle [°C]	235 - 260
Bottom Zone	235 - 250
Middle / Center Zone [°C]	225 - 245
Top/Rear Zone [°C]	225 - 245
Bed Temp [°C]	60 - 110
Bed Adhesion	Smooth Surface, build plate adhesives can assist.
Drying Temps °C	80°C, 4-6 hours or water content < 500ppm

*Due to each FGF extruder being unique, these are guidelines only. Print samples came from a 3 mm nozzle, 1 mm layer height, and 4 mm layer width. *Fan speeds, barrel size, nozzle diameters, extrusion rates, and other variables will influence the end product. Higher fan speeds may affect clarity.

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