insight Polymers & Compounding PRODUCT DATA SHEET

Insight™ CBFC02

PC/PBT W/Carbon Fiber

Insight™ CBFC02 is a PC/PBT alloy with Carbon Fiber reinforcement developed for 3D printing via Fused Granulate Fabrication (FGF) and filament production. Insight™ CBFC02 exhibits an excellent balance of strength and stiffness as well as chemical resistance typical of PC/PBT alloys. Benefits include a good balance of strength, stiffness and impact strength as well as process enhancements such as low warp (lay-flat), layer to layer adhesion and printability.

Insight™ CBFC02 PC/PBT Carbon Fiber Reinforced

General	SI Metric	English	Test Method
Specific Gravity	1.30 g/cc	-	ASTM D 792
Filler Content	10%	10%	
Melt Point	201 °C	394 °F	ASTM D3418
Mechanical			
Tensile Modulus	4500 Mpa	6.5 x 10^5 psi	ASTM D 638
Tensile Strength	70 Mpa	10100 psi	ASTM D 638
Elongation at Break	4%	4%	ASTM D 638
Flexural Modulus	3200 Mpa	4.6 x 10^5 psi	ASTM D 790
Flexural Strength	83 Mpa	12000	ASTM D 790
Izod Impact (Notched)	70 J/m	1.3 ft-lb/in	ASTM D 256
Izod Impact (Unnotched)	1800 J/m	33.6 ft-lb/in	ASTM D 256
Thermal Properties			
@ 0.45 Mpa (66 PSI)	120 °C	248 °F	ASTM D 648
@1.8 Mpa (264 PSI)	86 °C	187 °F	ASTM D 648

Notes

These data are typical and not to be construed as a specification.
Unless otherwise stated, all data was generated from typical values of injection molded samples.
PC/PBT Alloys is Hygroscopic and requires drying before processing. Recommended drying time is 4 hrs. @ 110 Deg °C (230 °F).

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