

**Polycarbonate (PC)  
FDM Material Properties**

A true industrial thermoplastic, polycarbonate (PC) is widely used throughout industry. When combined with the Fused Deposition Modeling (FDM) systems by Stratasys, polycarbonate is ideal for the rapid production of prototypes, tooling and tool-less manufacturing of production parts.

**MECHANICAL PROPERTIES<sup>1</sup>**

	<b>Test Method</b>	<b>Imperial</b>	<b>Metric</b>
Tensile Strength, Type 1, 0.125	ASTM D638	7,600 psi	52 MPa
Tensile Modulus, Type 1, 0.125	ASTM D638	290,000 psi	2,000 MPa
Tensile Elongation, Type 1, 0.125	ASTM D638	3 %	3 %
Flexural Strength	ASTM D790	14,000 psi	97 MPa
Flexural Modulus	ASTM D790	310,000 psi	2,137 MPa
IZOD impact, un-notched	ASTM D256	5 ft-lb/in	
IZOD Impact, notched	ASTM D256	1 ft-lb/in	

**THERMAL PROPERTIES**

Heat Deflection Temperature (HDT)	ASTM D648	260 °F	127 °C
Glass Transition (T <sub>g</sub> )	DMA (SSYS)	322 °F	161 °C
Melt Point		Not Applicable <sup>2</sup>	Not Applicable <sup>2</sup>

**OTHER PROPERTIES**

Specific Gravity	1.2
Vertical Burning Test	UL94 V2, 1.1 mm
Coefficient of Thermal Expansion	3.8E-05 in/in/F
Rockwell Hardness	R118
Dielectric S (kV/mm)	15
Dielectric C (60Hz)	3.17

**APPEARANCE**

- White

**SYSTEM AVAILABILITY**

- FDM Titan **TI**
- FDM Vantage **SE**
- FDM Vantage **S**
- FDM Vantage **i** (when configures with PC)

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*The information presented are typical values intended for reference and comparison purposes only. They should not be used for design specifications or quality control purposes. End-use material performance will be impacted by, but not limited to, part design, end-use conditions, test conditions, etc. Actual values will vary with build conditions.*

*Product specifications are subject to change without notice.*

<sup>1</sup> Build orientation is Down, on Side Edge

<sup>2</sup> Due to amorphous nature, material does not exhibit a melting point