

Polycarbonate-ISO



PC-ISO (polycarbonate-ISO), an industrial thermoplastic, in its raw state meets the ISO 10993-1 and USP Class VI classification¹ and comes in a variety of colors. Because of their strength and medical compatibility, PC-ISO blends are commonly used in food and drug packaging and medical device manufacturing. PC-ISO gives you Real Parts™ that can be functionally utilized from conceptual prototyping through design verification through direct digital manufacturing. Refer to the FDM System Material Availability spec sheet for system availability and color options.

Mechanical Properties ²	Test Method	Imperial	Metric
Tensile Strength, Type 1, 0.125	ASTM D638	7,500 psi	52 MPa
Tensile Modulus, Type 1, 0.125	ASTM D638	253,000 psi	1,744 MPa
Tensile Elongation, Type 1, 0.125	ASTM D638	5 %	5 %
Flexural Strength	ASTM D790	11,830 psi	82 MPa
Flexural Modulus	ASTM D790	318,000 psi	2,193 MPa
IZOD Impact, notched	ASTM D256	1 ft-lb/in	53.39 J/a
IZOD Impact, un-notched	ASTM D256	9 ft-lb/in	480.5 J/a

Thermal Properties	Test Method	Imperial	Metric
Heat Deflection Temperature @ 66 psi	ASTM D648	271° F	133° C
Heat Deflection Temperature @ 264 psi	ASTM D648	260° F	127° C
Glass Transition Temperature (Tg)	DMA (SSYS)	322° F	161° C
Vicat Softening	ISO 306	282° F	139° C
Melt Point		Not Applicable ³	Not Applicable ³

Other	Test Method	Value
Specific Gravity	ASTM D792	1.2
Flame Classification	UL 94	HB
Dielectric Constant @ 60Hz	IEC 60250	3.17
Dielectric Constant @ 1Mhz	IEC 60250	2.96

¹ It is the responsibility of the finished device manufacturer to make a determination of the suitability of all the component parts and materials to be used in the finished products. ² Build orientation is on side edge. ³ Due to amorphous nature, material does not exhibit a melting point.

The information presented includes 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 can be impacted (+/-) by, but not limited to, part design, end-use conditions, test conditions, etc. Actual values will vary with build conditions. Tested parts were built on Titan Ti, 0.010 inch slice (0.245mm).

For more information about Stratasys systems and materials, contact your representative at +1 888.480.3548 or visit www.stratasys.com

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