

# PC-ISO

PC-ISO (polycarbonate-ISO), an industrial thermoplastic, which in its raw state, is biocompatible (ISO 10993 USP Class VI) and can be gamma or EtO sterilized. PC-ISO is commonly used in food and drug packaging and medical device manufacturing because of the material's strength and medical compatibility. When combined with a Fortus® 3D Production system, PC-ISO gives you real parts that can be used for conceptual modeling, functional prototyping, and end-use parts.

MECHANICAL PROPERTIES	TEST METHOD	ENGLISH	METRIC
Tensile Strength (Type 1, 0.125", 0.2"/min)	ASTM D638	8,300 psi	57 MPa
Tensile Modulus (Type 1, 0.125", 0.2"/min)	ASTM D638	289,800 psi	2,000 MPa
Tensile Elongation (Type 1, 0.125", 0.2"/min)	ASTM D638	4%	4%
Flexural Strength (Method 1, 0.05"/min)	ASTM D790	13,100 psi	90 MPa
Flexural Modulus (Method 1, 0.05"/min)	ASTM D790	310,400 psi	2,100 MPa
IZOD Impact, notched (Method A, 23°C)	ASTM D256	1.6 ft-lb/in	86 J/m
IZOD Impact, un-notched (Method A, 23°C)	ASTM D256	1 ft-lb/in	53 J/m

THERMAL PROPERTIES	TEST METHOD	ENGLISH	METRIC
Heat Deflection (HDT) @ 66 psi	ASTM D648	271°F	133°C
Heat Deflection (HDT) @ 264 psi	ASTM D648	260°F	127°C
Glass Transition (Tg)	DMA (SSYS)	322°F	161°C
Vicat Softening	ISO 306	282°F	139°C

ELECTRICAL PROPERTIES	TEST METHOD	VALUE RANGE
Volume Resistivity	ASTM D257	1.5x10e14 - 8.0x10e13 ohms
Dielectric Constant	ASTM D150-98	3.0 - 2.8
Dissipation Factor	ASTM D150-98	.0009 - .0005
Dielectric Strength	ASTM D149-09, Method A	370 - 70 V/mm
Dielectric Constant @ 60 Hz	IEC 60250	3.17
Dielectric Constant @ 1 Mhz	IEC 60250	2.96

OTHER TEST	METHOD	VALUE
Specific Gravity	ASTM D792	1.2
Flame Classification	UL 94	HB

SYSTEM AVAILABILITY	LAYER THICKNESS CAPABILITY	SUPPORT STRUCTURE	AVAILABLE COLORS
Fortus 900mc	0.013 inch (0.330 mm)	BASS	White

---

0.010 inch (0.254 mm)

Translucent Natural

---

0.007 inch (0.178 mm)

---

Actual part properties may vary slightly from those listed above based on processing parameters, operating conditions, and material usage. Forecast3D makes no warranties of materials for any particular application, nor does it make a warranty of any type, expressed or implied, including, but not limited to, the warranties of merchantability for a particular purpose.

Forecast3D is a world class Rapid Manufacturing facility located in Carlsbad CA specializing in high-quality rapid prototyping, 3D printing (SLA, SLS, FDM, Objet, and DMLS), short-run manufacturing and CNC machining, and is well known for its unique ProCAST RTV & Hybrid Tooling capabilities.

[www.Forecast3D.com](http://www.Forecast3D.com)

1-800-549-5414