

PC-ISO (polycarbonate-ISO), an industrial thermoplastic, which in its raw state, meets the ISO 10993-1 and USP Class VI requirements.<sup>4</sup> PC-ISO blends are 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 <sup>1</sup>	Test Method	English	Metric
Tensile Strength (Type 1, 0.125", 0.2"/min)	ASTM D638	8,265 psi	57 MPa
Tensile Modulus (Type 1, 0.125", 0.2"/min)	ASTM D638	289,768 psi	998 MPa
Tensile Elongation (Type 1, 0.125", 0.2"/min)	ASTM D638	4.3%	4.3%
Flexural Strength (Method 1, 0.05"/min)	ASTM D790	13,089 psi	90 MPa
Flexural Modulus (Method 1, 0.05"/min)	ASTM D790	310,439 psi	2,140 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 <sup>3</sup>	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
Melt Point	-----	Not Applicable <sup>2</sup>	Not Applicable <sup>2</sup>

Other <sup>3</sup>	Test Method	Value
Specific Gravity	ASTM D792	1.2
Flame Classification	UL 94	HB
Dielectric Constant @ 60 Hz	IEC 60250	3.17
Dielectric Constant @ 1 Mhz	IEC 60250	2.96

► See reverse for color options and system availability.

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 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 Fortus 400mc @ 0.010" (0.254 mm) slice. Product specifications are subject to change without notice.

<sup>1</sup>Build orientation is on side long edge. <sup>2</sup>Due to amorphous nature, material does not display a melting point. <sup>3</sup>Literature value unless otherwise noted.

<sup>4</sup>It is the responsibility of the finished device manufacturer to determine the suitability of all the component parts and materials used in their finished products.



System Availability	Layer Thickness Capability	Support Structure	Available Colors
Fortus 400mc Fortus 900mc <sup>1</sup>	0.013 inch (0.330 mm) 0.010 inch (0.254 mm) 0.007 inch (0.178 mm)	BASS	<input type="checkbox"/> White <input type="checkbox"/> Translucent Natural

<sup>1</sup>PC-ISO will be available for Fortus 900mc Q3 2009

## At the core: Advanced FDM<sup>®</sup> technology

Fortus systems are based on patented Stratasys FDM — Fused Deposition Modeling — technology. FDM is the industry's leading additive fabrication technology, and the only one that uses production grade thermoplastics, enabling the most durable parts.

Fortus systems use a wide range of thermoplastics with advanced mechanical properties so your parts can endure high heat, caustic chemicals, sterilization, and high impact applications.

## No special facilities needed

You can install a Fortus 3D Production System just about anywhere. No special venting is required because Fortus systems don't produce noxious fumes, chemicals, or waste.

## No special skills needed

Fortus 3D Production Systems are easy to operate and maintain compared to other additive fabrication systems because there are no messy powders or resins to handle and contain. They're so simple, an operator can be trained to operate a Fortus system in less than 30 minutes.

## Get your benchmark on the future of manufacturing

Fine details. Smooth surface finishes. Accuracy. Strength. The best way to see the advantages of a Fortus 3D Production System is to have your own part built on a Fortus system. Get your free part at: [www.fortus.com/benchmark](http://www.fortus.com/benchmark).

For more information about Fortus systems, materials and applications, call **888.480.3548** or visit [www.fortus.com](http://www.fortus.com)

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