

# Polycarbonate ISO (PC-ISO)

An industrial thermoplastic, this polycarbonate has the unique features of being compliant with the ISO-1099-3 and Class VI classification in its raw state. PC-ISO blends are widely used throughout packaging and medical device manufactures. When combined with the fused Deposition Modeling (FDM) systems by Stratasys, this material is ideal for the rapid production of prototypes and the direct (tool-less) manufacturing of production parts<sup>1</sup>.

Material Properties <sup>2</sup>	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

Mechanical Properties	Test Method	Imperial	Metric
Heat Deflection (HDT), 264 psi 0.25"	ASTM D648	260° F	127° C
Glass Transition (T <sub>g</sub> )	DMA (SSYS)	322° F	161° C
Melting Point		Not Applicable <sup>3</sup>	Not Applicable <sup>3</sup>

Other	Test Method	Value
Specific Gravity	ASTM D792	1.2

#### CLASSIFICATIONS<sup>1</sup>

In its raw state, this material meets the requirements for:

- ISO 10993-1
- USP Class VI

#### APPEARANCE

- White
- Natural Translucent (no color)

#### FDM SYSTEM AVAILABILITY

- FDM Titan TI
- FDM Vantage **SE**
- FDM Vantage **S**

*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. 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.*

<sup>1</sup> 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.

<sup>2</sup> Build orientation is on side edge. <sup>3</sup> Due to amorphous nature, material does not exhibit a melting point.

For more information about Stratasys systems and materials, contact your representative +1 888.480.3548 or visit [www.stratasys.com](http://www.stratasys.com)

