



ABS-M30i is a high strength material well suited for the medical and food packaging industries. Parts manufactured with ABS-M30i material are biocompatible (ISO 10993 certified)¹ and can be gamma or EtO sterilized. When combined with a Stratasys FDM mc™ series system, ABS-M30i gives you biocompatible Real Parts™ with excellent mechanical properties that are well suited for prototyping and direct digital manufacturing.

Mechanical Properties ²	Test Method	Imperial	Metric
Tensile Strength (Type 1, 2"/min)	ASTM D638	5,200 psi	36 MPa
Tensile Modulus	ASTM D638	350,000 psi	2,413 MPa
Tensile Elongation	ASTM D638	4 %	4 %
Flexural Stress (Method 1, 0.05"/min)	ASTM D790	8,800 psi	61 MPa
Flexural Modulus	ASTM D790	336,000 psi	2,317 MPa
Flexural Elongation	ASTM D790	52 %	52 %
IZOD Impact, notched (Method A, 23°C)	ASTM D256	2.6 ft-lb/in	139 J/m
IZOD Impact, un-notched (Method A, 23°C)	ASTM D256	5.3 ft-lb/in	283 J/m

Thermal Properties ³	Test Method	Imperial	Metric
Heat Deflection (HDT) @ 66 psi, 0.125", unannealed	ASTM D648	204°F	96°C
Heat Deflection (HDT) @ 264 psi, 0.125", unannealed	ASTM D648	180°F	82°C
Vicat Softening Temp. (Rate B/50)	ASTM D1525	210°F	99°C
Coefficient of Thermal Expansion (flow, -40F to 100F)	ASTM E831	4.9E-05 in/in/°F	8.82E-05 mm/mm/°C
Coefficient of Thermal Expansion (xflow, -40F to 100F)	ASTM E831	4.7E-05 in/in/°F	8.46E-05 mm/mm/°C
Glass Transition (Tg)	DSC (SSYS)	226°F	108°C
Melt Point	-----	Not Applicable ⁴	Not Applicable ⁴

Other ³	Test Method	Value
Specific Gravity	ASTM D792	1.04
Vertical Burning Test (Flame)	UL94	HB (0.06", 0.85mm)
Rockwell Hardness	ASTM D785	109.5
Dielectric S (kV/mm)	IEC 60112	28.0

► See reverse for 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 FDM 400mc @ 0.10" (0.254 mm) slice. Product specifications are subject to change without notice.

¹ 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. ² Build orientation is on side long edge. ³ Literature value unless otherwise noted. ⁴ Due to amorphous nature, material does not display a melting point.

System Availability	Layer Thickness Capability	Support Structure	Color
FDM 400mc	0.013 inch (0.330 mm) 0.010 inch (0.254 mm) 0.007 inch (0.178 mm) 0.005 inch (0.127 mm)	Soluble Supports	 Natural

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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