



Stratasys is the only company that gives engineers the ability to manufacture real ABSi industrial thermoplastic parts direct from digital files. ABSi parts can be used from conceptual prototyping through design verification through direct digital manufacturing. It's strength is superior to ABS and the translucent nature of ABSi is beneficial for monitoring material flow and light transmission, most commonly used for medical and automotive applications. When combined with Stratasys FDM (Fused Deposition Modeling) systems, ABSi gives you Real Parts™ that are visually unique, dimensionally accurate, durable and hold shape over time. Refer to the FDM System Material Availability spec sheet for system availability and color options.

Mechanical Properties ¹	Test Method	Imperial	Metric
Tensile Strength	ASTM D638	5,400 psi	37 MPa
Tensile Modulus	ASTM D638	277,700 psi	1,915 MPa
Tensile Elongation	ASTM D638	3.1 %	3.1 %
Flexural Strength	ASTM D790	8,830 psi	61 MPa
Flexural Modulus	ASTM D790	264,000 psi	1,820 MPa
IZOD Impact, notched	ASTM D256	1.9 ft-lb/in	101.4 J/a
IZOD Impact, un-notched	ASTM D256	4.1 ft-lb/in	218.9 J/a

Thermal Properties	Test Method	Imperial	Metric
Heat Deflection Temperature @ 66 psi	ASTM D648	188° F	87° C
Heat Deflection Temperature @ 264 psi	ASTM D648	163° F	73° C
Glass Transition Temperature (Tg)	DMA (SSYS)	240° F	116° C
Coefficient of Thermal Expansion	ASTM D696	6.7x10 ⁻⁶ in/in/F	12.1*10 ⁻⁵ mm/mm/C
Melt Point	-----	Not Applicable ²	Not Applicable ²

Other	Test Method	Value
Specific Gravity	ASTM D792	1.08
Rockwell Hardness	ASTM D785	R108
Flame Classification	UL 94	HB

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 Titan Ti, 0.010 inch slice (0.245mm).

¹ Build orientation is on side edge. ² Do to amorphous nature, material does not display a melting point.

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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