

Protofacturing 3D production give engineers the ability to manufacture real industrial thermoplastic parts direct from digital files. ABSi is an ideal material for conceptual modeling, functional prototyping and direct digital manufacturing. Its strength is superior to standard ABS, and the translucent nature of ABSi is beneficial for monitoring material flow and light transmission, most commonly used for medical and automotive applications. ABSi gives you real parts that are visually unique, dimensionally accurate, durable and hold their shape over time.



Mechanical Properties ¹	Test Method	Imperial	Metric
Tensile Strength (Type 1, 2"/min)	ASTM D638	5,400 psi	37 MPa
Tensile Modulus	ASTM D638	277,700 psi	1,915 MPa
Tensile Elongation	ASTM D638	4.4 %	4.4 %
Flexural Stress (Method 1, 0.05"/min)	ASTM D790	8,980 psi	62 MPa
Flexural Modulus	ASTM D790	278,000 psi	1,917 MPa
Flexural Elongation	ASTM D790	< 80 %	< 80 %
IZOD Impact, notched (Method A, 23°C)	ASTM D256	1.8 ft-lb/in	96.4 J/m
IZOD Impact, un-notched (Method A, 23°C)	ASTM D256	3.6 ft-lb/in	191.1 J/m

Thermal Properties ³	Test Method	Imperial	Metric
Heat Deflection (HDT) @ 66 psi, 0.125", unannealed	ASTM D648	188°F	86 °C
Heat Deflection (HDT) @ 264 psi 0.125", unannealed	ASTM D648	163°F	73°C
Glass Transition Temperature (Tg)	DMA (SSYS)	240°F	116°C
Coefficient of Thermal Expansion	ASTM D696	6.7 E -06 in/in/F	12.1 E -05 mm/mm/C
Melt Point	-----	Not Applicable ²	Not Applicable ²

Other ³	Test Method	Value
Specific Gravity	ASTM D792	1.08
Rockwell Hardness	ASTM D785	R108
Flame Classification	UL 94	HB

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

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



System Availability	Layer Thickness Capability	Support Structure	Available Colors
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	 Translucent Natural Translucent Amber Translucent Red

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