

ABS-P400

A true industrial thermoplastic, ABS is widely used throughout industry. When combined with Dimension 3D printers it becomes the ideal solution to printing 3D models in an office environment.

Mechanical Properties ¹	Test Method	English	Metric
Tensile Strength (Type 1, 0.125", 0.2"/min)	ASTM D638	3,200 psi	22 MPa
Tensile Modulus (Type 1, 0.125", 0.2"/min)	ASTM D638	236,000 psi	1,627 MPa
Tensile Elongation (Type 1, 0.125", 0.2"/min)	ASTM D638	6%	6%
Flexural Delamination	ASTM D790	2,000 psi	14 MPa
Flexural Strength (Method 1, 0.05"/min)	ASTM D790	6,000 psi	41 MPa
Flexural Modulus (Method 1, 0.05"/min)	ASTM D790	266,000 psi	1,834 MPa
IZOD Impact, notched (Method A, 23°C)	ASTM D256	2.0 ft-lb/in	106 J/m

Thermal Properties ²	Test Method	English	Metric
Heat Deflection (HDT) @ 66 psi	ASTM D648	195°F	90°C
Heat Deflection (HDT) @ 264 psi	ASTM D648	169°F	76°C
Glass Transition Temperature (T _g)	DMA (SSYS)	219°F	104°C
Melt Point	-----	Not Applicable ³	Not Applicable ³
Coefficient of Thermal Expansion	ASTM E831	5.60 E-05 in/in°F	-----

Other ²	Test Method	Value
Specific Gravity	ASTM D792	1.04
Vertical Burn	UL94	HB
Dielectric Strength	IEC 60112	32.0 kV/mm
UL File Number	-----	E345258

System Availability	Layer Thickness Capability	Support Structure	Available Colors
Dimension SST 768 Dimension BST 768 Dimension SST 1200 Dimension BST 1200	0.013 inch (0.330 mm) 0.010 inch (0.254 mm)	Soluble Supports (SST 768 and SST 1200) Breakaway Supports (BST 768 and BST 1200)	<input type="checkbox"/> White <input checked="" type="checkbox"/> Black <input type="checkbox"/> Steel Grey <input checked="" type="checkbox"/> Red <input checked="" type="checkbox"/> Blue <input checked="" type="checkbox"/> Green <input checked="" type="checkbox"/> Yellow

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, color, etc. Actual values will vary with build conditions. Product specifications are subject to change without notice.

The performance characteristics of these materials may vary according to application, operating conditions, or end use. Each user is responsible for determining that the Stratasys material is safe, lawful, and technically suitable for the intended application, as well as for identifying the proper disposal (or recycling) method consistent with applicable environmental laws and regulations. Stratasys makes no warranties of any kind, express or implied, including, but not limited to, the warranties of merchantability, fitness for a particular use, or warranty against patent infringement.

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

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