

## P430 ABS Material Properties

A true industrial thermoplastic, ABS is widely used throughout industry. When combined with a Dimension Elite system, P430 ABS is ideal for 3D printing of models in the engineering office.

### MECHANICAL PROPERTIES<sup>1</sup>

	Test Method	Imperial	Metric
Tensile Strength, Type 1, 2 in/min (51 mm/min), 0.125	ASTM D638	5,295 psi	36 MPa
Tensile Modulus, Type 1, 2 in/min (51 mm/min), 0.125	ASTM D638	329,499 psi	2,272 MPa
Tensile Elongation, Type 1, 2 in/mm 51 mm/min, 0.125	ASTM D638	4%	4%
Flexural Delamination	Stratasys Standard	5,142 psi	35 MPa
Flexural Strength	ASTM D790	7,604 psi	52 MPa
Flexural Modulus	ASTM D790	319,737 psi	2,204 MPa
IZOD Impact, Notched, 73°F (23° C)	ASTM D 256	1.8 ft-lb/in	96 J/m

### THERMAL PROPERTIES

Heat Deflection Temperature – unannealed <sup>3</sup>	ASTM D648		
HDT, 66 psi (0.5 MPa)		204 °F	96 °C
HDT, 264 psi (1.8 MPa)		180 °F	82 °C
Melt Point		Not Applicable <sup>2</sup>	Not Applicable

### OTHER

Specific Gravity	1.04
Vertical Burning Test <sup>3</sup>	HB, UL94
Coefficient of Thermal Expansion <sup>3</sup>	4.9E-05

### APPEARANCE

Natural

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*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.*

*Product specifications are subject to change without notice.*

<sup>1</sup> Build orientation is on side edge

<sup>2</sup> Due to amorphous nature, material does not display a melting point

<sup>3</sup> Injection molded properties