



P430 ABSplus Material Properties

A true industrial thermoplastic, ABS is widely used throughout industry.

MECHANICAL PROPERTIES¹

Test Method	Imperial	Metric
Tensile Strength, Type 1, 2 in/min (51 mm/min) 0.125	ASTM D638	5,300 psi 37 MPa
Tensile Modulus, Type 1, 2 in/min (51 mm/min) 0.125	ASTM D638	330,000 psi 2,320 MPa
Tensile Elongation, Type 1, 2 in/min (51 mm/min) 0.125	ASTM D638	3% 3%
Flexural Delamination	ASTM D790	4,500 psi 31 MPa
Flexural Strength	ASTM D790	7,600 psi 53 MPa
Flexural Modulus	ASTM D790	320,000 psi 2250 MPa
IZOD Impact, notched, (Method A, 73° (23° C))	ASTM D256	2.0 ft-lb/in 106 J/m

THERMAL PROPERTIES³

Test Method	Imperial	Metric
Heat Deflection (HDT) @ 66 psi (0.5 MPa)	ASTM D648	204 °F 96 °C
Heat Deflection (HDT) @ 264 psi (1.8 MPa)	ASTM D648	180 °F 82 °C
Glass Transition (TG)	DMA (SSYS)	226 ° F 108 °C
Melt Point	(NA) ²	(NA) ²

OTHER³

Test Method	Value
Specific Gravity	ASTM D792 1.04
Vertical Burning Test	UL94 HB
Coefficient of Thermal Expansion	ASTM E831 4.90E-05 in/in/F
Dielectric Strength (kV / mm)	IEC 60112 28.0