



## Material Properties

Property, Units	ASTM Test Method	Polypropylene	Hi-Impact Polystyrene	ABS
Tensile Strength at Break, psi	D638	4500-6000	5200-7500	3,500-8,000
Elongation at Break, percent	D638	100-600	1.2-2.5	1.5-2.5
Tensile Yield Strength, psi	D638	4,500-5,400	3,100-4,400	5,700
Compressive Strength (Rupture or Yield) psi	D695	5,500-8,000	6,000-8,000	6,500-7,500
Flexural Strength (Rupture or Yield), psi	D790	6,000-8,000	10,000-14,600	10,500
Tensile Modulus, 10 <sup>3</sup> , psi	D638	165-225	330-475	375
Compressive Modulus, 10 <sup>3</sup> , psi	D695	150-300	480-490	130-310
Flexural Modulus, 10 <sup>3</sup> , psi	D790 at 73°F D790 at 200°F D790 at 250°F	170-250 50 35	380-490	380
Izod Impact, ft-lb/in of notch (1/8-in specimen)	D256A	0.4-1.2	0.35-0.45	2.00
Hardness: Rockwell	D785	R80-102	M60-75	112
Hardness: Shore/Barcol		D2240/D2583		