

Average Properties of Polycarbonate

Physical	Test Method	Units	Typical Values
Specific Gravity	D-792	---	1.20
Water Absorption	D-570	% max	0.32 equilibrium
Rockwell Hardness	D-785	(R Scale)	118
Pencil Hardness	D-3363	Scratch Hardness	B
Coefficient of Thermal Expansion	D-696	in/in/°F	38×10^{-6}
Optical			
Light Transmission	D-1003	%	88-91
Refractive Index	D-542	N_D	1.586
Mechanical			
Tensile Strength Yield	D-882	psi	8,700
Tensile Strength Break	D-882	psi	10,500
Elongation	D-882	%	150
Tensile Modulus	D-882	psi	350,000
Thermal			
Tensile Heat Distortion	D-1637	°F	302 @ 50 psi
Deflection Temperature	D-648	°F	288 @ 264 psi
Vicat Softening Temperature	D-1525	°F	305-315