

PolyGreen™ PETG Technical Data Sheet

Description and Applications

PolyGreen™ PETG (Polyethylene Terephthalate Glycol) are high gloss, transparent thermoplastic sheets combining exceptional clarity, toughness and ease of fabrication. Offering high impact resistance and excellent thermoformability, PETG can be cold bent, vacuum formed or heat shaped within minimal or no pre-drying under normal storage conditions. These sheets machine and fabricate easily –allowing cutting, drilling, bonding and edge finishing without cracking or stress whitening. Compared to acrylic, PolyGreen™ PETG delivers significantly higher impact strength and improved chemical resistance to many common cleaning agents and industrial solutions. It is ideal for use in protective panels, vending machines, display components, signage, baby bassinets and formed parts where durability, clarity and ease of processing are essential. Available in clear and color variants, as well as UV stabilized grades for prolonged outdoor exposure.

Typical Property Values

Property					Test Method		Units		Value		
Physical											
Density					ASTM D792		g/cm3		1.27		
Rockwell Hardness					ASTM D785		R-Scale		108		
Optical											
Light Transmission					ASTM D1003		%		90		
Haze					ASTM D1003		%		< 1.0		
Mechanical											
Tensile Strength @ Yield 50mm/min (2inch/min)					ASTM D638		MPa (kgf/cm ²)		50 (510)		
Tensile Strength @ Break 50mm/min (2inch/min)					ASTM D638		MPa (kgf/cm ²)		29 (300)		
Elongation @ Yield 50mm/min (2inch/min)					ASTM D638		%		4.5		
Elongation @ Break 50mm/min (2inch/min)					ASTM D638		%		180		
Flexural Strength 1.27mm/min (0.05inch/min)					ASTM D790		MPa (kgf/cm ²)		69 (700)		
Flexural Modulus 1.27mm/min (0.05inch/min)					ASTM D790		MPa (kgf/cm ²)		2100 (21400)		
Izod Impact Strength, Notched @ 23°C (23°F)					ASTM D256		J/m		105		
Thermal											
Mold Shrinkage (Parallel to Flow)					ASTM D955		%		0.2 – 0.5		
Heat Distortion Temperature			@ 0.455 Mpa (66psi)		ASTM D648		°C (°F)		70 (158)		
			@ 1.82 Mpa (66psi)		ASTM D648		°C (°F)		62 (143)		
UL Flammability											
@ 1.0mm thickness					UL94		HB				
@ 1.5mm thickness					UL94		HB				
@ 3.0mm thickness					UL94		V-2				

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These are typical properties and are not intended for specifications purposes. If minimum certifiable properties are required, please contact your local sales representative. Reported values are based on 1.0mm thickness film unless otherwise noted.

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