

PRODUCT DATA SHEET

Product Code: PC175GC927, PC175GC1220610, PC250GC927, PC250GC1220610, PC375GC1220610

Issued July 2017

Technical Data Sheet Gloss Clear Polycarbonate

The Plastic Films Specialist

Description and Applications

This is an extruded polished / polished polycarbonate film, comprising excellent mechanical and optical properties. It offers excellent transparency, high temperature resistance, good dimensional stability with ease of processing for thermoforming, die cutting, embossing, bonding and bending. These films are commonly used for printing, thermoforming, and surface coating. Typical applications include panel nameplates, membrane touch switches, labels, automotive instrument panels, light guide films, sporting helmets, toy car bodies and security cards. The film offers good printability without pre-treatment, making it also suitable for multi-layer printing applications like overlays and in-mold decorations. Specific product applications requiring additional UV stability are also available.

Typical Property Values

Property	Test Method	Units	Value
Physical			
Density	ASTM D792	g/cm ³	1.2
Water Absorption , 24hrs	ASTM D570	%	0.35
Optical			
Light Transmission	ASTM D1003	%	89-91
Haze	ASTM D1003	0⁄0	< 1
Mechanical			
Tensile Strength	ASTM D882	MPa	≥ 60
Tensile Elongation at Break	ASTM D882	%	100 - 150
Young Modulus	ASTM D882	MPa	\geq 2100
Impact Strength (0.76mm)	ASTM D256	ft-lb	23





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Thermal			
Heat Deflection Temperature at 1.82M	pa ASTM D648	°C	135
Coefficient of Thermal Expansion	ASTM D696	10-5/°C	7
Coefficient of Thermal Exchange	ASTM D117	W/m.°C	0.19
Vicat Softening Temperature, B	ASTM 1525-00 Mod	°C	150
Electrical		× 7/ ·1	1500
Dielectric Strength	ASTM D149	V/mil	1700
Surface Resistivity	ASTM D257	Ω /square	>1015
Volume Resistivity	ASTM D257	Ω.cm	≥1016
UL Flammability			
Film thickness ≤ 0.25 mm U	L94		

$1 \text{ min unreacted} \leq 0.23 \text{ min}$	UL94
Film thickness = 1mm	UL94

Manufacturing Gauge Specifications

	Min/Max	
	Tolerances of	
Nominal Gauge Ranges	Nominal	
0.125mm - 0.175mm	+/- 10%	
0.25mm - 0.375mm	+/- 7%	
0.5mm - 1.0mm	+/- 5%	



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These are typical properties and are not intended for specification purposes. If minimum certifiable properties are required, please contact your local PlastCo sales representative. Reported values are based on 0.250 mm thickness film unless otherwise noted.

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