

Tenopex® GS110Q Polycarbonate Technical Data Sheet

Description and Applications

Tenopex® GS110Q is a clear transparent polished / polished polycarbonate film meeting additional requirements for optical clarity and gauge control. It offers excellent transparency at very low haze level. Typical applications include automotive instrument cluster panels, light guide films, touch screens & display panels for electronics and AV/OA equipment, goggles and face shields. The films offers good printability without pre-treatment, making it suitable for multi-layer printing applications like overlays and in-mold decorations. It is also excellent base substrates for secondary coating like hardcoat and anti-fog

Typical Property Values

Property	Test Method	Units	Value
Physical			
Density	ASTM D792	g/cm3	1.2
Water Absorption, 24 hrs	ASTM D570	%	0.35
Optical			
Light Transmission	ASTM D1003	%	89 - 92
Haze	ASTM D1003	%	< 0.8
Mechanical			
Tensile Strength	ASTM D882	MPa	≥ 60
Tensile Elongation at Break	ASTM D882	%	90 - 120
Young Modulus	ASTM D882	MPa	≥ 2100
Impact Strength (0.76mm)	ISO 6603-1	J	31
Electrical			
Dielectric Strength	ASTM D149	V	17000
Surface Resistivity	ASTM D257	Ω/square	10 ¹⁵
Volume Resistivity	ASTM D257	Ω.cm	10 ¹⁶
Thermal			
Heat Deflection Temperature at 1.82Mpa	ASTM D648	°C	135
Coefficient of Thermal Expansion	ASTM D696	10 ⁻⁵ /°C	7
Coefficient of Thermal Exchange	ASTM C177	W/m.°C	0.19
UL Flammability			
Film thickness ≤ 0.25mm	UL94	VTM-2	
Film thickness ≥ 0.375mm	UL94	V-2	
Nominal Gauge Range		Min/Max Tolerances of Nominal	
0.125mm – 0.175mm (.005” - .007”)	+/-10%		
0.25mm – 0.375mm (.010” - .015”)	+/-7%		
0.5mm – 0.76mm (.020” - .030”)	+/-5%		

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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 0.250mm thickness film unless otherwise noted.

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