

# Tenopex® COEx GS11UV/PMMA Technical Data Sheet

## Description and Applications

Tenopex® GS11UV/PMMA is a co-extruded polycarbonate sheet featuring a thin PMMA surface layer. This dual layer configuration combines the high surface hardness and optical clarity of PMMA with the toughness of thermoformability of the PC substrate. The PMMA capped layer enhances scratch resistance and visual transparency while allowing easy forming and fabrication of with the PC main substrate. It also offers UV resistance making it suitable for various display surfaces with direct and prolonged exposure to sunlight. This sheet is ideal for IMD/FIM processes and other high temperature forming, hot pressing or thermoforming applications used in automotive interior trims, display and touch panel as well as premium membrane switch overlays.

## Typical Property Values

Property	Test Method	Units	Value
<b>Physical</b>			
Density	ASTM D792	g/cm <sup>3</sup>	1.2
Pencil Hardness	ASTM D3363		1H-2H
<b>Optical</b>			
Light Transmission	ASTM D1003	%	> 92
Haze	ASTM D1003	%	< 0.5
<b>Mechanical</b>			
Tensile Strength	ASTM D882	psi	8,800
Tensile Elongation at Break	ASTM D882	%	> 90
Impact Strength @ 10mils	JIS-K6745	In-lbs	120
<b>Thermal</b>			
Vicat Softening Point 120°C/hr, 10N Load	ISO 306	°C	151
<b>Electrical</b>			
Dielectric Strength @ 10mils	ASTM D149	V/mil	1700
Surface Resistivity @ 25°C, 50% RH	ASTM D257	Ω/square	10 <sup>15</sup>
Volume Resistivity @ 25°C, 50% RH	ASTM D257	Ω.cm	10 <sup>16</sup>
<b>UL Flammability</b>			
Film thickness ≤ 0.25mm	UL94		VTM-2
Film thickness ≥ 0.375mm	UL94		V-2
<b>Visual Inspection</b>			
Pinhole / Inclusions / Black Specks / Foreign Particles etc	Area Inspected	Defects Size Ø	Numbers Allowable
	930mm x 1830mm	0.5mm ≤ Ø ≤ 2.0mm	0
	450mm x 500mm	0.2mm ≤ Ø ≤ 0.5mm	1
	450mm x 500mm	0.1mm ≤ Ø ≤ 0.2mm	8

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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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