SkyGate Polymer Sdn Bhd

Reg No: 202401023225 (1569074-W)

POLYCARBONATE (PC) TECHNICAL DATA SHEET

ITEM		TEST METHOD ASTM	UNIT	PC
OPTICAL	Refractive Index	ASTM D542	-	1.586
	Total Transmission	ASTM D1003	%	90
	Haze	ASTM D1003	%	<0.8
THERMAL	Coefficient of Linear Expansion	ASTM E831	cm/cm/°C	0.000070
	Vicat Softening Temperature (VST)	ASTM D1525[12]	°C	144
	Deflection Temperature Under Load 1.82 Mpa (unannealed)	ASTM D648	°C	127
	Melt Flow Rate (MFR) 300°C, 1.2kg	ASTM D1238	g/10min.	7
MECHANICAL	Tensile Strength at break	ASTM D638	Mpa	63
	Tensile Strain at break	ASTM D638	%	>70
	Flexural Strength	ASTM D790	Mpa	90
	Flexural Modulus	ASTM D790	Mpa	2300
	Charpy Impact Strength (notched) 23 °C	ASTM D256	J/m	900
	Rockwell Hardness Scale R	ASTM D785	-	120
ELECTRICAL	Volume Resistivity	ASTM D257	Ω cm	$>10^{15}$
	Dielectric Strength (1.6mm)	ASTM D149	kV/mm	27
	Dielectric Constant (1MHz)	ASTM D150	-	3.0
	Dissipation Factor (1MHZ)	ASTM D150	-	0.010
OTHER	Specific Gravity	ASTM D792	g/cm^3	1.20
	Mold Shrinkage	-	%	0.5 - 0.7
	Water Absorption	ASTM D570	%	0.35
	Flammability (1.6mm)	UL 94	-	V-2

**The above date are typical laboratory values and are intended to serve as guides only.*

Benefits
Optical Clear
Light Transmittance 90%
UV stabilized
Easily machined & formed
Mold release
Easy maintenance

Applications
Automotive
Lighting Fixtures
Safety & Machine Guards
Signs & Displays
Architecture
Industrial Roofing

30 Years of Extrusion Excellence

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