



# POLYCARBONATE

PolyCarbonate, Unfilled, Machine Grade, Extruded



\*\* PC 1000® is the registered trademark of

**MITSUBISHI CHEMICAL  
ADVANCED MATERIALS**

### PRODUCT CAPABILITIES:

- Rod : 6mm - 50mm
- Sheet : 6mm - 50mm

### ADVANTAGES:

- Excellent Impact Resistance, Toughness And Elongation Properties Elasticity. The Material Has A 290°F (145°C)
- Transparent
- Good Dielectric Properties
- Economical Thermal Performance

### PRODUCT COLORS:

- Natural (Clear, Translucent)
- Black

### APPLICATIONS INCLUDE:

- Insulators
- Sight Glasses
- Manifolds

GENERAL PROPERTIES	ASTM or UL Test	POLYCARBONATE Typical Values
<b>PHYSICAL</b>		
Specific Gravity (g/cm <sup>3</sup> )	D792	1.20
Water Absorption, 24 hrs (%)	D570	0.20
<b>MECHANICAL</b>		
Tensile Strength (psi)	D638	10,500
Tensile Modulus (psi)	D638	320,000
Tensile Elongation at Break (%)	D638	100
Flexural Strength (psi)	D790	13,000
Flexural Modulus (psi)	D790	350,000
Compressive Strength (psi)	D695	11,500
Hardness, Rockwell	D785	M75
IZOD Notched Impact (ft-lb/in)	D256	1.5
<b>THERMAL</b>		
Coeff. of Thermal Expansion (x 10 <sup>-5</sup> in./in./°F)	E831	3.9
Heat Deflection Temp (°F / °C) @ 264 psi	D648	290 / 143
Glass Transition Temp (°F / °C)	D3418	293 / 145
Max Operating Temp (°F / °C)	-	250 / 121
Thermal Conductivity (BTU-in/ft <sup>2</sup> -hr-°F)	F433	1.29
Flammability Rating	UL94	HB
<b>ELECTRICAL</b>		
Dielectric Strength (V/mil) short time	D149	400
Dielectric Constant at 106 Hz	D150	3.17
Dissipation Factor at 106 Hz	D150	0.0009
Surface Resistivity (ohm/sq) at 50% RH	ANSI / ESD STM 11.11	>10 <sup>13</sup>

NOTE: The information contained here in is typical values intended for reference only. They should NOT be used as a basis for design specifications or quality control.

**Pactumax International Pte Ltd**

39, Kaki Bukit View, Singapore 415968

Tel: 65 6482 5006 | Fax: 65 6482 5703 | Email: sales@pactumax.com | Website: www.pactumax.com