



## TECHNICAL DATA SHEET POLYCARBONATE (WEARGUARD®)

	Unit	Test method	PC
<b>Physical Properties</b>			
Specific gravity	-	ASTM D 792	1.2
Water absorption (24 hours @ 73°F (23°C))	%	ASTM D 570	0.15
Refractive Index	-	ASTM D 542A	1.59
Light transmission (0.125"/3.2mm thickness) - clear	%	ASTM D 1003	> 86
Light transmission (0.125"/3.2mm thickness) - haze	%	ASTM D 1003	< 1
Yellow index (3 years on U.V. protected coated sheet)	-	ASTM D 1925	> 2.0
Rockwell Hardness	-	ASTM D 785	R 115
<b>Mechanical Properties</b>			
Tensile Strength (Ultimate)	psi (Kgf/cm <sup>2</sup> )	ASTM D 638	9,500 (670)
Elongation (Ultimate)	%	ASTM D 638	100
Flexural strength	psi (Kgf/cm <sup>2</sup> )	ASTM D 790	14,000 (985)
Flexural Modulus	psi (Kgf/cm <sup>2</sup> )	ASTM D 790	332,000 (23,350)
Izod impact strength (0.12"/3.2mm thickness, notched)	ft-lbs/in (Kgfcm/cm)	ASTM D 256A	16 (90)
<b>Thermal Properties</b>			
Heat deflection temperature - 264psi (18.5kg/cm <sup>2</sup> )	°F(°C)	ASTM D 648	270 (132)
Heat deflection temperature - 66psi (4.6kg/cm <sup>2</sup> )	°F(°C)	ASTM D 649	280 (138)
Coefficient of thermal expansion	in/in/°F(cm/cm/°C)	ASTM D 696	3.75 x 10 <sup>-5</sup> (6 x 10 <sup>-5</sup> )
Brittle temperature	°F(°C)	ASTM D 746	-211 (-100)
<b>Flammability</b>			
Ignition temperature - flash	°F(°C)	ASTM D 1925	873 (467)
Ignition temperature - self	°F(°C)	ASTM D 1926	1,076 (580)
<b>Electrical Properties</b>			
Volume resistivity	Ohm-cm	ASTM D 257	1.OE17
Dielectric constant (60Hz)	-	ASTM D 150	3.17

### Application

- Machine guards.
- Security glazing.
- Meter covers.
- Forklift side screens.
- Light covers.
- Sight glass applications.

### Standard options

SHEET: Colourless (Clear) and Opal - 2440mm x 1220mm in 1mm to 12.5mm thick

ROD: Colourless (Clear) - up to Ø100mm diameter.

TUBE: Colourless (Clear) - Ø6mm OD x Ø3mm ID to Ø127mm OD x Ø124mm ID