

TECHNICAL DATA SHEET

POLYCARBONATE

Physical Properties	Test Method	Unit	Typical Value
Specific gravity	ASTM D 792	-	1.2
Water absorption (24 hrs	ASTM D 570	%	0.15
73f/23°c)			1.
Refractive index	ASTM D 542A	-	1.59
Light transmission (0.1			
	ASTM D 1003	%	>86
25"/3.2mm thickness clear)			
(0.125"/3.2mm thickness haze)	ASTM D 1003	%	<1
Yellow index (3 yrs u.v.			
	ASTM D 1925	-	>2.0
Coated sheet)			
Rockwell hardness	ASTM D 785	-	R 115
Mechanical properties			
Tensile strength (ultimate)	ASTM D 638	psi(Kgf/cm2)	9,500(670)
Elongation (ultimate)	ASTM D 638	%	100
Flexural strength	ASTM D 790	psi(Kgf/cm2)	14,000(985)
Flexural modulus	ASTM D 790	psi(Kgf/cm2)	332,000(23,350)
Izod impact strength		ft-	
	ASTM D256A		16(90)
(0.12"/3.2mm thickness, notched)		lbs/in(Kgfcm/cm)	
Thermal properties			
Heat deflection			
TEMPERATURE - 264psi	ASTM D 648	°F(°C)	270(132)
(18.5kg.cm2)	\		
- 66psi (4.6kg/cm2)			280(138)
Coefficient of thermal			3.75X10-
Expansion	ASTM D 696	in/in/°F(cm/cm/°C)	5(6X10-5)
Brittle temperature	ASTM D 746	°F(°C)	-211(-100)
Flammability			
Ignition temperature - flash	ASTM D 1925	°F(°C)	873(467)
- Self			1,076(580)
Electrical properties			
Volume resistivity	ASTM D 257	Ohm-cm	1.OE17
Dielectric constant(60hz)	ASTM D 150		3.17

Application:

Polycarbonate is extremely strong and often used as machine guards, protective covers and security glazing. Can be cold bent for ease of fabrication.

We have been involved in making protective parts for many years and will quote to fabricate machine guards. These guards are supplied ready to install on the machine.



Machine guards, security glazing, meter covers, fork lift side screens, light covers, sight glass tubes, electrical guards covers, anti-vandal glazing, terminal blocks.

Options:

SHEET: Clear

Size: 2440 mm x 1220 mm Thickness: 1.0 mm to 12.5 mm

ROD: Clear

Diameters: Up to 100 mm diameter.

TUBE: Clear

Diameters: 6 mm x 3 mm to 127 mm x 124 mm



Disclaimer:

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