



The Plastics Sheets Specialist

Polycarbonate (PC) Sheet

PC Sheet

Optima+ polycarbonate (PC) solid sheets are manufactured by the extrusion technology. Their superior characteristics provide an opportunity for design freedom and make them an ideal choice for a variety of applications. As well as being lightweight and easy to handle, they offer excellent light transmittance up to 90-92% (subject to thickness). Optima+ PC solid sheets provide excellent heat and sound insulation, and are weather resistance as well as providing protection from UV radiations. The PC sheets will not turn yellow after sun exposure and suitable for outdoor usage. Optima+ PC sheets have high resistance to impact or fracture and are virtually unbreakable. They are easy to fabricate and provide excellent thermoforming capabilities. They are available in a variety of colours and thicknesses.

Typical Property Values

Property	Test Method	Test Condition	Unit	Result
Melt Flow Index	ASTM D1238	300°C, 1.2kg	g/10 min	6
Haze	ASTM D1003	3.2mm	%	0.4
Transmittance		3.2mm	%	89
Mass Density	ASTM D792	23°C	-	1.2
Hardness	ASTM D785	-	L	100.4
Tensile Strength	ASTM D638	6mm/min (yield)	Kg/cm	690
			lb/in	9813
Tensile Elongation		6mm/min	%	112
Flexural Strength	ASTM D790	1.3mm/min	Kg/cm ² , MPa	982, 96.3
			lb/in ²	14000
Flexural Modulus		1.3mm/min	10 ⁴ Kg/cm ²	2.5
			10 ⁵ lb/in ²	3.56
IZOD	ASTM D256 (Notched)	3.2mm, 23°C	kg-cm/cm	83
Izod Impact Strength			ft-lb/in	15.2
Vicat Softening Temp	ASTM D1525	1kg, 120°C/hr	°C	152
Heat Distortion Temp	ASTM D648 (Annealed)	132°C x 8hours Loading 4.6kg/cm ²	°C	150
UL Flammability	UL 94	-	-	V-2
Formed Shrinkage	ISO 294-4	Parallel Direction	%	0.7
		Vertical Direction	%	0.7
RoHS Test	RoHS 2.0	-	-	Pass
REACH Test	191 SVHC	-	-	Pass
FDA Test	FDA Food Contact	-	-	Pass

OptimaPlus Asia

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