

Data sheet – Polycarbonate sheet (Palsun®)

Property	Test Method	Conditions	Units	Value
Physical				
Relative density	ISO 1183		g/cm ³	1.2
Water absorption	ISO 62	24 hr @ 23°C	%	0.2
Mechanical				
Tensile strength at yield	ASTM D-638	10mm/min	MPa	65
Tensile strength at break	ASTM D-638	10mm/min	MPa	60
Elongation at yield	ASTM D-638	10mm/min	%	6
Elongation at break	ASTM D-638	10mm/min	%	>90
Tensile modulus of elasticity	ASTM D-638	1mm/min	MPa	2,300
Flexural modulus	ASTM D-790	1.3mm/min	MPa	2,600
Flexural strength at yield	ASTM D-790	1.3mm/min	MPa	65
Izod impact strength	ASTM D-256	notched	J/m	800
Charpy impact strength	ASTM D-256	notched	J/m	800
Impact falling weight	ISO 6603	3mm sheet	J	158
Rockwell hardness	ASTM D-785		R scale	125
Thermal				
Service temperature			°C	-50 to + 100
Heat distortion temperature	ASTM D-648	Load: 1.82MP	°C	130
Vicat softening temperature	ASTM D-1525	Load: 1kg	°C	150
Coefficient of thermal expansion	ASTM D-696		mm/m°C	0.065
Thermal conductivity	C-177		W/m°K	0.21
Specific heat capacity	C-351		kJ/kg°K	1.26
Optical				
Light transmission	ASTM D-1003		%	89
Refractive index	ASTM D-542			1.586
Yellowness Index	ASTM D-1925			< 1
Haze	ASTM D-1003		%	< 0.5
Electrical				
Dielectric strength	ASTM D-149	500V/s	kV/mm-1	> 30
Surface resistivity	ASTM D-257	Keithley	Ω	5.1x10 ⁵
Flammability				
EN13501				B,s1,d0
BS 476 Part 7				Class 1
UL Classified				V2 (File e221255)
NSP 92501,4				M2
DIN 4102				B1, B2
ASTM D-635				CC1