

# Palclear

## Flat Transparent PVC Sheet



### Overview

Palclear provides an excellent solution to many applications in crowded indoor areas.

Palclear combines excellent mechanical properties and impact strength, water-clear clarity, excellent resistance to chemicals and fire. It withstands many chemical agents and can be easily formed using various fabrication techniques.

Optional characteristics range from high clarity and anti-glare surface to increased impact resistance.

### Main Benefits

- ❖ Excellent resistance to chemicals.
- ❖ High fire rating: for populated areas.
- ❖ High light transmission.
- ❖ Water clear clarity.
- ❖ Optional high-impact and UV resistance.
- ❖ Formable: can be thermoformed, vacuum formed, and bent hot or cold, fabricated.
- ❖ Palclear Matte: Anti-glare finish on one side to eliminate reflection.

### Typical Applications

- ❖ Transparent advertising items.
- ❖ Indoor signage in populated areas.
- ❖ High impact glazing.
- ❖ Machine guards.
- ❖ Chemically resistant safety glazing.
- ❖ Fabrication and forming applications.
- ❖ Anti-glare glazing and frame covers.



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## Flat Transparent PVC Sheet

### Colours

Transparent	Water-clear, Bronze, Bluish
Translucent	White Opal, White Diffuser

### Standard Dimensions

Thickness	Dimensions	Palclear	Palclear UV	Palclear HI
1 - 2	1000 x 2000			X
	1220 x 2440			X
	1300 x 2500			X
	1500 x 3000			X
	2000x 3050			X
3 - 4	1000 x 2000	X	X	
	1220 x 2440	X	X	
	1300 x 2500	X	X	
	1500 x 3000	X	X	
	2000x 3050	X	X	
5 - 6	1000 x 2000	X	X	
	1220 x 2440	X	X	
	1300 x 2500	X	X	
8 - 15	1000 x 2000	X		
	1220 x 2440	X		
	1300 x 2500	X		

### Product Range

Product	Description
Palclear Water Clear	Clear UV stabilised PVC sheet
Palclear Bluish	Traditional bluish tint
Palclear UV	UV Protected on one side
Palclear HI	High impact sheet
Palclear Embossed	Prismatic embossed finish on one side
Palclear Matte	Matte finish on one side
Palclear Diffuser	For indoor light box applications

### Impact Resistance

Palclear HI and Palclear offer a wider choice to designers and fabricators for point of sale and general fabricated items, particularly when compared to the impact properties of acrylic and polystyrene sheets.

### Flammability

Palclear sheets are self extinguishing and comply with the most demanding international fire resistance standards as indicated in the attached table.

Standard	Classification
EN 13501	B, s2, d0
BS 476/7	Class 1
NSP 92501,5	M-1, M-2
UL 94	V-0

### Typical Physical Properties

Property	Method	Conditions	Units	Value
Density	D-792	-	g/cm <sup>3</sup>	1.4
Water absorption	-	24h4 @ 23°C	%	0.03
Heat deflection temperature	D-648	Load: 1.82 MPa	°C	62 – 65
Service temp range	-	-	°C	-10 to +50
Thermal conductivity	C-177	-	W/m K	0.15
Coefficient of linear thermal expansion	D-696	-	Cm/cm°C	6.7 x 10
Tensile strength at yield	D-638	10mm/min	MPa	71
Tensile strength at break	D-638	10mm/min	MPa	35
Elongation at yield	D-638	10mm/min	%	3
Elongation at break	D-638	10mm/min	%	60
Tensile modulus of elasticity	D-638	10mm/min	MPa	3,600
Flexural strength	D-790	1.3mm/min	MPa	103
Flexural modulus	D-790	1.3mm/min	MPa	3,400
Impact behaviour – falling dart	ISO 6603/1	1.3mm/min	J	95
Light transmission	D-1003	3mm sheet	%	85

