



PALCLEAR®

Flat Transparent PVC Sheet



CONSTRUCTION



FABRICATION



SIGN & DISPLAY



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 resistance. 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, 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



Palram Europe Ltd

PALCLEAR®

Colors

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

Standard Dimensions

Thickness (mm)	Dimensions (mm)	PALCLEAR®	PALCLEAR® UV	PALCLEAR® HI
1-2	1000x2000			✓
	1220x2440			✓
	1300x2500			✓
	1500x3000			✓
	2000x3050			✓
3-4	1000x2000	✓	✓	
	1220x2440	✓	✓	
	1300x2500	✓	✓	
	1500x3000	✓	✓	
	2000x3050	✓	✓	
5-6	1000x2000	✓	✓	
	1220x2440	✓	✓	
	1300x2500	✓	✓	
	1500x3000	✓	✓	
	2000x3050	✓	✓	
8-15	1220x2440	✓		
	1300x2500	✓		
	1500x3000	✓		

*Other dimensions are available, subject to minimum quantity.

PALCLEAR® Product Range

Product	Description
PALCLEAR® Water-Clear*	Clear UV stabilized PVC sheet
PALCLEAR® Bluish	Traditional bluish tint
PALCLEAR® UV	UV protected on one side
PALCLEAR® HI	High Impact: Increased impact resistance
PALCLEAR® Embossed	Prismatic embossed finish on one side
PALCLEAR® Matte	Matte finish on one side
PALCLEAR® Diffuser	For indoor light box applications

* Water-Clear is PALCLEAR's standard color. Bluish tint is available upon request.

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

* Depends on thickness, color and type.

Typical Physical Properties

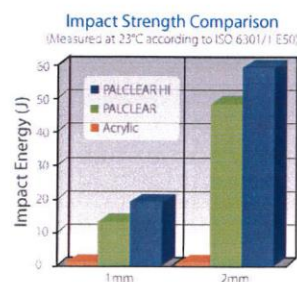
Property	Method*	Conditions	Units	Value
Density	D-792		g/cm ³	1.4
Water absorption		24 hr. at 23°C	%	0.03
Heat deflection temperature	D-648	Load: 1.82MPa	°C	62 - 65
Service temperature range			°C	-10 to +50
Thermal conductivity	C-177		W/m K	0.15
Coefficient of linear thermal expansion	D-596		cm/cm °C	6.7 x 10 ⁻⁵
Tensile strength at yield	D-638	10 mm/min.	MPa	71
Tensile strength at break	D-638	10 mm/min.	MPa	35
Elongation at yield	D-638	10 mm/min.	%	3
Elongation at break	D-638	10 mm/min.	%	60
Tensile modulus of elasticity	D-638	10 mm/min.	MPa	3,600
Flexural strength	D-790	1.3 mm/min.	MPa	103
Flexural modulus	D-790	1.3 mm/min.	MPa	3,400
Impact behavior - Falling dart	ISO 6603/1 E50	1.3 mm/min.	J	95
Light transmission	D-1003	3mm sheet	%	85

*ASTM except where noted otherwise.

**PALCLEAR becomes brittle below 0°C, although it will not be damaged if no impact occurs.

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.



It is essential to Palram to ensure the quality and performance of its products. We guarantee the material's resistance to impact, fire, and weathering. We also guarantee the material's stability for outdoor use. We guarantee the material's resistance to UV radiation. We guarantee the material's resistance to chemical attack. We guarantee the material's resistance to mechanical damage. We guarantee the material's resistance to biological growth. We guarantee the material's resistance to mold and mildew. We guarantee the material's resistance to staining. We guarantee the material's resistance to discoloration. We guarantee the material's resistance to fading. We guarantee the material's resistance to cracking. We guarantee the material's resistance to peeling. We guarantee the material's resistance to delamination. We guarantee the material's resistance to warping. We guarantee the material's resistance to bending. We guarantee the material's resistance to twisting. We guarantee the material's resistance to stretching. We guarantee the material's resistance to shrinking. We guarantee the material's resistance to expansion. We guarantee the material's resistance to contraction. We guarantee the material's resistance to vibration. We guarantee the material's resistance to shock. We guarantee the material's resistance to impact. We guarantee the material's resistance to abrasion. We guarantee the material's resistance to erosion. We guarantee the material's resistance to corrosion. We guarantee the material's resistance to oxidation. We guarantee the material's resistance to reduction. We guarantee the material's resistance to polymerization. We guarantee the material's resistance to depolymerization. We guarantee the material's resistance to crosslinking. We guarantee the material's resistance to uncrosslinking. We guarantee the material's resistance to curing. We guarantee the material's resistance to uncuring. We guarantee the material's resistance to drying. We guarantee the material's resistance to undrying. We guarantee the material's resistance to wetting. We guarantee the material's resistance to unwetting. We guarantee the material's resistance to adhesion. We guarantee the material's resistance to detachment. We guarantee the material's resistance to bonding. We guarantee the material's resistance to unbonding. We guarantee the material's resistance to joining. We guarantee the material's resistance to separating. We guarantee the material's resistance to welding. We guarantee the material's resistance to unwelding. We guarantee the material's resistance to soldering. We guarantee the material's resistance to unsoldering. We guarantee the material's resistance to brazing. We guarantee the material's resistance to unbrazing. We guarantee the material's resistance to welding. We guarantee the material's resistance to unwelding. We guarantee the material's resistance to soldering. We guarantee the material's resistance to unsoldering. We guarantee the material's resistance to brazing. We guarantee the material's resistance to unbrazing.



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