



PALCLEAR™

Flat Solid Transparent PVC Sheet



► Introduction

PALCLEAR provides a versatile solution for applications in populated indoor areas. PALCLEAR has high mechanical properties, impact strength, water-clear clarity, excellent chemical resistance and self-extinguishing fire resistance. Optional characteristics range from high clarity and anti-reflective surface to increased impact resistance. PALCLEAR withstands many chemical agents, and offers many fabrication options due to its convenient mechanical behaviour

► Features and Benefits

- High light transmission
- Water Clear Clarity
- Excellent fire and chemical resistance
- Optional high-impact and UV resistance
- Easily thermoformed and fabricated
- Optional anti-glare finish on one side to eliminate reflection

► Typical Applications

- Fabrication and forming
- Indoor applications in populated areas
- Safety in workplace and chemical environments
- Anti-reflective transparent glazing



► Typical Physical Properties

Property	(Method ^a)	Conditions	Units	Value
Density	(D-1505)		g/cm ³	1.4
Water Absorption	(D-570)	24 hr. @ 23 °C	%	0.03
Heat Deflection Temperature	(D-648)	Load: 1.82 MPa	°C	60
Service Temperature Range ^b			°C	0 to +50
Thermal Conductivity	(C-177)		W/m K	0.15
Coefficient of Linear Thermal Expansion	(D-696)		cm/cm °C	6.7x10 ⁻⁵
Tensile Strength at Yield	(D-638)	10 mm/min	MPa	55
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	%	120
Tensile Modulus of Elasticity	(D-638)	1.3 mm/min	MPa	3,100
Flexural Strength	(D-790)	1.3 mm/min	MPa	103
Flexural Modulus	(D-790)		MPa	3,200
Impact behavior - Falling dart (ISO 6603/1E ₅₀)		3 mm sheet	J	95
Light Transmission	(D-1003)	3 mm sheet	%	87

^a ASTM except where noted otherwise.

^b PALCLEAR becomes brittle below 0°C. If no impact occurs it will not be damaged by low temperatures.

► Flammability

PALCLEAR sheets are self-extinguishing and comply with the most demanding international fire resistance standards as indicated by representative results in the table to the right.

Standard	Classification*
DIN 4102	B-1
BS 476/7	Class 1
NSP 92501, 4	M-1, M2
IEC 695.2.1	Self Extinguish
CSE RF 3/77	Class 1
UL 94	V-0
ASTM D-635	SE

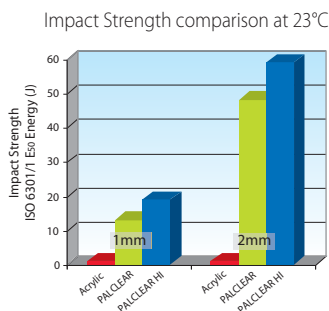
*Depends on product thickness, color and type.

► Weather Resistance

PALCLEAR UV should be preferred for outdoor use and can cope with a wide variety of climatic conditions. The service temperature range of both PALCLEAR and PALCLEAR UV is from 0°C to 50°C. PALCLEAR UV should be preferred for external applications.

► Impact Strength

PALCLEAR and PALCLEAR HI offer a wider choice to designers and fabricators for point of sale and general fabricated items, particularly when compared to the impact properties of acrylics and styrenes.



Inasmuch as Palram Industries has no control over the use to which others may put the material, it does not guarantee that the same results as those described herein will be obtained. Each user of the material should make his own tests to determine the material's suitability for his own particular use. Statements concerning possible or suggested uses of the materials described herein are not to be construed as constituting a license under any Palram Industries patent covering such use or as recommendations for use of such materials in the infringement of any patent. Palram Industries or its distributors cannot be held responsible for any losses incurred through incorrect installation of the material. In accordance with our Company policy of continual product development you are advised to check with your local Palram Industries supplier to ensure that you have obtained the most up to date information.

► PALCLEAR™ Product Range

Product	Description
PALCLEAR™ Water Clear	UV stabilized, with unique Water Clear clarity
PALCLEAR™ Bluish	UV stabilized, with traditional bluish tint
PALCLEAR™ UV*	UV protected on one side
PALCLEAR™ HI	High Impact Resistance
PALCLEAR™ Embossed	Prismatic embossed finish
PALCLEAR™ Matte	Matt finish on one side
PALCLEAR™ UV TF	UV stabilized thermoformable grade

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

** Other dimensions are available, subject to minimum order.

► Standard Dimensions

Thickness mm	Dimensions mm	PALCLEAR™	PALCLEAR™ UV	PALCLEAR™ High Impact
1-2mm	1000 x 2000			✓
	1220 x 2440			✓
	1300 x 2500			✓
	1500 x 3000			✓
3-6mm	1000 x 2000	✓	✓	
	1220 x 2440	✓	✓	
	1300 x 2500	✓	✓	
	1500 x 3000	✓	✓	
8-15mm	1000 x 2000	✓		
	1220 x 2440	✓		

► Colors

- **Transparent:** Water Clear, Bronze, Bluish.
- **Translucent:** White Opal, White Diffuser.

Additional colors are available as special order upon request.

Please contact your Palram representative or agent for additional details.

Photo frame covering With PALCLEAR™ Matte

Standard Clear PVC - Glossy Surface



Light reflected...

PALCLEAR™ Matt - Anti-Glare Surface



Light dispersed!

Uniclass
L6619-L414P** F5217:D14+D15X*
C/S/B
(37.4) Rn6

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REGISTERED COMPANY
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