



Palclear Flat Rigid PVC Sheet

Only Palram’s Palclear water clear brings total clarity to PVC with the highest light transmission available. (The traditional bluish tint is also available). Palclear is available in standard or high impact (HI) grades and as Palclear UV for external applications. Palclear is an excellent clear substrate for printed signs. Palclear is the clear sheet of choice in harsh chemical environments.

Features at a Glance

- High light transmission
- Water clear clarity
- The highest fire resistance rating available
- UV resistant (Palclear UV)
- Excellent chemical resistance
- Formable: Palclear can be thermoformed, vacuum formed, bent hot or cold
- Impact strength: standard and high impact resistant available
- Now available with a matt (one side) antiglare finish avoiding reflection
- ISO 9001:2000 Certified Quality Assurance

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 to 50 °C. Q.U.V. accelerated laboratory weathering reveals that there is almost no change in the optical properties of PALCLEAR UV for tests lasting “2000 hours, which simulates 20 years of exposure outdoors”.

Typical Properties	Method	Units	Values
Density	D 1505	g/cm ³	1.4
Water Absorption (24 hr @ 23°C)	D 570	%	0.03
Heat Deflection Temperature (Load 1.82)	D 648	°C	62 – 65
Service Temperature Range	-	°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	MPa	71
Tensile Strength at Break (10mm/min)	D 638	MPa	35
Elongation at Yield (10mm/min)	D 638	%	3
Elongation at Break (10mm/min)	D 638	%	60
Tensile Modulus of Elasticity (10mm/min)	D 638	MPa	3600
Flexural Strength (1mm/min)	D 790	MPa	103
Flexural Modulus (1mm/min)	D 790	MPa	3400
Impact Behaviour – Falling Dart (1mm/min)	ISO 6603/E1	J	95
Light Transmission (3mm sheet)	D 1003	%	87
Yellowness Index – Water Clear (3mm sheet)	D 192t5	-	<4

Flammability

Classification	Classification
DIN 4102	B-1
BS 476/7	Class 1
NSP 92501, 4	M-1, M-2
IEC 695.2.1	Self Extinguish
CSE RF 3/77	Class 1
UL 94	V-0
ASTM D-635	SE

