

TYPICAL PHYSICAL PROPERTIES

Rigid PVC

Property	Test Method	Conditions	Units	Value	
				PALOPAQUE	PALCLEAR
Physical					
Relative Density	ASTM D-0505		g/cm ³	1.4	1.4
Water Absorption	ASTM D-570	24 hr @ 23°C	%		0.03
Mechanical					
Tensile Strength at Yield	ASTM D-638	10mm/min	MPa	50	71
Tensile Strength at Break	ASTM D-638	10mm/min	MPa	45	35
Elongation at Yield	ASTM D-638	10mm/min	%	3	3
Elongation at Break	ASTM D-638	10mm/min	%	>80	60
Tensile Modulus of Elasticity	ASTM D-638	1mm/min	MPa	2900	3600
Flexural Modulus	ASTM D-790	1.3mm/min	MPa	2700	3400
Flexural Strength at Yield	ASTM D-790	1.3mm/min	MPa		103
Izod Impact Strength	ASTM D-256	notched	J/m		35
Charpy Impact Strength	ISO 6603	notched	J/m		95
Impact Falling Weight	ISO 6603	3mm sheet	J	95	95
Rockwell Hardness	ASTM D-785		R Scale	97R	115
Thermal					
Service Temperature			°C	-10 to 50 C	0 to 50°C
Heat Distortion Temperature	ASTM D-648	Load: 1.82MP	°C		62-65
Vicat Softening Temperature	ASTM D-1525	Load: 1kg	°C		86
Coefficient of Thermal Expansion	ASTM D-696		cm/cm°C	6.7 x 10-5	6.7 x 10-5
Thermal Conductivity	C-177		W/m°C	0.15	0.15
Specific Heat Capacity	C-351		kJ/kg°C		
Optical					
Light Transmission	ASTM D-1003		%		87
Refractive Index	ASTM D-542				
Yellowness Index	ASTM D-1925				<4
Haze	ASTM D-1003		%		
Electrical					
Dielectric Strength	ASTM D-149	500V/s	kV/mm		50
Surface Resistivity	ASTM D-257	Keithley	Ω		3.7x10 ⁴

Other physical properties and values available on request.

Palclear Flammability

Standard	Classification
EN13501	B, s2, d0
BS 476 Part 7	Class 1
UL 94	V0
NSP 92501,5	M1, M2
DIN 4102	B1
CSE RF 3/77	Class 1
IEC 695.2.1	Self Extinguish

Palopaque Flammability

Standard	Classification
EN13501	B, s3, d0
DIN 4102	B1
BS476 Part 7	Class 0
ASTM E-84	Class A

Note: Rigid PVC has a self-extinguishing property. If ignited in air, it will die by itself. Subsequently, rigid PVC complies with the most demanding fire resistance standards as indicated by these representative results.

● = standard | ○ = non-standard; may be available as ex-stock or secured on a made to order basis subject to minimum order quantity.