

Data sheet – Extruded acrylic sheet (Perspex®)

Property	Test Method	Conditions	Units	Value
Physical				
Relative density	ISO 1183		g/cm ³	1.2
Water absorption	ISO 62		%	0.2
Mechanical				
Tensile strength	ISO 527	5mm/min	MPa	70
Elongation at break	ISO 527	5mm/min	%	4
Flexural strength	ISO 178		MPa	107
Flexural modulus	ISO 178	2mm/min	MPa	3030
Izod impact strength	ISO 180/1A	Notched	kJm ⁻²	n/a
	ISO 179	Unnotched	kJm ⁻²	10
	ISO 179	Notched	kJm ⁻²	n/a
Rockwell hardness	ISO 2039-2		M scale	101
Thermal				
Service temperature			°C	-40 to 80
Vicat softening temperature	ISO 136		°C	>105
Coefficient of thermal expansion	ASTM D-696		mm/m°C	0.078
Optical				
Light transmission	ASTM D-1003	3mm sheet	%	>92
Refractive index	ISO 489/A			1.49
Electrical				
Dielectric strength	IEC 243		kV/mm-1	N/A
Surface resistivity	IEC 93		Ω m ⁻²	>10 ¹⁴
Flammability				
BS 476 Part 7				Class 4
UL 94				HB
NFP 92-307				M4 (without drips)