

Data sheet - Cast Acrylic sheet (Perspex®)

Property	Test Method	Conditions	Units	Value
Physical				
Relative density	ISO 1183		g/cm ³	1.19
Water absorption	ISO 62		%	0.2
Mechanical				
Tensile strength	ISO 527	5mm/min	MPa	75
Elongation at break	ISO 527	5mm/min	%	4
Flexural modulus	ISO 178	2mm/min	MPa	3210
Flexural strength at yield	ISO 178	2mm/min	MPa	116
Izod impact strength	ISO 180/1A	Notched	kJm-2	n/a
Charpy impact strength	ISO 179	Unnotched	kJm-2	12
Rockwell hardness	ISO 2039-2		M scale	102
Thermal				
Vicat softening temperature	ISO 306		°C	>110
Coefficient of thermal expansion	ASTM D-696		mm/m°C	0.077
Optical				
Light transmission	ASTM D-1003	3mm sheet	%	>92
Refractive index	ISO 489/A			1.49
Electrical				
Dielectric strength	IEC 243		kV/mm-1	15
Surface resistivity	IEC 93		Ω m-2	>10 ¹⁴
Flammability				
BS 476 Part 7				Class 3
UL 94				HB
NFP 92-307				M4 (without drips)