

Plexiglas® HT121

Acrylic Resin Technical Data Sheet

PROPERTIES	VALUE	UNIT OF MEASURE	TEST METHOD
GENERAL CHARACTERISTICS			
Density	1.19	g/cm ³	ISO 1183
Water Absorption, 24H	0.3	% weight gain	ISO 62
Mold Shrinkage	0.2 - 0.6	%	ISO 294
RHEOLOGICAL PROPERTIES			
Melt Flow Rate	2.7	g/10 min	ISO 1133, 230°C/3.8kg
Melt Volume-flow Rate	2.5	cm ³ /10 min	ISO 1133, 230°C/3.8kg
MECHANICAL PROPERTIES			
Tensile Modulus	3500	MPa	ISO 527-2/1A/1
Tensile Strength @ Yield	67	MPa	ISO 527-2/1A/5
Tensile Strength @ Break	67	MPa	ISO 527-2/1A/5
Tensile Strength @ Yield	3	%	ISO 527-2/1A/5
Tensile Strength @ Break	3	%	ISO 527-2/1A/5
Flex Stress @ Conventional Deflection	95	MPa	ISO 178, Method A
Flexural Modulus	3400	MPa	ISO 178, Method A
Charpy Impact Resistance – Un-notched	20	kJ/m ²	ISO 179-1/1eU/23°C
Charpy Impact Resistance – Un-notched	20	kJ/m ²	ISO 179-1/1eU/-40°C
Charpy Impact Resistance – Notched	2	kJ/m ²	ISO 179-1/1eA/23°C
Charpy Impact Resistance – Notched	2	kJ/m ²	ISO 179-1/1eA/-40°C
Izod Impact Resistance – Notched	2.0	kJ/m ²	ISO 180
Rockwell Hardness	99	M-Scale	ISO 2039-2
THERMAL PROPERTIES			
Vicat Softening Point - 50N	114	°C	ISO 306/B50, 50N
HDT - 1.82 MPa	105	°C	ISO 75-2, Method A, 1.8 MPa
HDT - 0.45 MPa	109	°C	ISO 75-2, Method B, 0.45 MPa
OPTICAL			
Refractive Index	1.49	—	ISO 489, 23°C
Luminous Transmittance	92.5	%	ASTM D1003, 3.2mm
Haze	< 1	%	ASTM D1003, 3.2mm

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