ASTARIGLAS®
CAST ACRYLIC SHEET

Typical Property Values

General Properties	Test Method	Units	ASTARIGLAS®
Relative Density	ISO 1183	g/mc³	1.19
Water Absorption	ISO 62	%	0.3
Ignition Temperature	ASTM 1929	°C	300
Mechanical Properties			
Tensile Strength @23°C	ISO 527	MPa	70
Tensile Strength, Rupture	ISO 527	MPa	70
Elongation at Break @23°C	ISO 527	%	4
Flexural Strength	ISO 178	MPa	114
Modulus of Elasticity	ASTM D638	psi	450,000
Flexural Modulus	ISO 178	MPa	3200
Impact Strength - Charpy-unnotched	ISO 179 / I fu	$kJ.m^{-2}$	12
Izod Impact Strength, notched	ISO 180/ I A	$kJ.m^{-2}$	1.4
Shear Strength	ASTM D732	psi	9,000
Shear Modulus	ASTM D732	psi	168,000
Rockwell Hardness	ISO 2039-2	M scale	95
Thermal Properties			
Vicat Softening Point	ISO 306 A	°C	>110
Hot Forming Temperature		°C	140 - 180
Maximum Continuous Service Temperature		°C	80 - 85
Coefficient of Thermal - Conductivity	ASTM C177	BTU /(hr) (sgft) (°F/in)	1.3
U-value, for thickness:	DIN 4701	W / m²K	
2 mm			5.7
3 mm			5.7
6 mm			5.4
Coefficient of Thermal - Expansion-Linear	ASTM D696	$x\ 10^{-5}.\ K^{-1}$	7
Flammability UL94 HB	UL94		GB
Optical Properties			
Light Transmission	ASTM D1003	% (3 mm)	>92
Refractive Index	ISO 489 A		1.49
Electrical Properties			
Surface Resistivity	DIN 53482	Ω	$>10^{14}$
Dielectric Resistivity	DIN 53481	kV/mm	30

Note:

The standards value quoted are not always strictly equivalent and based on tests on representatives samples. The information given in this publication is based on our general experience and given in good faith. It is intended as a general guide and must not be considered as a binding specification. No warranty is given or is to be implied. In no way does this information incurs the liability of Astari Niagara Internasional, especially in infringement of the rights of a third party