

ASTARIGLAS® ECO CAST

General Properties

	Test Method	Units	ASTARIGLAS® ECO CAST
Relative Density	ISO 1183	g/mc ³	1.19
Water Absorption	ISO 62	%	0.35

Mechanical Properties

	Test Method	Units	ASTARIGLAS® ECO CAST
Tensile Strength @23°C	ISO 527	MPa	69
Tensile Strength, Rupture	ISO 527	MPa	68
Elongation at Break @23°C	ISO 527	%	4.2
Flexural Strength	ISO 178	MPa	116
Modulus of Elasticity	ASTM D638	psi	460,000
Flexural Modulus	ISO 178	MPa	3300
Impact Strength - Charpy-Unnotched	ISO 179 / I fu	kJ.m ⁻²	12.5
Izod Impact Strength, Notched	ISO 180/ I A	kJ.m ⁻²	1.35
Shear Strength	ASTM D732	psi	8,900
Shear Modulus	ASTM D732	psi	167,500
Rockwell Hardness	ISO 2039-2	M scale	100

Thermal Properties

	Test Method	Units	ASTARIGLAS® ECO CAST
Vicat Softening Point	ISO 306 A	°C	>110
Heat Deflection Temperature	ISO 75	°C	95
Hot Forming Temperature	N/A	°C	140 - 180
Maximum Continuous Service Temperature	N/A	°C	80 - 85
Coefficient of Thermal - Conductivity	ASTM C177	BTU /(hr) (sgft) (°F/in)	1.3
Coefficient of Thermal - Expansion-Linear	ASTM D696	x 10 ⁻⁵ . K ⁻¹	7
Flammability UL94 HB	UL94		HB
Flammability (burning rate on 0.236")	ASTM D635	in/min	0.99
Self-Ignition Temperature	ASTM D1929	°F	874
Smoke Density Rating (on 0.236")	ASTM 2843	%	9.9

Optical Properties

	Test Method	Units	ASTARIGLAS® ECO CAST
Light Transmission	ASTM D1003	% (3 mm)	>92
Haze	ASTM D1003	% (3 mm)	0.55
Refractive Index	ISO 489 A		1.49

Electrical Properties

	Test Method	Units	ASTARIGLAS® ECO CAST
Surface Resistivity	IEC 93	Ω	>10 ¹⁴
Volume Resistivity	ASTM D 257	Ohm-cm	1.6 x 10 ¹⁶
Electrical Strength	IEC 243	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.