

Product Data Sheet

Monogal-AR, UV- resistant, hard coated polycarbonate substrate. Monogal-AR is designed to provide excellent UV and scratch resistance, so it can be used in exterior applications.

Typical Properties

Property	Test Method	Units	Values
Physical			
Specific Gravity	ASTM D792	N/A	1.2
Light Transmission, Clear @ 0.118"	ASTM D1003	%	87
Water Absorption, 24 Hours @ 73 °F	ASTM D570	%	0.15
Chemical Resistance	ASTM D1308	N/A	Pass
Taber Abrasion @ 100 cycles, Delta Haze CS-10F Wheels, 500 g Weight	ASTM D1044	%	<5
Mechanical			
Tensile Strength, Ultimate	ASTM D638	psi	9,500
Tensile Strength, Yield	ASTM D638	psi	9,000
Tensile Modulus	ASTM D638	psi	340,000
Elongation	ASTM D638	%	110
Flexural Strength	ASTM D790	psi	13,500
Flexural Modulus	ASTM D790	psi	345,000
Compressive Strength	ASTM D695	psi	12,500
Izod Impact Strength, Notched @ 0.125"	ASTM D256	ft.lbs/in	16
Thermal			
Heat Deflection Temperature @ 264 psi	ASTM D648	°F	270
Coefficient of Thermal Expansion	ASTM D696	in/in/ °F	3.75x10 ⁻⁵
Coefficient of Thermal Conductivity	ASTM C177	BTU.in/hr.ft ² .°F	1.35
Shading Coefficient, Clear @ 0.236"	NFRC 100-2010	N/A	0.97
U factor @ 0.236" (summer/winter)	NFRC 100-2010	BTU/hr.ft ² .°F	0.85/0.92
Flammability			
Horizontal Burn, AEB	ASTM D635	in	<1
UL 94 Rating of base substrate @ 0.060"	UL 94	N/A	V2
UL 94 Rating of base substrate @ 0.236"	UL 94	N/A	V0
UV Stability			
Xenon Arc Simulated Weathering	ANSI Z26.1 Test 11	N/A	Pass

The data listed is based on average reporting information, and therefore should not be considered as the sole supporting information for specification purposes. Testing in individual applications is highly suggested before specifying this, or any products offered by Plazit-Polygal Group.