

OPTIX SG acrylic sheet

OPTIX SG acrylic sheet provides excellent forming characteristics with detailed vacuum definition, high optical clarity and superb weatherability. OPTIX SG is stocked in various thicknesses, sheet sizes and colors. For increased durability, DURAPLEX SG05 medium-impact modified acrylic and DURAPLEX SG10 high-impact modified acrylic are also available. OPTIX SG products are available in sheet and reels.

APPLICATIONS

Interior and Exterior Signs, Point-of-Purchase Displays, Skylights

Typical Properties

Property	Test Method	Units	Values
PHYSICAL			
Specific Gravity	ASTM D792	-	1.15 - 1.19
Light Transmission- total	ASTM D1003	%	90 - 92
Light Transmission- haze	ASTM D1003	%	<3
Water Absorption	ASTM D570	%	0.4
Mold Shrinkage	ASTM D955	Mils/in	2-6
MECHANICAL			
Tensile Strength	ASTM D638		
SG		psi	11,030
SG05		psi	8,000
SG10		psi	5,600
Tensile Modulus of Elasticity	ASTM D638		
SG		psi	490,000
SG05		psi	340,000
SG10		psi	250,000
Flexural Strength	ASTM D790		
SG		psi	17,000
SG05		psi	12,000
SG10		psi	8,300
Izod Impact Strength - Notched	ASTM D256		
SG		ft-lb./in	0.4
SG05		ft-lb./in	0.7
SG10		ft-lb./in	1.1
Rockwell hardness	ASTM D785		
SG		-	95
SG05		-	68
SG10		-	46
THERMAL			
Maximum Recommended Continuous Service Temperature	-	°F	170-190
Softening Temperature	-	°F	210-220
Deflection Temperature @ 264 psi (1.8 MPa)	ASTM D648		
SG		°F	203
SG05		°F	194
SG10		°F	185
Coefficient of Thermal Expansion	ASTM D696	in/(in-°F) x 10 ⁻⁵	3.0 - 5.0
Flammability (Burning Rate)	ASTM D635		
SG		in/minute	1.0
SG05		in/minute	1.25
SG10		in/minute	1.97
Flammability	UL 94	-	HB
Smoke Density Rating	ASTM D2843		
SG		%	3.4
SG05		%	8.5
SG10		%	16.5
Self-Ignition Temperature	ASTM D1929	°F	833

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These suggestions and data are based on information we believe to be reliable. They are offered in good faith, but without guarantee, as conditions and methods of use are beyond our control. We recommend that the prospective user determines the suitability of our materials and suggestions before adopting them on a commercial scale.

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