

DURAPLEX IMPACT MODIFIED ACRYLIC

DURAPLEX® impact modified acrylic sheets (also known as Sign Grade (SG) acrylic) have higher impact strengths than general-purpose acrylic. They have the superior optical properties necessary for high-quality sign and lighting systems, and are easy to fabricate and form, with exceptional UV stability, for many interior and exterior applications.

DURAPLEX® is available as a custom blend for impact strength and is available in a wide range of gauges, sheet sizes, colors and patterns. DURAPLEX® is also available in sheets or roll stock.

APPLICATIONS

Indoor and outdoor displays, skylights, signage, replacement windows

Typical Properties

Property	Test Method	Units	Duraplex 30%	Duraplex 50% (SG05)	Duraplex 70%	Duraplex 100% (SG10)
PHYSICAL						
Specific Gravity	ASTM D792	-	1.18	1.17	1.16	1.15
Light Transmission - Total	ASTM D1003	%	92	92	90	90
Light Transmission - Haze	ASTM D1003	%	2	2	<3	<3
Water Absorption	ASTM D570	%	0.3	0.3	0.3	0.3
Mold Shrinkage	ASTM D955	mils/in	3-6	3-6	3-6	3-6
MECHANICAL						
Tensile Strength	ASTM D638	psi	9,000	8,000	7,100	5,600
Tensile Modulus of Elasticity	ASTM D638	psi	376,000	340,000	304,000	250,000
Flexural Strength	ASTM D790	psi	13,690	12,000	10,610	8,300
Izod Impact Strength - Notch	ASTM D256	ft-lb./in	0.6	0.7	0.9	1.1
Rockwell hardness	ASTM D785	-	M-78	M-68	M-59	M-46
THERMAL						
Deflection Temperature @ 264 psi (1.8 MPa)	ASTM D648	°F	198	194	190	185
Coefficient of Thermal Expansion	ASTM D696	in/in/°F	3.5 x 10 ⁻⁵	4 x 10 ⁻⁵	4.5 x 10 ⁻⁵	5 x 10 ⁻⁵
Flammability (Burning Rate)	ASTM D635	in/min	0.85	1.25	1.53	1.97
Flammability	UL 94	-	HB	HB	HB	HB
Smoke Density Rating	ASTM D2843	%	5.2	8.5	11.5	16.5
Self-Ignition Temperature	ASTM D1929	°F	>850	>850	>850	>850

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PLASTICS

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Curbell Plastics is a proud supplier of Plaskolite materials.

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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