

PLASKOLITE

DURAPLEX Impact Modified Acrylic Sheet

Typical Properties

Physical	TEST METHOD	UNITS	DURAPLEX 30%	DURAPLEX 70%	DURAPLEX OPTIX SG05 (50%)	DURAPLEX OPTIX SG10 (100%)
Specific Gravity/Relative Density	ASTM D792		1.18	1.16	1.17	1.15
Light Transmission -Total	ASTM D1003	%	92	90	92	90
Light Transmission - Haze	ASTM D1003	%	2	>3	2	>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	TEST METHOD	UNITS	DURAPLEX 30%	DURAPLEX 70%	DURAPLEX OPTIX SG05 (50%)	DURAPLEX OPTIX SG10 (100%)
Tensile Strength	ASTM D638	psi	9,000	7,100	8,000	5,600
Tensile Modulus of Elasticity	ASTM D638	psi	376,000	304,000	340,000	250,000
Flexural Strength	ASTM D790	psi	13,690	10,610	12,000	8,300
Izod Impact Strength – Molded Notch	ASTM D256	ft-lb/in Notch	0.6	0.9	0.7	1.1
Ball Drop Impact			Pass	Pass	Pass	Pass
Rockwell Hardness	ASTM D785		M-78	M-59	M-68	M-46

Thermal	TEST METHOD	UNITS	DURAPLEX 30%	DURAPLEX 70%	DURAPLEX OPTIX SG05 (50%)	DURAPLEX OPTIX SG10 (100%)
Deflection Temperature @ 264 psi (1.8 MPa)	ASTM D648	°F	198	190	194	185
Coefficient of Thermal Expansion	ASTM D696	in/in/°F	3.5x10 ⁻⁵	4.5x10 ⁻⁵	4x10 ⁻⁵	5x10 ⁻⁵
Flammability (Burning Rate)	ASTM D635	in/minute	0.85	1.53	1.25	1.97
Flammability	UL 94		HB	HB	HB	HB
Smoke Density Rating	ASTM D2843	%	5.2	11.5	8.5	16.5
Self-Ignition Temperature	ASTM D1929	°F	>850	>850	>850	>850

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 determine the suitability of our materials and suggestions before adopting them on a commercial scale.

Questions? Please contact Plaskolite Customer Support 800-848-9124

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