

PLASKOLITE

OPTIX Colored Acrylic

Mechanical	TEST METHOD	UNITS	OPTIX Colored Acrylic
Flexural Strength	ASTM D-790	psi	17,000
Abrasion Resistance - Change in Haze - 50 cycles	ASTM D-1044	Haze, %	24
Tensile Modulus of Elasticity	--	psi	490,000
Abrasion Resistance - Change in Haze - 10 cycles	ASTM D-1044	Haze, %	11.2
Izod Impact Strength – Milled Notch	ASTM D-256	ft-lb/in Notch	0.28
Abrasion Resistance - Change in Haze - 0 cycles	ASTM D-1044	Haze, %	0
Rockwell Hardness	ASTM D-785		M-95
Tensile Elongation – Max.	ASTM D-638	%	5.8
Izod Impact Strength – Molded Notch	ASTM D-256	ft-lb/in Notch	0.4
Abrasion Resistance - Change in Haze - 200 cycles	ASTM D-1044	Haze, %	24.9
Tensile Impact Strength	ASTM D-1822	ft-lb/in ²	20
Tensile Strength	ASTM D-638	psi	11,030
Flexural Modulus of Elasticity	ASTM D-790	psi	490,000

Thermal	TEST METHOD	UNITS	OPTIX Colored Acrylic
Melting Temperature		°F	300-315
Deflection Temperature @ 66 psi (0.45 MPa)	ASTM D-648	°F	207
Thermal Conductivity	ASTM C-177	BTU-ft/(hr-ft ² -°F)	0.075
Flammability (Burning Rate)	ASTM D-635	ln/minute	1.019
Smoke Density Rating	ASTM D-2843	%	3.4
Melt Flow Rate	ASTM D-1238	g/10 min.	1.5
Deflection Temperature @ 264 psi (1.8 MPa)	ASTM D-648	°F	203
Self-Ignition Temperature	ASTM D-1929	°F	833
Smoke Developed Index	ASTM E-84		550
Flammability	UL 94		HB
Maximum Recommended Continuous Service Temperature		°F	170-190
Softening Temperature		°F	210-220
Flame Spread Index	ASTM E-84		115
Coefficient of Thermal Expansion	ASTM D-696	in/(in-°F) x 10 ⁻⁵	3.0

Chemical	TEST METHOD	UNITS	OPTIX Colored Acrylic
Resistance to Stress - Critical Crazing Stress to: Lacquer Thinner	ARTC Modification of MIL-P6997	psi	500
Resistance to Stress - Critical Crazing Stress to: Toluene	ARTC Modification of MIL-P6997	psi	1,300
Resistance to Stress - Critical Crazing Stress to: Solvesso 100	ARTC Modification of MIL-P6997	psi	1,600
Resistance to Stress - Critical Crazing Stress to: Isopropyl Alcohol	ARTC Modification of MIL-P6997	psi	900

Physical	TEST METHOD	UNITS	OPTIX Colored Acrylic
Optical Refractive Index	ASTM D-542		1.49
Specific Gravity/Relative Density	ASTM D-792		1.19
Sound Transmission	ASTM E90 / E413	db	27
Mold Shrinkage	ASTM D-955	mils/in	2-6
Water Absorption	ASTM D-570	% By wt	0.4

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

PLASKOLITE

Distributed by:  PolymerShapes

Call: 1 (866) 437-7427

Email: info@polymershapes.com