

PLASKOLITE

OPTIX NB - Noise Barrier Acrylic

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

Mechanical	TEST METHOD	UNITS	OPTIX NB
Tensile Strength	ASTM D-638	psi	10,100
Flexural Modulus of Elasticity	ASTM D-790	psi	490,000
Rockwell Hardness	ASTM D-785		M-95
Tensile Impact Strength	ASTM D-1822	ft-lb/in ²	20
Tensile Elongation – Max.	ASTM D-638	%	5.8
Flexural Strength	ASTM D-790	psi	14,600
Abrasion Resistance - Change in Haze - 0 cycles	ASTM D-1044	Haze, %	0
Tensile Modulus of Elasticity	--	psi	479,000
Abrasion Resistance - Change in Haze - 200 cycles	ASTM D-1044	Haze, %	24.9
Abrasion Resistance - Change in Haze - 10 cycles	ASTM D-1044	Haze, %	11.2
Izod Impact Strength – Molded Notch	ASTM D-256	ft-lb/in Notch	0.4
Abrasion Resistance - Change in Haze - 50 cycles	ASTM D-1044	Haze, %	24
Izod Impact Strength – Milled Notch	ASTM D-256	ft-lb/in Notch	0.28

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

Physical	TEST METHOD	UNITS	OPTIX NB
Water Absorption	ASTM D-570	% By wt	0.3
Mold Shrinkage	ASTM D-955	mils/in	2-6
Optical Refractive Index	ASTM D-542		1.49
Specific Gravity/Relative Density	ASTM D-792		1.19
Light Transmission -Total	ASTM D-1003	%	>91
Light Transmission - Haze	ASTM D-1003	%	<3
Sound Transmission	ASTM E90 / E413	db	>30

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