PLASKOLITE

OPTIX NG - Non-Glare Acrylic Heavy Matte Sheet

Typical Properties

Physical	TEST METHOD	UNITS	OPTIX NG Non-Glare
Specific Gravity/Relative Density	ASTM D792		1.19
Optical Refractive Index	ASTM D542		1.49
Sound Transmission	ASTM E90 / E413	dB	27
Water Absorption	ASTM D570	%	0.4
Mold Shrinkage	ASTM D955	mils/in	2-6
Mechanical	TEST METHOD	UNITS	OPTIX NG Non-Glare
Tensile Strength	ASTM D638	psi	11,030
Tensile Elongation – Max.	ASTM D638	%	5.8
Tensile Modulus of Elasticity	ASTM D638	psi	490,000
Flexural Strength	ASTM D790	psi	17,000
Flexural Modulus of Elasticity	ASTM D790	psi	490,000
Izod Impact Strength – Molded Notch	ASTM D256	ft-lb/in Notch	0.4
Izod Impact Strength – Milled Notch	ASTM D256	ft-lb/in Notch	0.28
Tensile Impact Strength	ASTM D1822	ft-lb/in ²	20
Abrasion Resistance - Change in Haze - 0 cycles	ASTM D1044	Haze, %	0
Abrasion Resistance - Change in Haze - 10 cycles	ASTM D1044	Haze, %	11.2
Abrasion Resistance - Change in Haze - 50 cycles	ASTM D1044	Haze, %	24
Abrasion Resistance - Change in Haze - 200 cycles	ASTM D1044	Haze, %	24.9
Rockwell Hardness	ASTM D785		M-95
		4	
Thermal	TEST METHOD	UNITS	OPTIX NG Non-Glare
Maximum Recommended Continuous Service		°F	470.400
Temperature			170-190
Softening Temperature		°F	040.000
			210-220
Melting Temperature		°F	300-315
Deflection Temperature @ 264 psi (1.8 MPa)	ASTM D648		300-315 203
	ASTM D648 ASTM D648	°F	300-315
Deflection Temperature @ 264 psi (1.8 MPa)		°F °F	300-315 203 207
Deflection Temperature @ 264 psi (1.8 MPa)Deflection Temperature @ 66 psi (0.45 MPa)Coefficient of Thermal Expansion	ASTM D648 ASTM D696	°F °F °F in/in/°F	300-315 203 207 3.0x10 ⁻⁵
Deflection Temperature @ 264 psi (1.8 MPa)Deflection Temperature @ 66 psi (0.45 MPa)Coefficient of Thermal ExpansionThermal Conductivity	ASTM D648 ASTM D696 ASTM C177	°F °F in/in/°F BTU-ft/ft ² /hr/°F	300-315 203 207 3.0x10 ⁻⁵ 0.075
Deflection Temperature @ 264 psi (1.8 MPa) Deflection Temperature @ 66 psi (0.45 MPa) Coefficient of Thermal Expansion Thermal Conductivity Flammability (Burning Rate)	ASTM D648 ASTM D696 ASTM C177 ASTM D635	°F °F °F in/in/°F	300-315 203 207 3.0x10 ⁻⁵ 0.075 1.019
Deflection Temperature @ 264 psi (1.8 MPa) Deflection Temperature @ 66 psi (0.45 MPa) Coefficient of Thermal Expansion Thermal Conductivity Flammability (Burning Rate) Flammability	ASTM D648 ASTM D696 ASTM C177 ASTM D635 UL 94	°F °F in/in/°F BTU-ft/ft ² /hr/°F in/minute	300-315 203 207 3.0x10 ⁻⁵ 0.075 1.019 HB
Deflection Temperature @ 264 psi (1.8 MPa) Deflection Temperature @ 66 psi (0.45 MPa) Coefficient of Thermal Expansion Thermal Conductivity Flammability (Burning Rate) Flammability Smoke Density Rating	ASTM D648 ASTM D696 ASTM C177 ASTM D635 UL 94 ASTM D2843	°F °F in/in/°F BTU-ft/ft ² /hr/°F in/minute	300-315 203 207 3.0x10 ⁻⁵ 0.075 1.019 HB 3.4
Deflection Temperature @ 264 psi (1.8 MPa) Deflection Temperature @ 66 psi (0.45 MPa) Coefficient of Thermal Expansion Thermal Conductivity Flammability (Burning Rate) Flammability Smoke Density Rating Self-Ignition Temperature	ASTM D648 ASTM D696 ASTM C177 ASTM D635 UL 94 ASTM D2843 ASTM D1929	°F °F in/in/°F BTU-ft/ft ² /hr/°F in/minute	300-315 203 207 3.0x10 ⁻⁵ 0.075 1.019 HB 3.4 833
Deflection Temperature @ 264 psi (1.8 MPa) Deflection Temperature @ 66 psi (0.45 MPa) Coefficient of Thermal Expansion Thermal Conductivity Flammability (Burning Rate) Flammability Smoke Density Rating Self-Ignition Temperature Flame Spread Index	ASTM D648 ASTM D696 ASTM C177 ASTM D635 UL 94 ASTM D2843 ASTM D1929 ASTM E84	°F °F in/in/°F BTU-ft/ft ² /hr/°F in/minute	300-315 203 207 3.0x10 ⁻⁵ 0.075 1.019 HB 3.4 833 115
Deflection Temperature @ 264 psi (1.8 MPa)Deflection Temperature @ 66 psi (0.45 MPa)Coefficient of Thermal ExpansionThermal ConductivityFlammability (Burning Rate)FlammabilitySmoke Density RatingSelf-Ignition Temperature	ASTM D648 ASTM D696 ASTM C177 ASTM D635 UL 94 ASTM D2843 ASTM D1929	°F °F in/in/°F BTU-ft/ft ² /hr/°F in/minute	300-315 203 207 3.0x10 ⁻⁵ 0.075 1.019 HB 3.4 833
Deflection Temperature @ 264 psi (1.8 MPa) Deflection Temperature @ 66 psi (0.45 MPa) Coefficient of Thermal Expansion Thermal Conductivity Flammability (Burning Rate) Flammability Smoke Density Rating Self-Ignition Temperature Flame Spread Index	ASTM D648 ASTM D696 ASTM C177 ASTM D635 UL 94 ASTM D2843 ASTM D1929 ASTM E84 ASTM E84	°F °F in/in/°F BTU-ft/ft ² /hr/°F in/minute % °F	300-315 203 207 3.0x10 ⁻⁵ 0.075 1.019 HB 3.4 833 115 550
Deflection Temperature @ 264 psi (1.8 MPa) Deflection Temperature @ 66 psi (0.45 MPa) Coefficient of Thermal Expansion Thermal Conductivity Flammability (Burning Rate) Flammability Smoke Density Rating Self-Ignition Temperature Flame Spread Index Smoke Developed Index Chemical Resistance to Stress - Critical Crazing Stress to:	ASTM D648 ASTM D696 ASTM C177 ASTM D635 UL 94 ASTM D2843 ASTM D1929 ASTM E84 ASTM E84 TEST METHOD ARTC Modification of	°F °F in/in/°F BTU-ft/ft ² /hr/°F in/minute	300-315 203 207 3.0x10 ⁻⁵ 0.075 1.019 HB 3.4 833 115
Deflection Temperature @ 264 psi (1.8 MPa) Deflection Temperature @ 66 psi (0.45 MPa) Coefficient of Thermal Expansion Thermal Conductivity Flammability (Burning Rate) Flammability Smoke Density Rating Self-Ignition Temperature Flame Spread Index Smoke Developed Index Chemical Resistance to Stress - Critical Crazing Stress to: Isopropyl Alcohol Resistance to Stress - Critical Crazing Stress to:	ASTM D648 ASTM D696 ASTM C177 ASTM D635 UL 94 ASTM D2843 ASTM D1929 ASTM E84 ASTM E84 TEST METHOD	°F °F in/in/°F BTU-ft/ft ² /hr/°F in/minute % °F	300-315 203 207 3.0x10 ⁻⁵ 0.075 1.019 HB 3.4 833 115 550
Deflection Temperature @ 264 psi (1.8 MPa) Deflection Temperature @ 66 psi (0.45 MPa) Coefficient of Thermal Expansion Thermal Conductivity Flammability (Burning Rate) Flammability Smoke Density Rating Self-Ignition Temperature Flame Spread Index Smoke Developed Index Chemical Resistance to Stress - Critical Crazing Stress to: Isopropyl Alcohol	ASTM D648 ASTM D696 ASTM C177 ASTM D635 UL 94 ASTM D2843 ASTM D1929 ASTM E84 ASTM E84 TEST METHOD ARTC Modification of MIL-P6997 ARTC Modification of	°F °F in/in/°F BTU-ft/ft ² /hr/°F in/minute % °F UNITS psi	300-315 203 207 3.0x10 ⁻⁵ 0.075 1.019 HB 3.4 833 115 550

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.

ARTC Modification of

MIL-P6997

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

Resistance to Stress - Critical Crazing Stress to:

Solvesso 100

PLASKOLITE

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