



LEXAN® 8B35VF AND 8A13VF FILM

Product Data Sheet

DESCRIPTION

LEXAN® 8B35VF and 8A13VF films are specifically designed to help eliminate pinholes in demanding backlit applications while meeting UL94 V-2/VTM-2 flammability performance. The next generation of our proven velvet/matte and polish/matte polycarbonate film, LEXAN 8B35VF and 8A13VF films offer the same excellent clarity, heat resistance, and dimensional stability with even a smoother surface. Recent technology improvements now in effect reduce texture variation by 50%. Additional enhancements allow improved gauge control (see reverse side for details).

TYPICAL PROPERTY VALUES*

Property	Test Method	Units	Value
PHYSICAL			
Specific Gravity	ASTM D792	--	1.24
Area Factor	Calculation	ft ² /lb/mil	155
Refractive Index @ 77°F	ASTM D542A	--	1.586
Light Transmission (Average)	ASTM D1003	%	88-91
Yellowness Index	ASTM D1925	--	<1.0
Water Absorption, Equilibrium, 24 Hrs	ASTM D570	%	0.35
MECHANICAL			
Tensile Strength @ Yield	ASTM D882	psi	8,500
Ultimate			9,000
Tensile Modulus	ASTM D882	psi	300,000
Elongation	ASTM D882	%	100-150
Gardner Impact Strength @ 30 mils	Gardner	in-lbs	120
Tear Strength			
Initiation	ASTM D1004	lb/mil	1.4-1.8
Propagation	ASTM D1922	g/mil	30-55
Burst Strength-Mullen @ 1 mil	ASTM D774	psig	40-45
Fold Endurance @ 10 mils	MIT	double folds	200
THERMAL			
Coefficient of Thermal Expansion	ASTM D696	in/in/°F	3.75 x 10 ⁻⁵
Coefficient of Thermal Conductivity	ASTM C177	Btu/hr/ft ² /°F/in	1.35
Specific Heat @ 40°F	ASTM C351	Btu/lb/°F	0.30
Strain Relief @ 275°F	ASTM D1204	%	<0.2
Tensile Heat Distortion @ 50 psi	ASTM D1637	°F	302
Heat Deflection Temperature @ 264 psi	ASTM D648	°F	275
Brittle Temperature	ASTM D746	°F	-211
Vicat Softening Temperature	ASTM D1525	°F	305-315
ELECTRICAL			
Dielectric Strength @ 72°F in Oil, Short Time, 10 mils	ASTM D149	V/mil	1,700
Dielectric Constant @ 60 Hz	ASTM D150	--	2.99
@ 1,000,000 Hz			2.93
Dissipation Factor @ 60 Hz	ASTM D150	--	0.001
@ 1,000,000 Hz			0.011
Volume Resistivity	ASTM D257	ohm-cm	10 ¹⁶
Surface Resistivity		ohm-sq	10 ¹⁵
Arc Resistance, Tungsten Electrodes	ASTM D495	sec	120

*These are typical properties and are not intended for specification purposes. If minimum certifiable properties are required, please contact your local GE Plastics Structured Products representative or the GE Plastics Structured Products Quality Services Department.



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MANUFACTURING SPECIFICATIONS

The manufacturing guidelines presented here outline the quality standards to which GE Plastics produces its films. More stringent standards can be agreed to on a case-by-case basis, depending upon the requirements of a particular application or process. Such changes may result in a change in sales price or conditions.

For more information call: (800) 451-3147 or (413) 448-5400.

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TEXTURES

Texture	Designation	Gauges	Available Widths
Velvet/Fine Matte	8B35VF-112	7 mils 10–30 mils	36" only 36" and 48"
Fine Matt/Polished	8A13VF-112	15–20 mils	36" and 48"

GARDNER GLOSS LEVELS AFTER SCREENING FLAT BLACK				
		ANGLE	VELVET	FINE MATTE
8B35VF	Minimum	60°	2.5	35
	Maximum		5.0	70
8A13VF	Minimum	85°		7.0
	Maximum			16.0

PROPERTY	UNITS	TYPICAL VALUE
Scratches	Inches	<1/4 Hairline, Buff Type
Web Edge* Curl Machine Direction (MD) Transverse Direction (TD)	Inches	<.10 <0.5
Defect Size >.025 >.015 >.005	Inches	1/100 Sq. Ft. 1/Sq. Ft. 20/Sq. Ft.
Gauge Variation .015"–.030" .008"–.014" .003"–.007"	%	Nominal Gauge: ± 3 Nominal Gauge: ± 5 Nominal Gauge: ± 10

*Films from .015" to .030" in gauge may contain curl due to roll set. This property can be minimized by reverse winding the rolls approximately 48 hours prior to sheeting.

Flammability

Thickness	Rating
0.003" ≤, ≤ 0.015" 0.015" and greater	UL94 VTM-2 UL94 V-2
File Number: E61257	



GE Structured Products

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