

PRODUCT NEWS

Auburn Manufacturing Co.

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LEXAN® FR 700-701 FILM FROM AUBURN

DESCRIPTION

LEXAN FR 700-701 is an opaque black, flame retardant polycarbonate film. With a UL94V-O listing at ≥ .010", this film meets stringent requirements for a wide range of electrical and electronic applications.

UL File Number: E61257(R)

Potential applications include:

- power supply insulation
- disc drive insulation
- bus bar insulation
- keyboard insulation
- TV/monitor insulation
- PC board insulation
- business equipment insulation
- foil laminated for shielding

CONFIGURATION

Finish: Velvet/fine matte
Standard Roll Width: 48"
Minimum Gauge: .010"
Standard Gauges: .010", .017"
Custom Gauges: .011" - .030"

TYPICAL PROPERTY VALUES*

Property	Test Method	Units	FR 700 Value	
PHYSICAL				
Specific Gravity	ASTM D792		1.32	
Area Factor	Calculation	ft²/lb/mil	145.75	
		m²/lb/mil	13.54	
Water Absorption, Equil., 24 Hrs	ASTM D570	%	0.28	
MECHANICAL		ŀ		
Tensile Strength	ASTM D882	psi		
@Yield			9,500	
Ultimate			8,800	
Tensile Modulus	ASTM D882	psi	31,000	
Elongation	ASTM D882	%	25-50	
Tear Strength		1		
Initiation	ASTM D1004	g/mil	770-910	
Propagation	ASTM D1922	g/mil	16-40	
Puncture Resistance	ASTM D1048	lb/in	332	
THERMAL				
Tensile Heat Distortion @ 50 psi	ASTM D1637	l °c	150	
Heat Deflection Temp. @ 254 psi	ASTM D1037	l č	135	
Thermal Conductivity	ASTM C177	Watt/M-°C	0.19	
Glass Transition	DSC	°C	156	
ELECTRICAL Dielectric Strength (@ 10 mils) Dielectric Constant @ 25°C, 50% RH @ 60 Hz @ 1,000 Hz @ 1,000,000 Hz Dissipation Factor @ 25°C, 50% RH @ 60 Hz @ 1,000 Hz @ 1,000 Hz	ASTM D149 ASTM D150 ASTM D150	Volts 	17,000 2.9 2.8 2.8 0.0026 0.0028 0.0117	
Volume Resistivity @ 25°C, 50% RH	ASTM D257	ohm-cm	10 ¹⁶	
Surface Resistivity @ 25°C, 50% RH	ASTM D257	Ω/□	1015	
FLAMMABILITY UL Flammability Oxygen Index Flash Point Self-Ignition Temperature	UL Bulletin 94 ASTM D2863		V-O, ≥ 10mil 33 440°C 605°C	
FMVSS-302	ASTM D618		All Pass	
NFPA 258-NBS	ASTM D618		D(4) = 6	
Smoke Chamber Test (10 mil)	ASTIVI E002		D(4) = 6 D(max) = 36	
Horizontal Burn Rate	D635		D(IIIax) = 30	
Extent of Burn			1.4 in	
Burn Time	1	1	5 sec	

^{*}This rating is not intended to reflect hazards presented by this or any other material under actual fire conditions. *Registered trade mark of GE.

^{*}These are typical properties and are not intended for specification purposes. If minimum certifiable properties are required, please contact your Auburn customer service representative.

AGENCY SUMMARY:

LEXAN FR-700-701 film has been tested under a number of agency testing protocols including UL 746A and UL 746B, IEC Publication 85 and CSA C22.2 Class 9052 30. The tables below summarize the UL and CSA listings for LEXAN FR 700-701.

In addition to the significant breadth of CSA and UL listing that LEXAN FR 700-701 has received, GE Plastics has indicated that its production facility has been registered by The British Standards Institute to the International Organization for Standardization, ISO 9002 Standards for Quality.

UL LISTING SUMMARY

File #E61257(R)

Material		Thickness			Relative Thermal Index			Performance Level Categories (PLC's)				
	Color	mils	mm	UL-94 Flame Rating	Elect.	Mechanical						
						With Elong.	Without Elong. @ Tensile	н W I	H A I	H V T R	D 4 9 5	C T I
LEVANI	bk	10-14	.2535	V-0	130	125	130	1	0			3
LEXAN FR-700 (FR7+)	bk	15-29	.3874	V-0	130	125	130	0	0			3
	bk	≥ 30	≥.76	V-0	130	125	130	0	0			3

^{&#}x27;This rating is not intended to reflect hazards presented by this or any other material under actual fire conditions.

CSA LISTING SUMMARY

File #LR84942

Material Type				Requirements in Standard								
	Minimum Thickness		Temp.	CSA C22.2 No.							IEC No.	
	mm	in	Class	1-M1990	6-M1984	66-1988	223-1987	2 3 4	9 5 0	6 5	9 5 0	
LEXAN FR-700	.25	.010	130°C	A	A	A	A	A	A	А	A	

Note: "A" indicates compliance with all of the requirements of the indicated agency standard.

FOR MORE INFORMATION CALL: (860)346-6677

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