



## LEXAN 940

Product Portfolio | Product Lines | LEXAN

USA: Commercial

Opaque colors, medium viscosity, superior flame retardance. Decreased smoke and lowered toxic gas emission.

### Processing

#### INJECTION MOULDING-USA

LEX-IM-04

Drying Temperature	250	deg F
Drying Time (basic)	3-4	h
Drying Time (cumulative)	48	h
Moisture Content	0.02	%
Melt Temperature	560-600	deg F
Nozzle Temperature	550-590	deg F
Front Temperature	560-600	deg F
Middle Temperature	540-580	deg F
Rear Temperature	520-560	deg F
Mold Temperature	160-200	deg F
Screw Speed	40-70	rpm
Shot to Cylinder Size	40-60	%
Clamp Tonnage	3-5	tons/psi
Vent Depth	0.0010-0.0030	in

Source Eris, last updated: 1999/08/

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### Properties

Property	Typical Data	Unit	Method
Tensile Strength, yield, Type I, 0.125"	9000	psi	ASTM D 638
Tensile Strength, break, Type I, 0.125"	8100	psi	ASTM D 638
Tensile Elongation, yield, Type I 0.125"	7.0	%	ASTM D 638
Tensile Elongation, break, Type I 0.125"	90.0	%	ASTM D 638
Flexural Strength, yield, 0.125"	13200	psi	ASTM D 790
Flexural Modulus, 0.125"	325000	psi	ASTM D 790
Compressive Strength	12500	psi	ASTM D 695
Compressive Modulus	325000	psi	ASTM D 695
Shear Strength	10000	psi	ASTM D 732
Shear Modulus	114000	psi	ASTM D 4065
Hardness, Rockwell M	70	-	ASTM D 785
Hardness, Rockwell R	118	-	ASTM D 785
Taber Abrasion, CS-17, 1 kg	10	mg/1000cy	ASTM D 1044
Fatigue Limit, 2.5 MM cycles	1000	psi	ASTM D 671

#### IMPACT

Property	Typical Data	Unit	Method
Izod Impact, unnotched, 73F	60.0	ft-lb/in	ASTM D 4812
Izod Impact, notched, 73F	12.0	ft-lb/in	ASTM D 256

Tensile Impact, Type "S"	250 ft-lb/in <sup>2</sup>	ASTM D 1822
Falling Dart Impact (D 3029), 73F	125 ft-lbs	ASTM D 3029

### THERMAL

Property	Typical Data	Unit	Method
Vicat Softening Temp, Rate B	305	deg F	ASTM D 1525
HDT, 66 psi, 0.250", unannealed	280	deg F	ASTM D 648
HDT, 264 psi, 0.250", unannealed	270	deg F	ASTM D 648
Thermal Conductivity	0.19	W/m-C	ASTM C 177
CTE, flow, -40F to 200F	3 E-5	in/in-F	ASTM E 831
Thermal Index, Elec Prop	130	deg C	UL 746B
Thermal Index, Mech Prop with impact	120	deg C	UL 746B
Thermal Index, Mech prop without impact	130	deg C	UL 746B

### PHYSICAL

Property	Typical Data	Unit	Method
Specific Gravity, solid	1.21	-	ASTM D 792
Specific Volume	23.10	in <sup>3</sup> /lb	ASTM D 792
Density	0.044	lb/in <sup>3</sup>	ASTM D 792
Water Absorption, 24 hours @ 73F	0.150	%	ASTM D 570
Water Absorption, equilibrium, 73F	0.35	%	ASTM D 570
Water Absorption, equilibrium, 212F	0.58	%	ASTM D 570
Mold Shrinkage, flow, 0.125"	5-7	in/in E-3	ASTM D 955
Melt Flow Rate, nom'l, 300C/1.2 kgf (O)	10.0	g/10 min	ASTM D 1238

### ELECTRICAL

Property	Typical Data	Unit	Method
Volume Resistivity	>1E17	ohm-cm	ASTM D 257
Dielectric Strength, in air, 125 mils	425	V/mil	ASTM D 149
Dielectric Constant, 60 Hz	3.01	-	ASTM D 150
Dielectric Constant, 1 MHz	2.96	-	ASTM D 150
Dissipation Factor, 60 Hz	0.0009	-	ASTM D 150
Dissipation Factor, 1 MHz	0.0100	-	ASTM D 150

### FLAME CHARACTERISTICS

Property	Typical Data	Unit	Method
UL File Number, USA	E121562	-	-
V-0 Rated (tested thickness)	0.044	inch	UL 94
CSA (See File for complete listing)	LS88480	File No.	CSA LISTED
Oxygen Index (LOI)	35.0	%	ASTM D 2863

Source Eris, last updated: 1997/11/

## Disclaimer

The values shown on the attached pages are typical values that have been obtained using test bars from typical lots and are not intended for specification purposes. These values are for natural colors only. Addition of pigments may alter some values. Inasmuch as the General Electric Company has no control over the use to which others may put the material, it does not guarantee that the same results as those described herein will be obtained. Each user of the material should make his own test to determine the material's suitability for his own particular use. Statements concerning possible or suggested uses of the materials described herein are not to be construed as constituting a license under any General Electric patent covering such use or as recommendations for use of such materials in the

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