

# LEXAN™ F6000 SHEET SERIES

## PRODUCT DATASHEET

### DESCRIPTION

LEXAN™ F6000 sheet series is a flame retardant opaque polycarbonate sheet range available in standard and custom colors. In addition to good flammability performance, it offers excellent impact resistance, good stiffness, strength, and ease of processing, making it suitable for a wide variety of applications in industries such as electrical/electronics and transportation (e.g. aircraft, rail).

### TYPICAL PROPERTY VALUES

PROPERTY	TEST METHOD	UNITS	VALUE
<b>PHYSICAL</b>			
Density	ISO 1183	g/cm <sup>3</sup>	1.21
Water absorption, 50% RH, 23 °C	ISO 62	%	0.15
Water absorption, saturation, 23°C	ISO 62	%	0.35
<b>MECHANICAL</b>			
Yield stress 50 mm/min	ISO 527	MPa	>60
Yield strain 50 mm/min	ISO 527	%	6
Nominal strain at break 50 mm/min	ISO 527	%	>100
Tensile modulus 1 mm/min	ISO 527	MPa	2300
Flexural strength 2 mm/min	ISO 178	MPa	90
Flexural modulus 2 mm/min	ISO 178	MPa	2300
<b>IMPACT</b>			
Charpy impact, notched, 3.0 mm	ISO 179/1eA	kJ/m <sup>2</sup>	75
Izod impact, unnotched 23°C, 3.0 mm	ISO 180/1U	kJ/m <sup>2</sup>	NB
Izod impact, notched 23°C, 3.0 mm	ISO 180/1A	kJ/m <sup>2</sup>	70
<b>THERMAL</b>			
Vicat softening temperature, B/120	ISO 306	°C	145
Temperature of deflection under load (type A), 1.8 MPa, flat	ISO 75	°C	127
Thermal conductivity	ISO 8302	W/m.°C	0.2
Coefficient of linear thermal expansion, 23-55°C	ISO 11359-2	1/°C	7x10 <sup>-5</sup>
Ball pressure test 125 ±2°C	IEC 60695-10-2	-	Pass
<b>ELECTRICAL</b>			
Volume resistivity	IEC 60093	Ohm.cm	>10 <sup>15</sup>
Dielectric strength, in oil, 3.2 mm	IEC 60243-1	kV/mm	18
<b>OPTICAL</b>			
Light transmission 3 mm	ASTM-D1003	%	n/a

PROPERTY	TEST METHOD	UNITS	VALUE
<b>FIRE RATINGS</b>			
<b>Aircraft</b>			
Vertical burn, 60 s	FAR 25.853(a)+App.F	-	Pass (1-6mm)
Smoke density	ABD0031	-	Pass, Ds(4min)<150 (1-6mm)
Smoke toxicity	ABD0031,BSS 7239	-	Pass (1-6mm)
<b>Rail</b>			
France	NF P 92-501	-	M2 (2mm)
France	NF F 16-101	-	F2 (2mm)
UK	BS 6853	-	Ao=0.125
Germany	DIN 5510-2	-	S4/ST2/SR2, FED<1 (1mm) S4/ST2/SR1, FED<1 (1.5-4mm)
Italy	UNI CEI 11170-3	-	Class 1B (1-3mm)
<b>Electrical</b>			
Vertical burn (50W)	UL94V	-	VO (1.5-6mm)
Limited Oxygen Index	ISO 4589-2	%	35

◆ Typical values only. Variations within normal tolerances are possible for the various textures.  
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## PRODUCT AVAILABILITY

**Product code:** LEXAN F6000

### Textures:

F6000 series is available in a variety of textures:

F6005 sheet -Velvet / Matte

F6006 sheet -Suede/ Matte

F6008 sheet -Matte/Polish

F60011 sheet - Haircell / Smooth COB

F60025 sheet -Polish / Polish

F60029 sheet -Deep Velvet / Matte

See product availability guide for available gauges, sizes, and colors.

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