

LEXAN™XHR6200 Sheet

PRODUCT DATASHEET

DESCRIPTION

LEXAN™ XHR6200 sheet is a high performance product formulated specifically for demanding applications in the Aerospace & Rail interiors market. LEXAN™ XHR6200 is a non-Chlorinated and non-Brominated compliant flame retardant opaque sheet and available in standard and custom colors. LEXAN™ XHR6200 sheet is easily formable and offers excellent mechanical properties.

TYPICAL PROPERTY VALUES◆

PROPERTY	TEST METHOD	UNITS	VALUE
Physical			
Density	ISO 1183	g/cm³	1.33
Water absorption, 50% RH, 23 °C	ISO 62	%	0.11
Water absorption, saturation, 23°C	ISO 62	%	0.28
Mechanical			
Yield stress 50 mm/min	ISO 527	Мра	>60
Yield strain 50 mm/min	ISO 527	%	6
Nominal strain at break 50 mm/min	ISO 527	%	80
Tensile modulus 1 mm/min	ISO 527	MPa	2600
Flexural strength 2 mm/min	ISO 178	MPa	110
Flexural modulus 2 mm/min	ISO 178	MPa	2500
Impact			
Charpy impact, notched, 3.0 mm	ISO 179/1C	kJ/m²	15
Izod impact, unnotched 23°C, 3.0 mm	ISO 180/1U	kJ/m²	NB
Izod impact, notched 23°C, 3.0 mm	ISO 180/1A	kJ/m²	15
Thermal			
Vicat softening temperature, B/120	ISO 306	°C	115
Temperature of deflection under load (type A), 1.8 MPa, flat	ISO 75	°C	95
Thermal conductivity	ISO 8302	W/m.°C	0.2
Coefficient of linear thermal expansion, 23-55°C	ISO 11359-2	1/°C	6x10 ⁵
Ball pressure test 125 ±2°C	IEC 60695-10-2	-	Pass
Fire Ratings			
Aircraft			
Vertical burn, 60 s	FAR 25.583(a)+App.F	-	Pass (1-4mm)
Smoke density	ABD0031	-	Pass, Ds(4min)<150 (1-4mm)
Smoke toxicity	ABD0031,BSS 7239	-	Pass (1-4mm)
OSU total heat release, 2 min.	FAR 25.583(d) App.F	kW.min/m2	Pass <65 (1-6mm)
OSU peak heat release rate, 5 min.	FAR 25.583(d) App.F	kW/m2	Pass <65 (1-6mm)
Rail			
Europe	EN 45545		R1/HL3 (3mm)
	EN 45545		R6/HL3 (2.5mm)

These property values have been derived from LEXAN™ resin data for the material used to produce this sheet product. Variations within normal tolerances are possible for various colors. If minimum certifiable properties are required please contact your local SABIC representative. All values are measured at least after 48 hours storage at 23°C/50% relative humidity. All properties are measured on injection molded samples. Trademarks of SABIC.

PROCESSING

LEXAN XHR6200 sheet is ideally suited to thermoforming. It offers high, deep draw ratios, equal wall thickness distribution, and it can be formed into complex shapes using standard thermoforming equipment. Sandwich type heating systems give the best results. LEXAN XHR6200 sheet has a forming temperature range of 170 - 190°C. When forming, a draft angle of at least 3° should be allowed, and post mold shrinkage of 0.3 – 0.8% taken into account, depending on mold temperature.

PRE-DRYING

It is important to ensure that LEXAN XHR6200 sheets are free of moisture prior to thermoforming. A hot air circulating oven set at 95°C is recommended. Pre-drying times vary from 3-12 hours for 1.2 to 4.0mm thick sheets.

ASSEMBLING

Parts made from LEXAN XHR6200 sheet can be assembled with plastics, metals, rubber and other materials using many types of adhesive bonding, welding and mechanical fastening techniques. Since some of these materials can cause environmental stress cracking, please consult SABIC Innovative Plastics, Film & Sheet representative for advice on specific applications.

PRODUCT AVAILABILITY

EUROPE:

Standard gauges: 1, 1.5, 2, 3, 4mm **Standard Size:** 1300x2050mm

Textures: Suede '6' **Masking:** none

Colors: Custom colors are available

CONTACT US:



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