

LEXAN™ H6700 SHEET

PRODUCT DATASHEET

DESCRIPTION

LEXAN™ H6700 sheet is a high modulus, non-Chlorinated and non-Brominated compliant flame retardant opaque polycarbonate sheet available in standard and custom colours. In addition to good flame retardant performance, it offers excellent mechanical properties combining impact with very high stiffness and strength and ease of processing making it an excellent candidate for a wide range of applications in railway interiors.

TYPICAL PROPERTY VALUES

PROPERTY	TEST METHOD	UNITS	VALUE
PHYSICAL			
Density	ISO 1183	g/cm ³	1.35
Water Absorption, (23°C/sat)	ASTM D570	%	n/a
MECHANICAL			
Tensile Stress at yield, 50mm/min	ISO 527	MPa	63.9
Tensile Stress at break, 50mm/min	ISO 527	MPa	31.6
Tensile Modulus, 1mm/min	ISO 527	MPa	4278
Flexural Stress, yield, 2mm/min	ISO 178	MPa	97
Flexural Modulus, 2mm/min	ISO 178	MPa	4190
IMPACT			
Izod Impact, notched 80*10*4 +23°C	ISO 180/1A	kJ/m ²	10.64
Izod Impact, notched 80*10*4 -30°C	ISO 180/1A	kJ/m ²	7.25
Charpy 23°C, V-notch Edgew 80*10*4 sp=62mm	ISO 179/1eA	kJ/m ²	9.1
THERMAL			
Vicat Softening Temp, Rate B/120	ISO 306	°C	150
HDT/Be, 0.45Mpa, Edgew 120*10*4 sp=100mm	ISO 75/Be	°C	141
HDT/Ae, 1.8Mpa, Edgew 120*10*4 sp=100mm	ISO 75/Ae	°C	135
Relative Thermo Index, Mech w/impact	UL746B	°C	80
FIRE RATINGS			
UL Recognized, 94-5VA Rating	UL94	mm	1
Oxygen Index (LOI)	ISO 4589	%	49

◆ These property values have been derived from LEXAN™ sheet data at 4mm thickness. Variation within normal tolerances are possible for various colours. These typical values are not intended for specification purposes. If minimum certifiable properties are required, please contact your local SABIC Innovative Plastics, Specialty Film & Sheet 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. All samples are prepared according to ISO and GB standard.

™ Trademark of SABIC.

FIRE, SMOKE & TOXICITY PERFORMANCE

LEXAN™ H6700 sheet has been tested for the properties as stated in the below table in 2, 3 & 4mm.

STANDARD	TEST METHOD	VALUE
TB/T 3237		Pass
Spread of Flame	UIC 564-2	
Smoke Density	GB/T 8323.24	
Toxicity Index	ASTM E662	
Oxygen index	ISO 4589-2	
VOC	TB/T 3139-2006	Pass
UIC 564-2		Pass
Spread of Flame	UIC 564-2-OR App 11	Class A
Smoke Density	UIC 564-2-OR App 15	Class A
Toxicity index	NCD 1409	< 1.0
NFPA 130		Pass
Flame Spread Index	ASTM E 162	I _s < 35
Smoke Density (with & without flame)	ASTM E 662	D _s (1.5) ≤ 100; D _s (4.0) ≤ 200

PROCESSING

LEXAN H6700 sheet is suitable for thermoforming. To reach optimal results the materials needs to be heated with sandwich type heating systems to reach uniform heat uptake. Pre-drying of this material is necessary. For pre-drying guidelines, follow standard guidelines for pre-drying standard LEXAN™ sheet.

LEXAN H6700 has a processing window between 170 and 210°C. When forming a draft angle of 3 degrees should be allowed. Post mold shrinkage is dependent on tool temperature and environmental circumstances, but will typically be in the range of 0.4-0.6%. It is strongly recommended to evaluate impact of part and mold design prior to production. The nature of filled products i.e. H6700 can be different from traditional unfilled products.

PRODUCT AVAILABILITY

Product code	: LEXAN H6700 Sheet
Standard sizes	: 1220 x 2440mm & 2050 x 3050mm
Gauges	: 2, 3 & 4 mm
Textures	: Polished/Hair cell (H6700N11)
Colors	: Off white - 7G8A2041, Grey -7N8B4732

Different colors and dimensions can be made available by prior arrangement.



CONTACT US:

SABIC CORPORATE HQ
PO Box 5101
Riyadh 11422
Saudi Arabia
T +966 (0) 1 225 8000
E info@sabic.com

AMERICAS
SABIC
Functional Forms
2500 CityWest Boulevard
Suite 100
Houston, TX 77042
USA
Toll-free (800) 323 3783
E spinside.sales@sabic.com

EUROPE
SABIC
Functional Forms
Plasticslaan 1
4612 PX
Bergen op Zoom
The Netherlands
T +31 (0)164 293684
E ff.info@sabic.com

PACIFIC
SABIC
Functional Forms
2550 Xiupu Road Pudong
201319 Shanghai
China
T +86 20 2866 6168
E ff.info@sabic.com

DISCLAIMER: THE MATERIALS, PRODUCTS AND SERVICES OF SAUDI BASIC INDUSTRIES CORPORATION (SABIC) OR ITS SUBSIDIARIES OR AFFILIATES ("SELLER") ARE SOLD SUBJECT TO SELLER'S STANDARD CONDITIONS OF SALE, WHICH ARE AVAILABLE UPON REQUEST. INFORMATION AND RECOMMENDATIONS CONTAINED IN THIS DOCUMENT ARE GIVEN IN GOOD FAITH. HOWEVER, SELLER MAKES NO EXPRESS OR IMPLIED REPRESENTATION, WARRANTY OR GUARANTEE (i) THAT ANY RESULTS DESCRIBED IN THIS DOCUMENT WILL BE OBTAINED UNDER END-USE CONDITIONS, OR (ii) AS TO THE EFFECTIVENESS OR SAFETY OF ANY DESIGN OR APPLICATION INCORPORATING SELLER'S MATERIALS, PRODUCTS, SERVICES OR RECOMMENDATIONS. UNLESS OTHERWISE PROVIDED IN SELLER'S STANDARD CONDITIONS OF SALE, SELLER SHALL NOT BE RESPONSIBLE FOR ANY LOSS RESULTING FROM ANY USE OF ITS MATERIALS, PRODUCTS, SERVICES OR RECOMMENDATIONS DESCRIBED IN THIS DOCUMENT. Each user is responsible for making its own determination as to the suitability of Seller's materials, products, services or recommendations for the user's particular use through appropriate end-use and other testing and analysis. Nothing in any document or oral statement shall be deemed to alter or waive any provision of Seller's Standard Conditions of Sale or this Disclaimer, unless it is specifically agreed to in a writing signed by Seller. Statements by Seller concerning a possible use of any material, product, service or design do not, are not intended to, and should not be construed to grant any license under any patent or other intellectual property right of Seller or as a recommendation for the use of any material, product, service or design in a manner that infringes any patent or other intellectual property right.

SABIC and brands marked with ™ are trademarks of SABIC or its subsidiaries or affiliates, unless otherwise noted.
© 2022 Saudi Basic Industries Corporation (SABIC). All Rights Reserved.

Any brands, products or services of other companies referenced in this document are the trademarks, service marks and/or trade names of their respective holders.