# سابک خطاعة

## Lexan\* Exell\* D ST Sheet

### **Product Datasheet**

## Description

Lexan Exell D ST sheet is a textured polycarbonate sheet with UV protection on both sides, offering excellent light diffusion without transparency. It has an excellent impact resistance, an excellent fire performance, ease of handling and installation and is an excellent candidate for wide variety of exterior and interior applications such as balcony and staircase glazing.

## Typical Property Values ◆

Property	Test Method	Unit	Value
Physical			
Specific gravity	ISO 1183	g/cm³	1.20
Water absorption, 23 °C, 24 hours	ISO 62	%	0.10
equilibrium	ISO 62	%	0.35
Mechanical			
Tensile stress, yield	ISO 527	N/mm <sup>2</sup>	60
Tensile modulus	ISO 527	N/mm <sup>2</sup>	2350
Tensile strain, yield	ISO 527	%	6
Tensile strain, break	ISO 527	%	120
Flexural stress, yield	ISO 178	MPa	90
Flexural modulus	ISO 178	MPa	2300
Impact			
Izod impact, notched 20°C	ISO 180/1A	kJ/m²	65
Gardner Impact 20°C	SABIC Method	J	>37
-40°C		J	>37
Thermal			
Vicat Softening Temperature,			
rate B/120	ISO 306	°C	148
Ball pressure test 75°C	IEC 335-1	-	Passes
125°C		-	Passes
Mould Shrinkage	ASTM D1955	%	0.6-0.8
Thermal Expansion	DIN 53752	1/ °C	7.10 <sup>-5</sup>
Optical			
Light transmission for bronze materia			
Light transmission 3mm	ASTM D1003	%	82
Light transmission 4mm	ASTM D1003	%	81
Light transmission 5mm	ASTM D1003	% %	80 79
Light transmission 6mm Light transmission 8mm	ASTM D1003 ASTM D1003	% %	79 78
Light dansinission onlin	V2114 D1002	70	78

<sup>◆</sup> These property values have been derived from Lexan\*resin data for the material used to produce this sheet product. Variation within normal tolerances are possible for various colors. 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 ISO 294.

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### Chemical Resistance

Lexan Exell D ST sheet has sufficient resistance to most chemical substances encountered in normal exterior use. In applications where the product will come into contact with aggressive chemicals, specific (application related) testing of the material is always advised. It is essential to check the compatability before use.

#### Product Availability

Product code: Lexan Exell D ST Standard gauge: 3,4,5,6,8 mm Standard width: 1250 and 2050 mm Standard length: 3000 and 6000 mm

**Textures:** Polished one side, pebble texture on reverse

Colors: Clear, bronze

Other colors/sizes are available by special request.



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