

# CLEAR LEXAN™ XHR2HC1 COATED SHEET

## PRODUCT DATASHEET

### DESCRIPTION

CLEAR LEXAN™ XHR2HC1 sheet is one-side hard coated sheet using SABIC's MARGARD™ coating, offering transparency, high impact resistance, good stiffness and strength, mar- and abrasion-resistance, and excellent heat release and flammability characteristics, making it an excellent candidate for the transportation applications, especially for the aircraft interiors.

### TYPICAL PROPERTY VALUES

PROPERTY	TEST METHOD	UNITS	VALUE
<b>PHYSICAL</b>			
Sheet thickness availability	Sabic Internal	mm	1.5-3.2
Specific gravity	ASTM D792	g/cm <sup>3</sup>	1.31
Light transmission, 2 mm	ASTM D1003	%	81
Refractive index	Sabic Internal		1.62
Rockwell hardness	ASTM D785		M78,R125
Water absorption, equilibrium	ISO 62	%	0.15
<b>MECHANICAL</b>			
Tensile strength at Yield	ASTM D638	MPa	78.7
Nominal strain at Break	ASTM D638	%	12.3
Tensile strain at Break	ASTM D638	MPa	62.9
Modulus of Elasticity	ASTM D638	MPa	2514
Elongation at Yield	ASTM D638	%	6.0
Elongation at Break	ASTM D638	%	10.9
Taber haze - 100 cycles, 500 gram, CS-10F	ASTM D1044	%	4 - 6
Taber haze - 500 cycles, 500 gram, CS-10F	ASTM D1044	%	6 - 8
<b>THERMAL</b>			
Vicat softening Temperature, 50N, 120°C/h	ASTM D1525	°C	136
Heat deflection Temperature, 1.82 MPa	ASTM D648	°C	128
Thermal conductivity	ASTM C177	W/m.°C	0.2
Coefficient of thermal expansion	ISO 11359-2	1/°C	5.5x10 <sup>-5</sup>
Mold Shrinkage	Sabic Internal	%	0.6 - 0.8
<b>IMPACT</b>			
Izod impact, notched 23°C	ISO 180/1A	kJ/m <sup>2</sup>	28
Izod impact strength, notched -30°C	ISO 180	kJ/m <sup>2</sup>	5.9
Ductility	ASTM D256	%	50
Multi Axial Impact Total Energy, 23°C	ASTM D3763	J	50.6
<b>FIRE RATINGS</b>			
<b>Aircraft</b>			
Vertical Burn, 60 s	FAR 25.583(a) App.F	-	Pass
Smoke density	ABD0031	-	Pass <50
Smoke toxicity	ABD0031, BSS 7239	-	Pass
OSU total heat release, 2 min	FAR 25.583(d) App.F	Kw.min/m <sup>2</sup>	Pass <55
OSU peak heat release rate, 5 min	FAR 25.583(d) App.F	kW/m <sup>2</sup>	Pass <55

◆ 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 of storage at 23°C/50% relative humidity.

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