

LEXAN™ HPXXE FILM

PRODUCT DATASHEET

DESCRIPTION

LEXAN™ HPXXE graphic films are high-performance coated films offering excellent chemical and highest abrasion resistant package of any films in the SABIC graphic film product line. Features include: Extreme durability of coating, 1/8" Mandrel bend flexibility, Gouge resistance, excellent clarity and consistency of gloss level.

Note: LEXAN™ HPXXE film cannot be first surface printed with graphics or textures and it is not suggested for 3D forming.

TYPICAL PROPERTY VALUES

PROPERTY	ASTM TEST METHOD	UNITS (USCS)	VALUE	ISO TEST METHOD	UNITS (SI)	VALUE
MECHANICAL						
Tensile Strength @ Yield	ASTM D882	psi	8800	ISO 527	MPa	60
Ultimate	ASTM D882	psi	9000	ISO 527	MPa	62
Tear Strength						
Initiation	ASTM D1004	lb/mil	1.51	ISO 34	kN/m	264
Propagation	ASTM D1922	g/mil	40		kN/m	14
THERMAL						
Vicat Softening Temperature, B	ASTM 1525	°F	320	ISO 306	°C	160
Heat Deflection Temp. by TMA at 1.8 Mpa		°F	290	ISO 75 Modified	°C	145
Shrinkage at 302°F (150°C)	ASTM D1204	%	1.40%			1.40%
PHYSICAL						
Density	ASTM D792		2.3	ISO 1183	kg/m ³	1200
Pencil Hardness	ASTM D3363					
Taber Abrasion	ASTM D1044	delta Haze	4			
OPTICAL						
Light Transmission	ASTM D1003	%	92			
Yellowness Index	ASTM D1925	%	0.7			
Haze	ASTM D1003	%	0.5			

◆ These are typical properties and are not intended for specification purposes. If minimum certifiable properties are required, please contact your local SABIC representative or the SABIC Quality Services Department.

Reported Values are Based on 0.010" (0.250 mm) Thickness unless otherwise noted.

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MANUFACTURING SPECIFICATIONS

NOMINAL GAUGE RANGES	MIN./MAX LIMIT OF NOMINAL
0.007" (0.175mm)	-10% / +24%
0.010" (0.250mm)	-10% / +20%
0.015" (0.375mm)	-5% / +12%
0.020" (0.500mm)	-5% / +10%

CHEMICAL RESISTANCE

CHEMICAL	RESULTS
One Hour Continuous Surface Contact at 73° F	
Acetone	Passed
MEK	Passed
Toluene	Passed
Methylene Chloride	Passed
Isopropyl Alcohol	Passed
Cyclohexane	Passed
Ethyl Acetate	Passed
40% NaOH	Passed
Conc.HCL	Passed
Gasoline (Unleaded)	Passed
Butyl Cellosolve	Passed

Failure constitutes any of the following: non-removable stain or cloudiness, blistering, delamination, or cracking of the coating or failure to pass crosshatch tape adhesion.

SAFETY

The processing guidance given in this documentation is given in good faith and the trust that in all cases you wear the correct Personal Protective Equipment (PPE), e.g. helmet, proper gloves, safety goggles etc. to safely fabricate, e.g. (but not limited to) sawing, cutting, forming our sheets and films. In all cases you should follow local and national regulations around the wear of PPE's prescribed or mandatory to perform these tasks in a safely manor.

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