

LEXAN™ HPXXT FILM

PRODUCT DATASHEET

DESCRIPTION

LEXAN™ HPXXT graphic films is a high-performance flexible hard coated film which offers very good abrasion and chemical resistance. This highly durable film looks to create new opportunities in coated film application designs whose potential benefits include: enhanced formability, embossing and lower taber haze compared to existing LEXAN™ HP films. HPXXT films can be thermoformed up to 10% thinning at standard forming conditions. This film also offers good chemical resistance against several industrial chemicals and household cleaners.

LEXAN™ HPXXT hard coated film is available in 48” widths and gauges from 0.007” to 0.030”. Masking is of the cling type on the uncoated side and of the stick type on the coated side. This hard coated film is available in 12, 40, 60 and 92 glosses.

TYPICAL PROPERTY VALUES

PROPERTY	ASTM (ISO) TEST METHOD	UNITS USCS (SI)	HP92T
MECHANICAL			
Tensile Strength @ Yield	ASTM D882 (ISO 527)	psi (MPa)	8800 (60)
Ultimate	ASTM D882 (ISO 527)	psi (MPa)	9000 (62)
Tear Strength			
Initiation	ASTM D1004	lb/mil (kN/m)	1.51 (264)
Propagation	ASTM D1922	g/mil (kN/m)	40 (14)
THERMAL			
Vicat Softening Temperature, B	ASTM 1525	°F (°C)	320 (160)
Heat Deflection Temp. by TMA at 1.8 Mpa	ISO 75 Modified	°F (°C)	290 (145)
Shrinkage at 302°F (150°C)	ASTM D1204	%	1.40%
PHYSICAL			
Density	ASTM D792 (ISO 1183)	slug/ft ³ (kg/m ³)	2.3 (1200)
Surface Tension (1st surface / 2 nd surface)	Dyne Pens	Dyne	34/38-40
Pencil Hardness (coated surface)	ASTM D3363	-	HB
Taber Abrasion	ASTM D1044	delta Haze	4
OPTICAL			
Light Transmission	ASTM D1003	%	92
Yellowness Index	ASTM D1925	%	0.6
Haze	ASTM D1003	%	0.2
Gloss over Flat Black min/max @ 60	ASTM D523-60 (ISO 2813)	-	89-92

◆ 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.

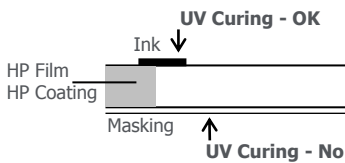
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MANUFACTURING SPECIFICATIONS

NOMINAL GAUGE RANGES	MIN./MAX LIMIT OF NOMINAL
0.007" (0.175mm)	-/+ 10%
0.010 - 0.015" (0.250 - 0.375mm)	-/+ 5%
0.020 - 0.030" (0.500 - 0.750mm)	-/+ 3%

MASKING

The standard masking on HP film is not designed to have UV radiation (for curing) passed through it. If this is required, alternate masking is available. Please contact your sales representative for more details.



CHEMICAL RESISTANCE

CHEMICAL	RESULTS [†]
One Hour Continuous Surface Contact at 73° F	
Isopropyl Alcohol	Passed
Cyclohexanone	Passed
Butyl Cellosolve	Passed
40% NaOH	Passed
Concentrated HCl	Passed
Gasoline (Regular)	Passed
Gasoline (Unleaded)	Passed
24 hour continuous Surface Contact at 120°F	
Coffee	Passed
Formula 409 [#]	Passed
Windex w/ Ammonia D ^{###}	Passed
Clorox [*]	Passed
Mustard	Passed
Ketchup	Passed
Tea	Passed
Lemon Juice	Passed
Sunscreen SPF 15	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.

^{††} Post cure conditions: One elliptical focused medium pressure mercury vapor lamp at 300 watts/inch and a conveyor speed of 20 feet/minute

[#] Formula 409 and Clorox are registered trademarks of the Clorox Company

^{*} Top Job, Downy, and Mr. Clean are registered trademarks of Procter & Gamble

^{**} Fantastik and Spray 'N Wash are registered trademarks of Texize, Division of Norton Norwich Products, Inc.

^{###} Windex w/Ammonia D is a registered trademark of Drackett Products Company

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