LEXAN® HPXXS FILM

Product Data Sheet

DESCRIPTION

LEXAN® HPXXS graphic film is a high-performance coated film offering very good chemical/abrasion resistance, together with unique processing characteristics. This highly durable, easily printed film creates new opportunities in graphic design with a unique package of benefits:

- Flexible UV processing
- Multiple topside selective texturing
- Colored topside texturing
- Durability of coating and texture adhesion when exposed to strong household chemicals such as Wisk or Formula 409
- Good appearance

LEXAN HPXXS film is available in 48" widths and gauges from .007" to .030". Masking is of the cling type on the uncoated side and of the stick type on the coated side.

TYPICAL PROPERTY VALUES*

Property	Test Method	Units	Value			
			HP92S	HP60S	HP40S	HP12S
PHYSICAL						
Specific Gravity	ASTM D792	–	1.20	1.20	1.20	1.20
Area Factor	Calculation	ft^2/lb/mil	160	160	160	160
Haze	ASTM D1003	%	<0.5	6.4	23	45
Light Transmission (Average)	ASTM D1003	%	92	92	91	90
Yellowness Index	ASTM D1925	–	1.0	1.0	1.0	1.0
Water Absorption, Equilibrium	ASTM D570	%	.40	.40	.40	.40
Resistance to Humidity, 720 Hrs @ 100°F, 100% RH	GE Test	–	**	**	**	**
Gloss–Backpainted, Flat Black	ASTM D523	Gardner				
@ 60°			92	62	40	12
@ 85°			–	–	–	45
@ 20°			84	–	–	–
Clear Over White						
@ 60°			165	103	64	27
@ 85°			–	–	–	45
@ 20°			181	–	–	–
MECHANICAL						
Tensile Strength	ASTM D882	psi				
@ Yield			8,500	8,500	8,500	8,500
Ultimate			8,800	8,800	8,800	8,800
Tear Strength						
Initiation	ASTM D1004	lb/mil	1.4	1.4	1.4	1.4
Propagation	ASTM D1922	g/mil	30	30	30	30
THERMAL						
Heat Aging @ 168 Hrs, 180°F	GE Test	—	**	**	**	**

**No visible change.

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**These are typical properties and are not intended for specification purposes. If minimum certifiable properties are required, please contact your local GE Plastics Structured Products representative or the GE Plastics Structured Products Quality Services Department.*

(continued on reverse)

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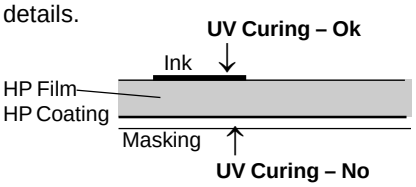
MASKING

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 AND ABRASION RESISTANCE

A unique feature of LEXAN HPXXS films is receptivity to multiple-pass, first-surface decoration for selective textures and/or color graphics. This feature requires that the coating be chemically sensitive to a variety of ink formulations. As a result, the coating is subject to attack by aggressive industrial chemicals and some strong household cleaners. Both the chemical resistance and hardness of the coating can be enhanced by exposing the coated surface of the film to UV ink curing conditions.

For more information call: (800) 451-3147.

CHEMICAL RESISTANCE

Chemical	Results*	
	As Manufactured	Post Cured**
One Hour Continuous Surface Contact at 73°F		
Acetone	Failed	Passed
MEK	Failed	Passed
Toluene	Failed	Passed
Methylene Chloride	Failed	Passed
Isopropyl Alcohol	Passed	Passed
Cyclohexanone	Failed	Passed
Ethyl Acetate	Failed	Passed
Xylene	Failed	Passed
40% NaOH	Failed	Passed
Concentrated HCl	Passed	Passed
Gasoline (Regular)	Passed	Passed
Gasoline (Unleaded)	Passed	Passed
Butyl Cellosolve	Failed	Passed
24 Hour Surface Exposure at 120°F		
Coffee	Failed	Passed
Top Job[1]	Failed	Passed
Fantastik[2]	Passed	Passed
Formula 409[3]	Failed	Passed
Windex w/Ammonia D[4]	Failed	Passed
Wisk5	Failed	Passed
Downy[1]	Passed	Passed
Spray 'N Wash[2]	Passed	Passed
Clorox[3]	Failed	Passed
Mustard	Failed	Passed
Mr. Clean[1]	Passed	Passed
Ketchup	Passed	Passed
Tea	Passed	Passed
Tomato Juice	Passed	Passed
Lemon Juice	Passed	Passed
Grape Juice	Passed	Passed
Vinegar	Passed	Passed
Milk	Passed	Passed

TABER ABRASION RESISTANCE (ASTM D1044) LEXAN HP92S Graphic Film

Condition	Units	As Manufactured	Post Cured**
CS10F wheel, 500 grams			
25	Change in % Haze	1.7	1.0
50	Change in % Haze	3.2	2.0
100	Change in % Haze	6.5	4.1
200	Change in % Haze	12.9	9.0

*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.

GE Structured Products

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* Not connected with the English company of similar name.