POLYVANTIS

PRODUCT DATASHEET

LEXAN™ SD14UV FILM

DESCRIPTION

LEXAN™ SD14UV Film is a one side fine velvet (FV), one side fine matte (FM) clear transparent laser markable polycarbonate overlay film that is typically used in government security documents, such as passport data pages, ID cards, driving licenses, … Beside great printability and ease of processing (laminating, die-cutting, hot stamping), it offers the possibility to apply personalized security features into the card by use of UV laser marking. LEXAN SD14UV Film is available in 50 and 100µm.

TYPICAL PROPERTY VALUES*

PROPERTY	ASTM TEST METHOD	UNITS (USCS)	VALUE	ISO TEST METHOD	UNITS (SI)	VALUE
MECHANICAL						
Tensile Strength @Yield	ASTM D882	psi	7830	ISO 527	MPa	54
@Break	ASTM D882	psi	9700	ISO 527	MPa	67
Tensile Modulus	ASTM D882	psi	300 x10^3	ISO 527	MPa	2080
Tensile Elongation at Break	ASTM D882	%	137	ISO 527	%	137
THERMAL						
Coefficient of Thermal	ASTM E831	(x 10-5 / °F)	4.2	ISO 11359	(x 10-5 / °C)	7.5
Vicat Softening Temperature, B50	ASTM 1525	°F	295	ISO 306	°C	147
Shrinkage at 130°C, 30min	Internal method	%	0.17	Internal method	%	0.17
PHYSICAL						
Density	ASTM D792	slug/ft^3	2.33	ISO 1183	g/cm^3	1.20
Water Absorption, 24 hrs.	ASTM D570	% change	0.09	ISO 62	% change	0.09
Surface Roughness Ra		µin	23[FM]	ISO4288	µm	0.6 [FM]
			102[FV]			2.6[FV]
Surface Tension	Dyne solutions	Dyne/cm	44 [FM]	Dyne solutions	Dyne/cm	44 [FM]
			38 [FV]			38 [FV]
OPTICAL						
Light Transmission	ASTM D1003	%	84		%	84
Color: b-value	CIELab, Reflection,		3.26	CIELab, Reflection,		3.26
	D65, 10°			D65, 10°		

◆ These are typical properties and are not intended for specification purposes. If minimum certifiable properties are required, please contact your local POLYVANTIS, Film & Sheet representative or the Quality Services Department. Reported Values are based on 0.100 mm (0.004") thickness film, except for the Coefficient of thermal expansion, Vicat softening temperature, Heat deflection temperature and water absorption, which are based on molded parts.

NOMINAL GAUGE RANGES	MIN./MAX LIMIT OF NOMINAL
0.050 – 0.100 mm	± 5%

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www.polyvantis.com

LEXAN™ POLYCARBONATE FILM & SHEET Tough, Virtually Unbreakable

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