

LEXAN™ OQ6DAW FILM

PRODUCT DATASHEET

DESCRIPTION

LEXANTM OQ6DAW is a high-performance dual coated film which offers very good pencil hardness and chemical/abrasion resistance, together with unique processing characteristics in a sheeted finished. This highly durable sheeted film may help create new opportunities in graphic design whose potential benefits may include: pencil hardness, anti-scratch and chemical resistance. LEXAN OQ6DAW film is available in gauges in 1.0 mm. Masking is of the stick type on both sides.

TYPICAL PROPERTY VALUES

PROPERTY	ASTM TEST METHOD	UNITS USCS	VALUE	ISO TEST METHOD	UNITS (SI)	VALUE
MECHANICAL Tensile Strength @ Ultimate	ASTM D882	psi	8323	ISO 527	MPa	51.1
Tensile Modulus	ASTM D882	psi	352000	ISO 527	MPa	2318
Tensile Elongation at Break	ASTM D882	%	5.6	ISO 527	%	5.2
Puncture Resistance (Dynatup)	ASTM D3763	ft-lb/in	20.3		J/mm	1.1
THERMAL Resistance to Humidity 720Hrs @100°F, 100%R.H.	ASTM D3359		5B			5B
Heat Aging @168 Hrs, 180°F	ASTM D3359		5B			5B
PHYSICAL						
Density	ASTM D792	slug/ft ³	2.3	ISO 1183	kg/m ³	1200
Water Absorption, 24 hrs.	ASTM D570	% change	0.12	ISO 62	% change	0.12
Area Factor Surface Tension	Calculation Dyne Pens	ft²/lb/mil Dyne	145 30	Calculation	m²/kg/mm	0.75
Pencil Hardness						
PMMA	ASTM D3363	-	3-4H			
PC	ASTM D3363		HB-F			
Taber Abrasion @ 25 cycles	ASTM D1044	% haze change	2.4	ISO 5470	% haze change	2.4
50 cycles	ASTM D1044	% haze change	2.9	ISO 5470	% haze change	2.9
100 cycles	ASTM D1044	% haze change	4.4	ISO 5470	% haze change	4.4
200 cycles	ASTM D1044	% haze change	7.2	ISO 5470	% haze change	7.2
OPTICAL						
Light Transmission	ASTM D1003	%	92			
Yellowness Index	ASTM D1925	%	<1.0			
Haze Gloss over Flat Black @ 60°	ASTM D1003 ASTM D523-60	% GU	0.12 93	ISO 2813	GU	93
20°	ASTM D523-60	GU	89	ISO 2813	GU	89
Gloss over White @ 60°	ASTM D523-60	GU	94	ISO 2813	GU	94
20°	ASTM D523-60	GU	90	ISO 2813	GU	90
ELECTRICAL	7.0 2020 00			100 20 10		
Dielectric Constant						
@ 1.1 GHz	ASTM D150		2.82	IEC 60250	-	2.82
Dissipation Factor						
@ 1.1 GHz	ASTM D150	-	.008	IEC 60250	-	0.008
Volume Resistivity	ASTM D257	Ω-cm	4.5E+16	IEC 60093	Ω-cm	4.5E+16
Surface Resistivity	ASTM D257	Ω/square	5.0E+15	IEC 60093	Ω/square	5.0E+15

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 1.00 mm thickness film and are tested at machine direction unless otherwise noted.

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MANUFACTURING SPECIFICATIONS

NOMINAL GAUGE RANGES	MIN./MAX LIMIT OF NOMINAL		
1.0 mm	± 3%		

CHEMICAL RESISTANCE

PROPERTY CHEMICAL	RESULTS			
One Hour Continuous Surface Contact at 73 °F †				
Acetone	Pass			
MEK	Pass			
Toluene	Pass			
Methylene Chloride	Pass			
Isopropyl Alcohol	Pass			
Kerosene	Pass			
Ethyl Acetate	Pass			
5% NaCl	Pass			
40% NaOH	Pass			
30% H ₂ SO ₄	Pass			

24 hour continuous Surface Contact at 73 °F †				
Olive oil	Pass			
Nivea Sun Lotion SPF 30	Pass			
Nivea SOS Hand Cream	Pass			
Vaseline Intensive Care Hand Cream	Pass			

[†] 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.

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