



GE Structured Products

LEXAN® T2F OQ™ FILM

Product Data Sheet

DESCRIPTION

LEXAN® T2F OQ (optical quality) film offers excellent clarity, low-stress, low optical retardation, and superior cleanliness for a wide variety of applications. LEXAN T2F OQ film has a very smooth surface finish on both sides while maintaining low levels of stress inherent in the web.

Manufactured in a clean-room environment using optical quality LEXAN resin, T2F OQ has improved gauge tolerance and a selection of masking materials available for protection.

TYPICAL PROPERTY VALUES*

Property	Test Method	Units	Values
PHYSICAL			
Specific Gravity	ASTM D792	–	1.20
Area Factor	–	ft ² /lb/mil m ² /kg/mm	160.0 0.833
Water Absorption, Equilibrium	ASTM D570	%	0.40
Resistance to Humidity	720 hrs @ 95°F, 100% R.H.	–	Pass
OPTICAL			
Refractive Index @ 77°F	ASTM D542A	–	1.586
Light Transmission	ASTM D1003	%	88–89
Yellowness Index	ASTM D1925	–	<0.7
Haze		%	<1
Retardation	ASTM D4093	nm	<100
MECHANICAL			
Tensile Strength @ Yield	ASTM D882	psi	8,500
Ultimate			9,000
Tensile Modulus	ASTM D882	psi	300,000
Elongation	ASTM D882	%	100-150
Gardner Impact Strength @ 30 mils	Gardner	in-lbs	120
Tear Strength			
Initiation	ASTM D1004	lb/mil	1.4-1.8
Propagation	ASTM D1922	g/mil	30-55
Burst Strength–Mullen @ 1 mil	ASTM D774	psig	40-45
ELECTRICAL			
Dielectric Strength @ 72°F in Oil, Short Time, 10 mils	ASMT D149	V/mil	1,700
Dielectric Constant @ 60 Hz	ASTM D140	–	2.99
@ 1,000,000 Hz			2.93
Dissipation Factor @ 60 Hz	ASTM D150	–	.001
@ 1,000,000 Hz			.011
Volume Resistivity	ASTM D257	ohm-cm	10 ¹⁶
Surface Resistivity		ohm-sq	10 ¹⁵
Arc Resistance, Tungsten Electrodes	ASTM D495	sec	120

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T2F OQ is a trademark of General Electric Company

(continued on reverse)

*This data has been derived from GE Plastics resin used in the production of LEXAN T2F OQ film. This data does not reflect actual testing of LEXAN T2F OQ film, and is not intended for specification purposes.

MANUFACTURING INFORMATION

The manufacturing guidelines presented here outline the quality standards to which GE Plastics produces its films. More stringent standards can be agreed to on a case-by-case basis, depending upon the requirements of a particular application or process. Such changes may result in a change in sales price or conditions.

For more information call: (800) 451-3147 or (413) 448-5400.

PROPERTY	UNITS	LIMITS	
Gauge Variation	%	± 2.5%	
Web Edge Curl*	Inches		<u>MASKED</u> <u>UNMASKED</u>
		Machine Direction (MD)	10 mils 0.70 0.25 11-15 mils 0.50 0.25
		Transverse Direction (TD)	10 mils 0.10 0.10 11-15 mils 0.10 0.10

*Films from .015" to .020" in gauge may contain curl due to roll set. This property can be minimized by reverse winding the rolls approximately 48 hours prior to sheeting.

MASKING

Stick	Free from creases and folds
Cling	Remains on film through sheeting process Easily removed in one continuous sheet

T2FOQ GRAPHICS QUALITY (all gauges)

Defect Size (inches)	Number of Visible Defects
>.025	0/sq.ft.
>.015	.5/sq.ft.
>.005	7/sq.ft.

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