POLYVANTIS

PRODUCT DATASHEET

LEXAN™ TP802 FILM

DESCRIPTION

LEXANTM TP802 film is a coloured fluorescent thermoplastic polycarbonate film with both sides polish, featuring outstanding printability and good dimensional stability at high temperatures. It also offers good outdoor weatherability between 3 to 5 years.

TYPICAL PROPERTY VALUES*

PROPERTY	ASTM TEST METHOD	UNITS (USCS)	VALUE	ISO TEST METHOD	UNITS (SI)	VALUE
MECHANICAL						
Tensile Strength @ Yield	ASTM D882	psi	6091.6	ISO 527	MPa	42
Ultimate	ASTM D882	psi	7832	ISO 527	MPa	54
Tensile Modulus	ASTM D882	psi	230755	ISO 527	MPa	1591
Tensile Elongation at Break	ASTM D882	%	143	ISO 527	%	143
THERMAL						
Coefficient of Thermal Expansion						
CTE -20~170°C, crossflow	ASTM E831	(x10-5/°F)	5.5	ISO 11359-2	(x10-5/°C)	9.86
CTE -20~170°C, inflow	ASTM E831	(x10-5/°F)	5.7	ISO 11359-2	(x10-5/°C)	10.2
Coefficient of Thermal Conductivity	ASTM E1461	Btu/hr/ft2/°F/i			W/m°K	0.24
Glass Transition Temperature		°F	293	ISO 11357	°C	145
Vicat Softening Temperature, B	ASTM 1525-00	°F	284		°C	140
Heat Deflection Temp. by TMA		°F		ISO 75 Modified	°C	130
Shrinkage at 266°F (130°C) TD/MD	ASTM D1204	%				0% /
Shrinkage at 302°F (150°C) TD/MD	ASTM D1204	%			%	0.3% /
PHYSICAL						
Density	ASTM D792	slug/ft3		ISO 1183	g/cm3	1.2*10^3
Surface Energy(1st surface/ 2nd	Dyne Pens	Dyne			Dyne	36/36
Water Absorption, 24 hrs.	ASTM D570	% change		ISO 62	% change	0.07
Electrical						
Volume Resistivity						
Yellow	ASTM D257	Ω-cm		IEC 60093	Ω-cm	1.5E17
Orange	ASTM D257	Ω-cm		IEC 60093	Ω-cm	2.3E16
Surface Resistivity						
Yellow	ASTM D257	Ω/square		IEC 60093	Ω/square	8.1E14
Orange	ASTM D257	Ω/square		IEC 60093	Ω/square	2.5E16

- These are typical properties and are not intended for specification purposes. If minimum certifiable properties are required, please contact your local POLYVANTIS representative or the POLYVANTIS Quality Services Department. Reported values are based on 0.250 mm (0.010") thickness film unless otherwise noted.

MANUFACTURING SPECIFICATIONS

NOMINAL GAUGE RANGES	MIN./MAX LIMIT OF NOMINAL
0.005"-0.007" (0.125mm-0.178 mm)	-/+5%

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