POLYVANTIS

PRODUCT DATASHEET

LEXAN™ PTFR SHEET

DESCRIPTION

LEXAN™ PTFR sheet is a standard flame retardant transparent Polycarbonate sheet. In addition to good flammability performance, it offers excellent impact resistance, high optical quality, good stiffness and strength and ease of processing, making it an excellent candidate for a wide variety of applications in the electrical, electronic, and transportation, building and construction industries.

TYPICAL PROPERTY VALUES*

PROPERTIES	TEST METHODS	UNITS	TYPICAL VALUES
MECHANICAL			
Tensile Stress, yld, Type I, 50	ASTM D 638	MPa	62
Tensile Strain, yld, Type I, 50	ASTM D 638	%	7
Flexural Stress, yld, 1.3 mm/min,	ASTM D 790	MPa	91
Flexural Modulus, 1.3 mm/min,	ASTM D 790	MPa	2240
IMPACT			
Izod Impact, unnotched, 23°C	ASTM D 4812	J/m	3204
Izod Impact, notched, 23°C	ASTM D 256	J/m	640
Tensile Impact Strength, Type	ASTM D 1822	kJ/m^2	525
THERMAL			
Vicat Softening Temp, Rate	ASTM D 1525	°C	151
HDT, 1.82 MPa, 6.4 mm,	ASTM D 648	°C	132
CTE, -40°C to 95°C, flow	ASTM E 831	1/°C	6.84E-05
Thermal Conductivity	ASTM C177	W/m-°C	0.19
PHYSICAL			
Density	ASTM D 792	g/cm^3	1.217
Water Absorption, 24 hours	ASTM D 570	%	0.15
Water Absorption, equilibrium,	ASTM D 570	%	0.35
OPTICAL			
Light Transmission, 2.54 mm	%	%	85
ELECTRICAL			
Volume Resistivity	Ohm-cm	Ohm-cm	>1.E+17
Dielectric Strength, in air, 3.2	kV/mm	kV/mm	16.7

* These property values have been derived from LEXAN™ resin data for the material used to produce this sheet product. Variations within normal tolerances are possible for various colors. These typical values are not intended for specification purposes. If minimum certifiable properties are required, please contact your local sales representative. All values are measured at least after 48 hours storage at 23°C/50% relative humidity. All properties are measured on injection molded samples. All samples are prepared according to ISO 294.

PROPERTIES	TEST METHODS	UNITS	TYPICAL VALUES
FIRE RATINGS+			
Electrical			
Vertical burn	UL94 VB	-	V2 (1.0-2.2mm) V0 (3mm-6mm)

+ The above values have been derived from LEXAN™ sheet product.

FIRE PERFORMANCE

LEXAN™ PTFR sheet has good fire behavior characteristics & is UL certified. LEXAN™ PTFR sheet does not contribute significantly to the spread of fire or to the generation of toxic gases. For details, please contact your local sales office.

ASSEMBLING

Parts made from LEXAN™ PTFR sheet can be assembled with plastics, metals, rubber, and other materials using many types of adhesive bonding, welding, and mechanical fastening techniques. Since some of these materials can cause environmental stress cracking, please consult local sales representative for advice on specific applications.

CHEMICAL RESISTANCE

LEXAN™ PTFR sheet has sufficient resistance to most mineral oils, greases, aliphatic hydrocarbons, and acids under low or moderate stress levels. In applications where the LEXAN™ PTFR sheet will come into contact with aggressive chemicals, specific (application related) testing is always advised. Effective painting systems can improve chemical resistance.

PRODUCT AVAILABILITY+

Product code	:	LEXAN™ PTFR Sheet
Standard size	:	1220mm x 2440mm
Gauges	:	1mm, 1.5mm, 2mm, 3mm, 4mm, 6mm
Masking	:	LEXAN printed masking on top, clear masking on bottom.
Textures	:	Polished/Polished
Color	:	Clear 112

+Other sizes are available by special request with additional cost.

POLYVANTIS

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LEXAN™ POLYCARBONATE FILM & SHEET Tough, Virtually Unbreakable

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