



PRODUCT DATASHEET

LEXAN™ 3000PIR SHEET

DESCRIPTION

LEXAN™ 3000PIR sheet is a circular product made from post-industrial waste. 3000PIR sheet can be cut, sawn, drilled and milled by using standard workshop equipment and is therefore an excellent candidate for fabricating a wide range of indoor applications such as machine guards. 3000PIR sheet can be easily thermoformed into complex parts while retaining its properties necessary for demanding applications. 3000PIR sheet may be decorated using a wide variety of modern techniques such as painting and screen-printing.

TYPICAL PROPERTY VALUES*

PROPERTY	TEST METHOD	UNITS	VALUE
PHYSICAL			
Density	ISO 1183	g/cm ³	1.20
Water absorption, 50% RH, 23 °C	ISO 62	%	0.15
Water absorption, saturation, 23°C	ISO 62	%	0.35
MECHANICAL			
Yield stress 50 mm/min	ISO 527	MPa	>60
Yield strain 50 mm/min	ISO 527	%	6
Nominal strain at break 50 mm/min	ISO 527	%	>100
Tensile modulus 1 mm/min	ISO 527	MPa	2300
Flexural strength 2 mm/min	ISO 178	MPa	90
Flexural modulus 2 mm/min	ISO 178	MPa	2300
IMPACT			
Charpy impact, notched 23°C, 3.0 mm	ISO 179/1eA	kJ/m ²	75
Izod impact, unnotched 23°C, 3.0 mm	ISO 180/1U	kJ/m ²	NB
Izod impact, notched 23°C, 3.0 mm	ISO 180/1A	kJ/m ²	70
THERMAL			
Vicat softening temperature, B/120	ISO 306	°C	145
Temperature of deflection under load (type A), 1.8 MPa, flat	ISO 75-2	°C	127
Thermal conductivity	ISO 8302	W/m.°C	0.2
Coefficient of linear thermal expansion, 23-55°C	ISO 11359-2	1/°C	7x10 ⁻⁵
Ball pressure test 125 ±2°C	IEC 60695-10-2	-	Pass
Relative Thermal Index, Electrical properties	UL746B	°C	130
Relative Thermal Index, Mechanical properties with impact	UL746B	°C	125
Relative Thermal Index, Mechanical properties without impact	UL746B	°C	125
ELECTRICAL			
Volume resistivity	IEC 60093	Ohm.cm	>10 ¹⁵
Dielectric strength, in oil, 3.2 mm	IEC 60243-1	kV/mm	18

*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.

LIGHT TRANSMISSION

LEXAN™ 3000PIR sheet has an excellent light transmission, depending on thickness between 84 - 87%.

FIRE PERFORMANCE

LEXAN 3000PIR sheet has good fire behaviour characteristics. LEXAN 3000PIR 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.

CHEMICAL RESISTANCE

LEXAN 3000PIR sheet has sufficient resistance to most mineral oils, greases, aliphatic hydrocarbons and acids under low or moderate stress levels. Specific (application related) testing is always advised, especially in applications where the WLS sheet will come into contact with aggressive chemicals.

REVINK

LEXAN 3000PIR has been made out of post-industrial waste, which is recovered through the ReVink program, part of Vink Kunststoffen B.V. The ReVink program focuses on chain collaboration between distributors, processors, and manufacturers by collecting and processing off-cuts into raw material without significant loss of material properties. Therefore, this circular sheet contributes to a more sustainable world by reducing the use of finite natural resources.

PRODUCT AVAILABILITY:

Product code:	LEXAN™ 3000PIR Sheet
Gauges:	2-15 mm
Standard size:	2050 X 3050
Colors:	CLEAR - transparent

POLYVANTIS

www.polyvantis.com

