POLYVANTIS

PRODUCT DATASHEET

LEXAN™ 9030 & 9030TG SHEET

DESCRIPTION

LEXAN™ 9030(TG) sheet is the standard general purpose LEXAN sheet. LEXAN 9030(TG) sheet combines high impact and temperature resistance with optical clarity and can be utilized for secondary glazing behind existing glazing for economical protection against breakage or intrusion. LEXAN 9030(TG) 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. LEXAN 9030(TG) sheet can be easily thermoformed into complex parts while retaining its excellent properties necessary for demanding applications. LEXAN 9030(TG) 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/cm³	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/m²	75
Izod impact, unnotched 23°C, 3.0 mm	ISO 180/1U	kJ/m²	NB
Izod impact, notched 23°C, 3.0 mm	ISO 180/1A	kJ/m²	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.

PROPERTY	TEST METHOD	UNITS	VALUE
FIRE RATING			
Building & Construction			
Europe	EN 13501-1	-	B, s1, d0 (2-6mm)
UL LISTING SHEET			
UL File# E539252			

LIGHT TRANSMISSION

Transparent LEXAN™ 9030 sheet have excellent light transmission, dependent of thickness between 84 - 87%.

Colour - τv (%)*	0.75	1mm	3mm	4mm	5mm	6mm	8mm	9.5mm	12mm	15mm
112 – Clear	91	90	89	88	88	87	85	85	85	80
5109 – Bronze	50	50	50	49	49	49	50	50	NPD	n/a
713 – Grey	n/a	n/a	50	49	49	49	50	50	NPD	n/a
WH6D060X	n/a	n/a	44	38	33	28	20	n/a	n/a	n/a

* Tolerance of ± 5%

FIRE PERFORMANCE

LEXAN 9030 sheet has good fire behaviour characteristics. LEXAN 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.

PRODUCT AVAILABILITY[o)]

Product code: **LEXAN™ 9030TG Sheet**
Gauges: **0.75-1.5 mm**
Standard size: 1250 x 2050mm
Masking: Top side: Coex opal white PE Dark-blue print
Bottom side: Coex transparent PE
Colors: Clear 112 & Bronze 5109

Product code: **LEXAN™ 9030 Sheet**
Gauges: **2-15 mm**
Standard size: 1250 x 2050mm, 2050 x 3050mm
Masking: Top side: Coex opal white PE Dark-blue print
Bottom side: Coex transparent PE
Colors: Clear 112
Bronze 5109 - max 12mm
Opal White WH4D348O & WH6D060X - max 8mm

[o)] LEXAN™ 9030 sheet can be supplied by prior arrangements in non - standard widths, lengths, and color. Such arrangements may affect prices, terms and/or other conditions of sales and are subject to minimum order quantities.

POLYVANTIS

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LEXAN™ POLYCARBONATE FILM & SHEET | Tough, Virtually Unbreakable

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