

PRODUCT DATASHEET

WLS & WLSTG SHEET

DESCRIPTION

WLS and WLSTG Polycarbonate sheet is an industrial grade sheet material extruded from POLYVANTIS internally reworked polycarbonate resins. WLS and WLSTG sheet material is an excellent candidate for non-aesthetic applications requiring impact resistance, good heat resistance whether in flat sheet or requiring formability.

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
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

Transparent WLS(TG) sheet have excellent light transmission, dependent of thickness between 84 - 91%.

FIRE PERFORMANCE

WLS sheet has good fire behaviour characteristics. WLS 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:	WLS(TG) Sheet
Gauges:	0.75-1.5 mm (WLSTG) 3-9.5 mm (WLS)
Standard size:	1250 x 2050mm (0.75-4mm) 2050-3050mm (3-9.5mm)
Masking:	Polished/ Polished, cling stick masking
Colors:	112 - CLEAR

For industrial, non-aesthetic applications. There are no quality specifications associated with this product.

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