

LEXAN™ LUX9610 resin

Polycarbonate

SABIC Innovative Plastics Asia Pacific

Message:

LEXAN LUX9610 is a UV stabilized flame retardant transparent polycarbonate featuring non brominated and non chlorinated FR system with good flow and thin wall FR performance providing good colorstability under heat exposure. Developed for lightguide and LED applicatons. It meets WEEE/RoHS requirements for various applications.

General Information			
UL YellowCard	E45329-101309095		
Additive	UV stabilizer		
Features	Chlorine Free		
	Good liquidity		
	Good color stability		
	Heat resistance, medium		
	Bromine-free		
	Flame retardancy		
Uses	LEDs		
	Thin wall parts		
RoHS Compliance	RoHS compliance		
Appearance	Clear/transparent		
Processing Method	Injection molding		
Physical	Nominal Value	Unit	Test Method
Specific Gravity	1.20	g/cm³	ASTM D792, ISO 1183
Melt Mass-Flow Rate (MFR) (300°C/1.2 kg)	7.0	g/10 min	ASTM D1238
Melt Volume-Flow Rate (MVR) (300°C/1.2 kg)	7.00	cm³/10min	ISO 1133
Molding Shrinkage - Flow (3.20 mm)	0.60 - 0.80	%	Internal method
Water Absorption			ISO 62
Saturated, 23°C	0.35	%	ISO 62
Equilibrium, 23°C, 50% RH	0.15	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus			
-- ¹	2300	MPa	ASTM D638
--	2230	MPa	ISO 527-2/1
Tensile Strength			
Yield ²	62.0	MPa	ASTM D638
Yield	62.0	MPa	ISO 527-2/50
Fracture ³	65.0	MPa	ASTM D638

Fracture	58.0	MPa	ISO 527-2/50
Tensile Elongation			
Yield ⁴	6.0	%	ASTM D638
Yield	6.0	%	ISO 527-2/50
Fracture ⁵	85	%	ASTM D638
Fracture	77	%	ISO 527-2/50
Flexural Modulus			
50.0mm span ⁶	2160	MPa	ASTM D790
-- ⁷	2250	MPa	ISO 178
Flexural Stress			
--	95.0	MPa	ISO 178
Yield, 50.0mm span ⁸	95.0	MPa	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact			
23°C	760	J/m	ASTM D256
-30°C ⁹	18	kJ/m ²	ISO 180/1A
23°C ¹⁰	70	kJ/m ²	ISO 180/1A
Instrumented Dart Impact (23°C, Total Energy)	70.0	J	ASTM D3763
Thermal	Nominal Value	Unit	Test Method
Heat Deflection Temperature			
0.45 MPa, unannealed, 64.0mm span ¹¹	136	°C	ISO 75-2/Bf
1.8 MPa, unannealed, 3.20mm	125	°C	ASTM D648
1.8 MPa, unannealed, 64.0mm span ¹²	125	°C	ISO 75-2/Af
Vicat Softening Temperature			
--	142	°C	ASTM D1525 ¹³
--	145	°C	ISO 306/B120
Ball Pressure Test (125°C)	Pass		IEC 60695-10-2
Linear thermal expansion coefficient			ASTM E831
Flow: -40 to 40°C	6.8E-5	cm/cm/°C	ASTM E831
Lateral: -40 to 40°C	6.7E-5	cm/cm/°C	ASTM E831
RTI Elec	125	°C	UL 746
RTI Imp	115	°C	UL 746
RTI	125	°C	UL 746
Electrical	Nominal Value	Unit	Test Method
Comparative Tracking Index (CTI)	PLC 3		UL 746
High Amp Arc Ignition (HAI)	PLC 1		UL 746
Hot-wire Ignition (HWI)	PLC 3		UL 746
Flammability	Nominal Value	Unit	Test Method
Flame Rating (1.50 mm)	V-0		UL 94
Glow Wire Flammability Index (1.00 mm)	960	°C	IEC 60695-2-12
Glow Wire Ignition Temperature			IEC 60695-2-13

1.00 mm	850	°C	IEC 60695-2-13
1.50 mm	850	°C	IEC 60695-2-13
Optical	Nominal Value	Unit	Test Method
Refractive Index	1.586		ISO 489
Transmittance			
2540 μm	> 90.0	%	ASTM D1003
2540 μm, 420 nm	> 88.0	%	Internal method
Haze (2000 μm)	1.0	%	Internal method
Injection	Nominal Value	Unit	
Drying Temperature	120	°C	
Drying Time	2.0 - 4.0	hr	
Suggested Max Moisture	0.020	%	
Hopper Temperature	60.0 - 80.0	°C	
Rear Temperature	260 - 280	°C	
Middle Temperature	270 - 290	°C	
Front Temperature	280 - 310	°C	
Nozzle Temperature	270 - 290	°C	
Processing (Melt) Temp	280 - 310	°C	
Mold Temperature	80.0 - 110	°C	
NOTE			
1.	5.0 mm/min		
2.	Type 1, 50mm/min		
3.	Type 1, 50mm/min		
4.	Type 1, 50mm/min		
5.	Type 1, 50mm/min		
6.	1.3 mm/min		
7.	2.0 mm/min		
8.	1.3 mm/min		
9.	80*10*3		
10.	80*10*3		
11.	80*10*4 mm		
12.	80*10*4 mm		
13.	标准 B (120°C/h), 载荷2 (50N)		

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China

