

LEXAN™ EXL9330 resin

Polycarbonate
SABIC Innovative Plastics

Message:
Opaque PC-Siloxane copolymer with excellent processability. Non-chlorinated, non-brominated flame retardant product in most colors. UV-stabilized. UL rated f1/V-0/5VA.

General Information			
Additive	Flame Retardant		
	UV Stabilizer		
Features	Bromine Free		
	Chlorine Free		
	Copolymer		
	Flame Retardant		
	Good Processability		
Appearance	Opaque		
Processing Method	Injection Molding		
Multi-Point Data	Viscosity vs. Shear Rate (ASTM D3835)		
Physical	Nominal Value	Unit	Test Method
Specific Gravity			
--	1.18	g/cm ³	ASTM D792
--	1.19	g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR) (300°C/1.2 kg)	10	g/10 min	ASTM D1238
Melt Volume-Flow Rate (MVR) (300°C/1.2 kg)	9.00	cm ³ /10min	ISO 1133
Molding Shrinkage			Internal Method
Flow : 3.20 mm	0.40 to 0.80	%	
Across Flow : 3.20 mm	0.40 to 0.80	%	
Water Absorption			ISO 62
Saturation, 23°C	0.35	%	
Equilibrium, 23°C, 50% RH	0.15	%	
Outdoor Suitability	f1		UL 746C
Hardness	Nominal Value	Unit	Test Method
Ball Indentation Hardness (H 358/30)	90.0	MPa	ISO 2039-1
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus			
-- ¹	2100	MPa	ASTM D638
--	2100	MPa	ISO 527-2/1
Tensile Strength			

Yield ²	58.6	MPa	ASTM D638
Yield	55.0	MPa	ISO 527-2/50
Break ³	61.4	MPa	ASTM D638
Break	60.0	MPa	ISO 527-2/50
Tensile Elongation			
Yield ⁴	6.0	%	ASTM D638
Yield	6.0	%	ISO 527-2/50
Break ⁵	130	%	ASTM D638
Break	130	%	ISO 527-2/50
Flexural Modulus			
50.0 mm Span ⁶	2070	MPa	ASTM D790
-- ⁷	2200	MPa	ISO 178
Flexural Stress			
--	85.0	MPa	ISO 178
Yield, 50.0 mm Span ⁸	88.9	MPa	ASTM D790
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength ⁹			ISO 179/1eA
-30°C	60	kJ/m ²	
23°C	75	kJ/m ²	
Charpy Unnotched Impact Strength ¹⁰			ISO 179/1eU
-30°C	No Break		
23°C	No Break		
Notched Izod Impact			
-50°C	590	J/m	ASTM D256
-30°C	680	J/m	ASTM D256
23°C	800	J/m	ASTM D256
23°C, 6.40 mm	640	J/m	ASTM D256
-30°C ¹¹	55	kJ/m ²	ISO 180/1A
-30°C ¹²	65	kJ/m ²	ISO 180/4A
23°C ¹³	70	kJ/m ²	ISO 180/1A
23°C ¹⁴	80	kJ/m ²	ISO 180/4A
Unnotched Izod Impact			
23°C ¹⁵	1100	J/m	Internal Method
-30°C ¹⁶	No Break		ISO 180/1U
23°C ¹⁷	No Break		ISO 180/1U
Instrumented Dart Impact (23°C, Total Energy)	52.9	J	ASTM D3763
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			
0.45 MPa, Unannealed, 3.20 mm	134	°C	ASTM D648
0.45 MPa, Unannealed, 100 mm Span ¹⁸	135	°C	ISO 75-2/Be
1.8 MPa, Unannealed, 3.20 mm	121	°C	ASTM D648

1.8 MPa, Unannealed, 6.40 mm	124	°C	ASTM D648
1.8 MPa, Unannealed, 100 mm Span ¹⁹	124	°C	ISO 75-2/Ae
Vicat Softening Temperature			
--	142	°C	ASTM D1525, ISO 306/B120 13 ²⁰
--	140	°C	ISO 306/B50
Ball Pressure Test (125°C)	Pass		IEC 60695-10-2
CLTE			
Flow : -40 to 40°C	6.7E-5	cm/cm/°C	ASTM E831
Flow : 23 to 80°C	7.2E-5	cm/cm/°C	ISO 11359-2
Transverse : -40 to 40°C	6.7E-5	cm/cm/°C	ASTM E831
Transverse : 23 to 80°C	7.7E-5	cm/cm/°C	ISO 11359-2
RTI Elec	125	°C	UL 746
RTI Imp	115	°C	UL 746
RTI Str	125	°C	UL 746
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	> 1.0E+15	ohms	IEC 60093
Volume Resistivity	> 1.0E+15	ohms·cm	IEC 60093
Dielectric Strength			
3.20 mm, in Oil	17	kV/mm	ASTM D149
3.20 mm, in Oil	16	kV/mm	IEC 60243-1
Dielectric Constant			
50 Hz	2.95		ASTM D150
60 Hz	2.95		ASTM D150
1 MHz	2.90		ASTM D150
50 Hz	2.60		IEC 60250
60 Hz	2.60		IEC 60250
1 MHz	2.70		IEC 60250
Dissipation Factor			
50 Hz	2.4E-3		ASTM D150
60 Hz	2.4E-3		ASTM D150
1 MHz	8.5E-3		ASTM D150, IEC 60250
50 Hz	1.0E-3		IEC 60250
60 Hz	1.0E-3		IEC 60250
Comparative Tracking Index (CTI)	PLC 3		UL 746
Comparative Tracking Index	225	V	IEC 60112
High Amp Arc Ignition (HAI)	PLC 0		UL 746
Hot-wire Ignition (HWI)	PLC 1		UL 746
Flammability	Nominal Value	Unit	Test Method
Flame Rating			UL 94
1.50 mm	V-0		
3.00 mm	5VA		

Glow Wire Flammability Index (1.00 mm)	960	°C	IEC 60695-2-12
Glow Wire Ignition Temperature (1.00 mm)	825	°C	IEC 60695-2-13
Oxygen Index	35	%	ISO 4589-2
Injection	Nominal Value	Unit	
Drying Temperature	121	°C	
Drying Time	3.0 to 4.0	hr	
Drying Time, Maximum	48	hr	
Suggested Max Moisture	0.020	%	
Suggested Shot Size	40 to 60	%	
Rear Temperature	217 to 293	°C	
Middle Temperature	282 to 304	°C	
Front Temperature	293 to 316	°C	
Nozzle Temperature	288 to 310	°C	
Processing (Melt) Temp	293 to 316	°C	
Mold Temperature	71.0 to 93.0	°C	
Back Pressure	0.345 to 0.689	MPa	
Screw Speed	40 to 70	rpm	
Vent Depth	0.025 to 0.076	mm	
NOTE			
1.	50 mm/min		
2.	Type I, 50 mm/min		
3.	Type I, 50 mm/min		
4.	Type I, 50 mm/min		
5.	Type I, 50 mm/min		
6.	1.3 mm/min		
7.	2.0 mm/min		
8.	1.3 mm/min		
9.	80*10*3 sp=62mm		
10.	80*10*3 sp=62mm		
11.	80*10*3		
12.	63.5*12.7*3.2		
13.	80*10*3		
14.	63.5*12.7*3.2		
15.	Double-Gated		
16.	80*10*3		
17.	80*10*3		
18.	120*10*4 mm		
19.	120*10*4 mm		
20.	Rate B (120°C/h), Loading 2 (50 N)		

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.

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



WECHAT