

LEXAN™ ML7667 resin

Polycarbonate

SABIC Innovative Plastics

Message:

LEXAN ML7667 specialty polycarbonate (PC) resin is a 9% GF reinforced, UV stabilized, flame retarded injection molding grade. This medium flow specialty PC resin combines UL94 V0 @ 1.5mm, 5VB @ 3.0mm flame retardancy based on non-chlorine, non-bromine FR agents with excellent processability, improved release performance and good impact performance. This product is available in limited opaque colors only and may be an excellent candidate for a broad range of applications, i.e. electrical and electronic enclosure applications.

General Information			
Filler / Reinforcement	Glass Fiber,9.0% Filler by Weight		
Additive	Flame Retardant		
	UV Stabilizer		
Features	Bromine Free		
	Chlorine Free		
	Flame Retardant		
	Good Impact Resistance		
	Good Mold Release		
	Good Processability		
Uses	Electrical Housing		
	Electrical/Electronic Applications		
Appearance	Opaque		
Processing Method	Injection Molding		
Physical	Nominal Value	Unit	Test Method
Specific Gravity	1.26	g/cm ³	ASTM D792, ISO 1183
Melt Mass-Flow Rate (MFR) (300°C/1.2 kg)	9.0	g/10 min	ASTM D1238
Melt Volume-Flow Rate (MVR) (300°C/1.2 kg)	8.00	cm ³ /10min	ISO 1133
Molding Shrinkage - Flow (3.20 mm)	0.20 to 0.60	%	Internal Method
Water Absorption			ISO 62
Saturation, 23°C	0.15	%	
Equilibrium, 23°C, 50% RH	0.40	%	
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus			
-- ¹	3500	MPa	ASTM D638
--	3600	MPa	ISO 527-2/1
Tensile Strength			
Yield ²	55.0	MPa	ASTM D638

Yield	54.0	MPa	ISO 527-2/5
Break ³	44.0	MPa	ASTM D638
Break	46.0	MPa	ISO 527-2/5
Tensile Elongation			
Yield ⁴	4.4	%	ASTM D638
Yield	4.4	%	ISO 527-2/5
Break ⁵	15	%	ASTM D638
Break	13	%	ISO 527-2/5
Flexural Modulus			
50.0 mm Span ⁶	3150	MPa	ASTM D790
-- ⁷	3400	MPa	ISO 178
Flexural Stress			
--	96.0	MPa	ISO 178
Yield, 50.0 mm Span ⁸	97.0	MPa	ASTM D790
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength ⁹			ISO 179/1eA
-30°C	15	kJ/m ²	
23°C	25	kJ/m ²	
Charpy Unnotched Impact Strength ¹⁰			ISO 179/1eU
-30°C	No Break		
23°C	No Break		
Notched Izod Impact			
-30°C	150	J/m	ASTM D256
23°C	340	J/m	ASTM D256
-30°C ¹¹	10	kJ/m ²	ISO 180/1A
23°C ¹²	25	kJ/m ²	ISO 180/1A
Unnotched Izod Impact Strength ¹³			ISO 180/1U
-30°C	No Break		
23°C	No Break		
Instrumented Dart Impact (23°C, Total Energy)	40.0	J	ASTM D3763
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			
1.8 MPa, Unannealed, 3.20 mm	135	°C	ASTM D648
1.8 MPa, Unannealed, 100 mm Span ¹⁴	132	°C	ISO 75-2/Ae
Vicat Softening Temperature			
--	146	°C	ASTM D1525, ISO 306/B120 10 ¹⁵
--	145	°C	ISO 306/B50
Ball Pressure Test (125°C)	Pass		IEC 60695-10-2
CLTE			ASTM E831, ISO 11359-2
Flow : -40 to 40°C	4.7E-5	cm/cm/°C	
Transverse : -40 to 40°C	7.0E-5	cm/cm/°C	

Electrical	Nominal Value	Unit	Test Method
Comparative Tracking Index (CTI)	PLC 3		UL 746
Comparative Tracking Index	175	V	IEC 60112
Flammability	Nominal Value	Unit	Test Method
Flame Rating			UL 94
0.750 mm, Testing by SABIC	HB		
1.50 mm, Testing by SABIC	V-0		
3.00 mm, Testing by SABIC	5VB		
Glow Wire Flammability Index (1.10 mm)	960	°C	IEC 60695-2-12
Glow Wire Ignition Temperature			IEC 60695-2-13
1.00 mm	825	°C	
2.00 mm	825	°C	
2.50 mm	825	°C	
3.00 mm	825	°C	
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	288 to 310	°C	
Middle Temperature	299 to 321	°C	
Front Temperature	310 to 332	°C	
Nozzle Temperature	304 to 327	°C	
Processing (Melt) Temp	310 to 332	°C	
Mold Temperature	82.2 to 116	°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.	5.0 mm/min		
2.	Type I, 5.0 mm/min		
3.	Type I, 5.0 mm/min		
4.	Type I, 5.0 mm/min		
5.	Type I, 5.0 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.	80*10*3		

13.	80*10*3
14.	120*10*4 mm
15.	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.

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

