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 reinforced material, 9.0% filler by weight		
Additive	UV stabilizer Flame retardancy		
Features	Chlorine Free Impact resistance, good Workability, good Good demoulding performance Bromine-free Flame retardancy		
Uses	Electrical/Electronic Applications Electrical housing		
RoHS Compliance	RoHS compliance		
Appearance	Opacity		
Processing Method	Injection molding		
Physical	**Nominal Value**	**Unit**	**Test Method**
Specific Gravity	1.26	g/cm³	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	cm³/10min	ISO 1133
Molding Shrinkage - Flow (3.20 mm)	0.20 - 0.60	%	Internal method
Water Absorption			ISO 62
Saturated, 23°C	0.15	%	ISO 62
Equilibrium, 23°C, 50% RH	0.40	%	ISO 62
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
Fracture [3]	44.0	MPa	ASTM D638
Fracture	46.0	MPa	ISO 527-2/5
Tensile Elongation			
Yield [4]	4.4	%	ASTM D638
Yield	4.4	%	ISO 527-2/5
Fracture [5]	15	%	ASTM D638
Fracture	13	%	ISO 527-2/5
Flexural Modulus			
50.0mm span [6]	3150	MPa	ASTM D790
-- [7]	3400	MPa	ISO 178
Flexural Stress			
--	96.0	MPa	ISO 178
Yield, 50.0mm 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/m²	ISO 179/1eA
23°C	25	kJ/m²	ISO 179/1eA
Charpy Unnotched Impact Strength [10]			ISO 179/1eU
-30°C	No Break		ISO 179/1eU
23°C	No Break		ISO 179/1eU
Notched Izod Impact			
-30°C	150	J/m	ASTM D256
23°C	340	J/m	ASTM D256
-30°C [11]	10	kJ/m²	ISO 180/1A
23°C [12]	25	kJ/m²	ISO 180/1A
Unnotched Izod Impact Strength [13]			ISO 180/1U
-30°C	No Break		ISO 180/1U
23°C	No Break		ISO 180/1U
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, 3.20mm	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 11 [15]
--	145	°C	ISO 306/B50
Ball Pressure Test (125°C)	Pass		IEC 60695-10-2
Linear thermal expansion coefficient			ASTM E831, ISO 11359-2
Flow: -40 to 40°C	4.7E-5	cm/cm/°C	ASTM E831, ISO 11359-2

Lateral: -40 to 40°C	7.0E-5	cm/cm/°C	ASTM E831, ISO 11359-2
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		UL 94
1.50 mm, Testing by SABIC	V-0		UL 94
3.00 mm, Testing by SABIC	5VB		UL 94
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	IEC 60695-2-13
2.00 mm	825	°C	IEC 60695-2-13
2.50 mm	825	°C	IEC 60695-2-13
3.00 mm	825	°C	IEC 60695-2-13
Injection	**Nominal Value**	**Unit**	
Drying Temperature	121	°C	
Drying Time	3.0 - 4.0	hr	
Drying Time, Maximum	48	hr	
Suggested Max Moisture	0.020	%	
Suggested Shot Size	40 - 60	%	
Rear Temperature	288 - 310	°C	
Middle Temperature	299 - 321	°C	
Front Temperature	310 - 332	°C	
Nozzle Temperature	304 - 327	°C	
Processing (Melt) Temp	310 - 332	°C	
Mold Temperature	82.2 - 116	°C	
Back Pressure	0.345 - 0.689	MPa	
Screw Speed	40 - 70	rpm	
Vent Depth	0.025 - 0.076	mm	
NOTE			
1.	5.0 mm/min		
2.	Type 1, 5.0 mm/min		
3.	Type 1, 5.0 mm/min		
4.	Type 1, 5.0 mm/min		
5.	Type 1, 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.	标准 B (120°C/h), 载荷2 (50N)

Recommended distributors for this material

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