LEXAN™ ML7689 resin

Polycarbonate

SABIC Innovative Plastics Europe

Message:

LEXAN ML7689 polycarbonate (PC) siloxane copolymer resin IS a high viscosity injection molding (IM) grade WITH good processability, offering opportunities FOR shorter IM CYCLE times compared TO standard PC resins. This resin offers extreme low temperature (-40 degree C) ductility. LEXAN ML7689 resin IS FDA/EU FC compliant available IN OPAQUE colors ONLY AND IS an excellent candidate FOR food contact applications.

General Information			
Features	Copolymer Ductile Fast Molding Cycle Food Contact Acceptable Good Processability High Viscosity		
Uses	Non-specific Food Applications		
Agency Ratings	EU Food Contact, Unspecified Rating FDA Food Contact, Unspecified Rating		
RoHS Compliance	RoHS Compliant		
Appearance	Opaque		
Processing Method	Injection Molding		
Physical	**Nominal Value**	**Unit**	**Test Method**
Specific Gravity			
--	1.18	g/cm³	ASTM D792
--	1.19	g/cm³	ISO 1183
Melt Mass-Flow Rate (MFR) (300°C/1.2 kg)	6.0	g/10 min	ASTM D1238
Melt Volume-Flow Rate (MVR) (300°C/1.2 kg)	6.00	cm³/10min	ISO 1133
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus			
-- [1]	2050	MPa	ASTM D638
--	2150	MPa	ISO 527-2/1
Tensile Strength			
Yield [2]	56.0	MPa	ASTM D638
Yield	57.0	MPa	ISO 527-2/50
Break [3]	50.0	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]	100	%	ASTM D638
Break	120	%	ISO 527-2/50
Flexural Modulus			
50.0 mm Span [6]	2250	MPa	ASTM D790
-- [7]	2250	MPa	ISO 178
Flexural Stress			
--	85.0	MPa	ISO 178
Yield, 50.0 mm Span [8]	92.0	MPa	ASTM D790
Impact	**Nominal Value**	**Unit**	**Test Method**
Notched Izod Impact (23°C)	850	J/m	ASTM D256
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load			
0.45 MPa, Unannealed, 3.20 mm	139	°C	ASTM D648
1.8 MPa, Unannealed, 3.20 mm	124	°C	ASTM D648
1.8 MPa, Unannealed, 100 mm Span [9]	128	°C	ISO 75-2/Ae
Vicat Softening Temperature	146	°C	ISO 306/B120
CLTE			ISO 11359-2
Flow : 23 to 80°C	7.2E-5	cm/cm/°C	
Transverse : 23 to 80°C	7.2E-5	cm/cm/°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	271 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	71.1 to 93.3	°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.	120*10*4 mm

Recommended distributors for this material

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