LEXAN™ 940 resin

Polycarbonate

SABIC Innovative Plastics

Message:

Opaque colors, medium viscosity, superior flame retardance.

General Information	
UL YellowCard	E121562-220904
Features	Flame Retardant Medium Viscosity
Appearance	Colors Available Opaque
Processing Method	Injection Molding
Multi-Point Data	Elastic Modulus vs Temperature (ASTM D4065) Flexural DMA (ASTM D4065) Instrumented Impact (Energy) (ASTM D3763) Instrumented Impact (Load) (ASTM D3763) Pressure-Volume-Temperature (PVT - Zoller Method) Shear DMA (ASTM D4065) Tensile Creep (ASTM D2990) Tensile Fatigue Tensile Stress vs. Strain (ASTM D638) Thermal Conductivity vs. Temperature (ASTM E1530)

Physical	Nominal Value	Unit	Test Method
Specific Gravity			ASTM D792
--	1.21	g/cm³	
--	1.22	g/cm³	
Specific Volume	0.835	cm³/g	ASTM D792
Radiant Panel Listing (UL)	YES		
Melt Mass-Flow Rate (MFR) (300°C/1.2 kg)	10	g/10 min	ASTM D1238
Molding Shrinkage - Flow (3.20 mm)	0.50 to 0.70	%	Internal Method
Water Absorption			ASTM D570
24 hr	0.15	%	
Equilibrium, 23°C	0.35	%	
Equilibrium, 100°C	0.58	%	
Outdoor Suitability	f1		UL 746C

Hardness	Nominal Value	Unit	Test Method

Rockwell Hardness			ASTM D785
M-Scale	70		
R-Scale	118		
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Strength [1]			ASTM D638
Yield	62.1	MPa	
Break	55.8	MPa	
Tensile Elongation [2]			ASTM D638
Yield	7.0	%	
Break	90	%	
Flexural Modulus [3] (50.0 mm Span)	2240	MPa	ASTM D790
Flexural Strength [4] (Yield, 50.0 mm Span)	91.0	MPa	ASTM D790
Taber Abrasion Resistance (1000 Cycles, 1000 g, CS-17 Wheel)	10.0	mg	ASTM D1044
Impact	**Nominal Value**	**Unit**	**Test Method**
Notched Izod Impact (23°C)	640	J/m	ASTM D256
Unnotched Izod Impact (23°C)	3200	J/m	ASTM D4812
Gardner Impact (23°C)	169	J	ASTM D3029
Tensile Impact Strength [5]	525	kJ/m^2	ASTM D1822
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load			ASTM D648
0.45 MPa, Unannealed, 6.40 mm	138	°C	
1.8 MPa, Unannealed, 6.40 mm	132	°C	
Vicat Softening Temperature	152	°C	ASTM D1525 [6]
CLTE - Flow (-40 to 95°C)	6.8E-5	cm/cm/°C	ASTM E831
Thermal Conductivity	0.19	W/m/K	ASTM C177
RTI Elec	130	°C	UL 746
RTI Imp	120	°C	UL 746
RTI Str	130	°C	UL 746
Electrical	**Nominal Value**	**Unit**	**Test Method**
Volume Resistivity	> 1.0E+17	ohms·cm	ASTM D257
Dielectric Strength (3.20 mm, in Air)	17	kV/mm	ASTM D149
Dielectric Constant			ASTM D150
50 Hz	3.01		
60 Hz	3.01		
1 MHz	2.96		
Dissipation Factor			ASTM D150
50 Hz	9.0E-4		
60 Hz	9.0E-4		
1 MHz	0.010		
Arc Resistance [7]	PLC 7		ASTM D495
Comparative Tracking Index (CTI)	PLC 2		UL 746

High Amp Arc Ignition (HAI)	PLC 3		UL 746
High Voltage Arc Tracking Rate (HVTR)	PLC 3		UL 746
Hot-wire Ignition (HWI)	PLC 2		UL 746
Flammability	**Nominal Value**	**Unit**	**Test Method**
Flame Rating (1.09 mm)	V-0		UL 94
Oxygen Index	35	%	ASTM D2863
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.	Type I, 50 mm/min		
2.	Type I, 50 mm/min		
3.	1.3 mm/min		
4.	1.3 mm/min		
5.	Type S		
6.	Rate B (120°C/h), Loading 2 (50 N)		
7.	Tungsten Electrode		

Recommended distributors for this material

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