LEXAN™ LUX2114 resin

Polycarbonate

SABIC Innovative Plastics Asia Pacific

Message:

18 MFR. Improved flame retardance. Internal mold release. UV stabilized.

General Information			
UL YellowCard	E207780-100944683		
Additive	Mold Release UV Stabilizer		
Features	Flame Retardant Good Mold Release Good UV Resistance		
Processing Method	Injection Molding		
Physical	**Nominal Value**	**Unit**	**Test Method**
Specific Gravity			ASTM D792
--	1.20	g/cm³	
--	1.19	g/cm³	
Specific Volume	0.830	cm³/g	ASTM D792
Melt Mass-Flow Rate (MFR) (300°C/1.2 kg)	18	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	f2		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	65.5	MPa	
Tensile Elongation [2]			ASTM D638
Yield	7.0	%	
Break	110	%	
Flexural Modulus [3] (50.0 mm Span)	2340	MPa	ASTM D790

Flexural Strength [4] (Yield, 50.0 mm Span)	93.1	MPa	ASTM D790
Taber Abrasion Resistance (1000 Cycles, 1000 g, CS-17 Wheel)	10.0	mg	ASTM D1044
Impact	**Nominal Value**	**Unit**	**Test Method**
Charpy Notched Impact Strength [5]			ISO 179/1eA
-30°C	12	kJ/m²	
23°C	65	kJ/m²	
Charpy Unnotched Impact Strength [6]			ISO 179/1eU
-30°C	No Break		
23°C	No Break		
Notched Izod Impact			
23°C	600	J/m	ASTM D256
-30°C [7]	11	kJ/m²	ISO 180/1A
23°C [8]	65	kJ/m²	ISO 180/1A
Unnotched Izod Impact			
23°C	3200	J/m	ASTM D4812
-30°C [9]	No Break		ISO 180/1U
23°C [10]	No Break		ISO 180/1U
Gardner Impact (23°C)	169	J	ASTM D3029
Tensile Impact Strength [11]	546	kJ/m²	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	154	°C	ASTM D1525 [12]
Ball Pressure Test (125°C)	Pass		IEC 60695-10-2
CLTE - Flow (-40 to 95°C)	6.8E-5	cm/cm/°C	ASTM E831
Specific Heat	1260	J/kg/°C	ASTM C351
Thermal Conductivity	0.25	W/m/K	ASTM C177
RTI Elec	80.0	°C	UL 746
RTI Imp	80.0	°C	UL 746
RTI Str	80.0	°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)	15	kV/mm	ASTM D149
Dielectric Constant			ASTM D150
50 Hz	3.17		
60 Hz	3.17		
1 MHz	2.96		
Dissipation Factor			ASTM D150
50 Hz	9.0E-4		
60 Hz	9.0E-4		

1 MHz	0.010		
Comparative Tracking Index (CTI)	PLC 3		UL 746
High Amp Arc Ignition (HAI)	PLC 1		UL 746
Hot-wire Ignition (HWI)	PLC 3		UL 746
Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.750 to 1.65 mm)	V-2		UL 94
Glow Wire Flammability Index			IEC 60695-2-12
0.750 mm	750	°C	
1.50 mm	850	°C	
Glow Wire Ignition Temperature			IEC 60695-2-13
0.750 mm [13]	875	°C	
1.50 mm	850	°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	260 to 282	°C	
Middle Temperature	271 to 293	°C	
Front Temperature	282 to 304	°C	
Nozzle Temperature	277 to 299	°C	
Processing (Melt) Temp	282 to 304	°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.	80*10*3 sp=62mm		
6.	80*10*3 sp=62mm		
7.	80*10*3		
8.	80*10*3		
9.	80*10*3		
10.	80*10*3		
11.	Type S		
12.	Rate B (120°C/h), Loading 2 (50 N)		
13.	by VDE		

Recommended distributors for this material

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