

# SABIC LEXAN™ EM3110

Automotive interiors. Optimizes flow/processability for cost effective thinner wall design uses.  
Information provided by SABIC

Physical Properties	Metric	English	Comments
Specific Gravity	1.19 g/cc	1.19 g/cc	ASTM D792
Water Absorption	0.16 %	0.16 %	24 hours; ASTM D570
Linear Mold Shrinkage, Flow	0.0050 - 0.0070 cm/cm @Thickness 3.20 mm	0.0050 - 0.0070 in/in @Thickness 0.126 in	SABIC method
Melt Flow	20 g/10 min @Load 1.20 kg, Temperature 300 °C	20 g/10 min @Load 2.65 lb, Temperature 572 °F	ASTM D1238

Mechanical Properties	Metric	English	Comments
Tensile Strength, Yield	57.0 MPa	8270 psi	50 mm/min; ASTM D638
Elongation at Break	110 %	110 %	50 mm/min; ASTM D638
Flexural Yield Strength	81.0 MPa	11700 psi	1.3 mm/min, 50 mm span; ASTM D790
Flexural Modulus	2.03 GPa	294 ksi	1.3 mm/min, 50 mm span; ASTM D790
Izod Impact, Notched	6.40 J/cm	12.0 ft-lb/in	ASTM D256
	2.13 J/cm @Temperature -30.0 °C	3.99 ft-lb/in @Temperature -22.0 °F	ASTM D256
	5.87 J/cm @Temperature -20.0 °C	11.0 ft-lb/in @Temperature -4.00 °F	ASTM D256
	2.13 J/cm @Thickness 6.40 mm	3.99 ft-lb/in @Thickness 0.252 in	ASTM D256
Dart Drop, Total Energy	56.0 J	41.3 ft-lb	peak; ASTM D3763

Thermal Properties	Metric	English	Comments
CTE, linear, Parallel to Flow	64.8 µm/m-°C @Temperature -40.0 - 95.0 °C	36.0 µin/in-°F @Temperature -40.0 - 203 °F	ASTM E831
Deflection Temperature at 0.46 MPa (66 psi)	126 °C @Thickness 6.40 mm	259 °F @Thickness 0.252 in	unannealed; ASTM D648
Deflection Temperature at 1.8 MPa (264 psi)	118 °C @Thickness 3.20 mm	244 °F @Thickness 0.126 in	unannealed; ASTM D648
	123 °C @Thickness 6.40 mm	253 °F @Thickness 0.252 in	unannealed; ASTM D648
UL RTI, Electrical	80.0 °C	176 °F	UL 746B
UL RTI, Mechanical with Impact	80.0 °C	176 °F	UL 746B

UL RTI, Mechanical without Impact	80.0 °C	176 °F	UL 746B
Flammability, UL94	HB @Thickness 1.47 mm	HB @Thickness 0.0579 in	UL 94
Processing Properties	Metric	English	Comments
Nozzle Temperature	270 - 295 °C	518 - 563 °F	Injection Molding
Zone 1	255 - 275 °C	491 - 527 °F	
Zone 2	265 - 290 °C	509 - 554 °F	
Zone 3	275 - 300 °C	527 - 572 °F	
Melt Temperature	275 - 300 °C	527 - 572 °F	
Mold Temperature	70.0 - 95.0 °C	158 - 203 °F	
Drying Temperature	120 °C	248 °F	Injection Molding
Dry Time	3.00 - 4.00 hour	3.00 - 4.00 hour	Injection Molding
	10.0 hour	10.0 hour	Cumulative; Injection Molding
Moisture Content	0.020 %	0.020 %	
Back Pressure	0.300 - 0.700 MPa	43.5 - 102 psi	
Shot Size	40 - 60 %	40 - 60 %	
Vent Depth	0.00250 - 0.00760 cm	0.000984 - 0.00299 in	
Screw Speed	40 - 70 rpm	40 - 70 rpm	