

# LEXANT™ RESIN EM3110

REGION ASIA

## DESCRIPTION

LEXANT™ EM3110 resin is a 20 MFR polycarbonate. Impact resistant at -20oC. UL94 HB rated. Optimized flow and processability for cost effective thinner wall designs. Suitable for automotive interiors.

## TYPICAL PROPERTY VALUES

Revision 20201125

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
<b>MECHANICAL</b>			
Tensile Stress, yld, Type I, 50 mm/min	57	MPa	ASTM D638
Tensile Strain, brk, Type I, 50 mm/min	110	%	ASTM D638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	81	MPa	ASTM D790
Flexural Modulus, 1.3 mm/min, 50 mm span	2030	MPa	ASTM D790
<b>IMPACT</b>			
Izod Impact, notched, 23°C	640	J/m	ASTM D256
Izod Impact, notched, -20°C	587	J/m	ASTM D256
Izod Impact, notched, -30°C	213	J/m	ASTM D256
Izod Impact, notched, 23°C, 6.4mm	213	J/m	ASTM D256
Instrumented Dart Impact Energy @ peak, 23°C	56	J	ASTM D3763
<b>THERMAL</b>			
HDT, 1.82 MPa, 3.2mm, unannealed	118	°C	ASTM D648
HDT, 0.45 MPa, 6.4 mm, unannealed	126	°C	ASTM D648
HDT, 1.82 MPa, 6.4 mm, unannealed	123	°C	ASTM D648
CTE, -40°C to 95°C, flow	6.48E-05	1/°C	ASTM E831
Relative Temp Index, Elec	80	°C	UL 746B
Relative Temp Index, Mech w/impact	80	°C	UL 746B
Relative Temp Index, Mech w/o impact	80	°C	UL 746B
<b>PHYSICAL</b>			
Specific Gravity	1.19	-	ASTM D792
Water Absorption, (23°C/24hrs)	0.16	%	ASTM D570
Mold Shrinkage, flow, 3.2 mm	0.5 – 0.7	%	SABIC method
Melt Flow Rate, 300°C/ 1.2 kgf	20	g/10 min	ASTM D1238
<b>FLAME CHARACTERISTICS</b>			
UL Recognized, 94HB Flame Class Rating	1.47	mm	UL 94
<b>INJECTION MOLDING</b>			
Drying Temperature	120	°C	
Drying Time	3 – 4	Hrs	
Drying Time (Cumulative)	10	Hrs	
Maximum Moisture Content	0.02	%	
Melt Temperature	275 – 300	°C	
Nozzle Temperature	270 – 295	°C	
Front - Zone 3 Temperature	275 – 300	°C	
Middle - Zone 2 Temperature	265 – 290	°C	

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Rear - Zone 1 Temperature	255 – 275	°C	
Mold Temperature	70 – 95	°C	
Back Pressure	0.3 – 0.7	MPa	
Screw Speed	40 – 70	rpm	
Shot to Cylinder Size	40 – 60	%	
Vent Depth	0.025 – 0.076	mm	

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