

# Lexan\* Resin EM3110R

# **Americas: COMMERCIAL**

Automotive interiors. Optimizes flow/processability for cost effective thinner wall design uses. Internal mold release.

## Property

TYPICAL PROPERTIES <sup>(1)</sup>				
MECHANICAL	Value	Unit	Standard	
Tensile Stress, yld, Type I, 50 mm/min	55	MPa	ASTM D 638	
Tensile Strain, brk, Type I, 50 mm/min	90	%	ASTM D 638	
Flexural Stress, yld, 1.3 mm/min, 50 mm span	82	MPa	ASTM D 790	
Flexural Modulus, 1.3 mm/min, 50 mm span	2170	MPa	ASTM D 790	
ІМРАСТ	Value	Unit	Standard	
Izod Impact, notched, 23°C	640	J/m	ASTM D 256	
Izod Impact, notched, -20°C	587	J/m	ASTM D 256	
Izod Impact, notched, -30°C	213	J/m	ASTM D 256	
Izod Impact, notched, 23°C, 6.4mm	213	J/m	ASTM D 256	
Instrumented Impact Energy @ peak, 23°C	56	J	ASTM D 3763	
THERMAL	Value	Unit	Standard	
HDT, 1.82 MPa, 3.2mm, unannealed	118	°C	ASTM D 648	
HDT, 0.45 MPa, 6.4 mm, unannealed	126	°C	ASTM D 648	
HDT, 1.82 MPa, 6.4 mm, unannealed	123	°C	ASTM D 648	
CTE, -40°C to 95°C, flow	6.48E-05	1/°C	ASTM E 831	
PHYSICAL	Value	Unit	Standard	
Specific Gravity	1.19	-	ASTM D 792	
Water Absorption, 24 hours	0.16	%	ASTM D 570	
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 D 1238	
Source GMD, last updated:01/04/20				

### Processing

Parameter		
Injection Molding	Value	Unit
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
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

#### THESE PROPERTY VALUES ARE NOT INTENDED FOR SPECIFICATION PURPOSES.

PLEASE CHECK WITH YOUR (LOCAL SALES OFFICE) FOR AVAILABILITY IN YOUR REGION

(1) Typical values only. Variations within normal tolerances are possible for various colors. All values are measured after at least 48 hours storage at 23°C/50% relative humidity. All properties, except the melt volume and melt flow rates, are measured on injection molded samples. All samples tested under ISO test standards are prepared according to ISO 294.

(2) Only typical data for selection purposes. Not to be used for part or tool design.

(3) This rating is not intended to reflect hazards presented by this or any other material under actual fire conditions.

(4) Internal measurements according to UL standards.

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