



LEXAN™ RESIN LUX2110T

REGION AMERICAS

DESCRIPTION

Global grade. LEXAN LUX2110T is an injection moulding grade especially designed for manufacturing optical parts requiring easy flow properties combined with very high transmission and color stability.

TYPICAL PROPERTY VALUES

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, yld, Type I, 50 mm/min	60	MPa	ASTM D 638
Tensile Stress, brk, Type I, 50 mm/min	68	MPa	ASTM D 638
Tensile Strain, yld, Type I, 50 mm/min	7	%	ASTM D 638
Tensile Strain, brk, Type I, 50 mm/min	143	%	ASTM D 638
Tensile Modulus, 50 mm/min	2220	MPa	ASTM D 638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	> 96	MPa	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	2360	MPa	ASTM D 790
IMPACT			
Izod Impact, unnotched, 23°C	2140	J/m	ASTM D 4812
Izod Impact, notched, 23°C	785	J/m	ASTM D 256
Izod Impact, notched, -30°C	143	J/m	ASTM D 256
Instrumented Impact Energy @ peak, 23°C	72	J	ASTM D 3763
THERMAL			
HDT, 0.45 MPa, 3.2 mm, unannealed	142	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	129	°C	ASTM D 648
CTE, -40°C to 95°C, flow	6.5E-05	1/°C	ASTM E 831
CTE, -40°C to 95°C, xflow	6.4E-05	1/°C	ASTM E 831
Vicat Softening Temp, Rate B/120	145	°C	ISO 306
PHYSICAL			
Specific Gravity	1.2	-	ASTM D 792
Density	1.2	g/cm ³	ASTM D 792
Mold Shrinkage on Tensile Bar, flow (2) (5)	0.6 – 0.9	%	SABIC method
Melt Flow Rate, 300°C/1.2 kgf	19	g/10 min	ASTM D 1238
OPTICAL			
Light Transmission, 2.54 mm	> 90	%	ASTM D 1003
INJECTION MOLDING			

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Drying Temperature	120	°C	
Drying Time	3 – 4	hrs	
Drying Time (Cumulative)	48	hrs	
Maximum Moisture Content	0.02	%	
Melt Temperature	295 – 315	°C	
Nozzle Temperature	290 – 310	°C	
Front - Zone 3 Temperature	295 – 315	°C	
Middle - Zone 2 Temperature	280 – 305	°C	
Rear - Zone 1 Temperature	270 – 295	°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	