

LEXANTM RESIN LUX2910T

REGION AMERICAS

DESCRIPTION

Global grade. LEXAN LUX2910T is an injection moulding grade especially designed for manufacturing optical parts requiring superior flow properties combined with very high transmission and color stability.

TYPICAL PROPERTY VALUES

Revision 20190717

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, yld, Type I, 50 mm/min	61	MPa	ASTM D 638
Tensile Stress, brk, Type I, 50 mm/min	59	MPa	ASTM D 638
Tensile Strain, yld, Type I, 50 mm/min	7	%	ASTM D 638
Tensile Strain, brk, Type I, 50 mm/min	119	%	ASTM D 638
Tensile Modulus, 50 mm/min	2220	MPa	ASTM D 638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	97	MPa	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	2420	MPa	ASTM D 790
IMPACT			
Izod Impact, unnotched, 23°C	2140	J/m	ASTM D 4812
Izod Impact, notched, 23°C	581	J/m	ASTM D 256
Izod Impact, notched, -30°C	44	J/m	ASTM D 256
Instrumented Impact Energy @ peak, 23°C	56	J	ASTM D 3763
THERMAL			
HDT, 0.45 MPa, 3.2 mm, unannealed	139	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	124	°C	ASTM D 648
CTE, -40°C to 95°C, flow	6.8E-05	1/°C	ASTM E 831
CTE, -40°C to 95°C, xflow	6.6E-05	1/°C	ASTM E 831
Vicat Softening Temp, Rate B/120	142	°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	0.6 – 0.9	%	SABIC method
Melt Flow Rate, 300°C/1.2 kgf	58	g/10 min	ASTM D 1238
OPTICAL			
Light Transmission, 2.54 mm	>90	%	ASTM D 1003
INJECTION MOLDING			
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	

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
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	

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