

# LEXANTM RESIN LUX1619

## **REGION AMERICAS**

# **DESCRIPTION**

LEXAN™ LUX1619 resin is a 7.5 MFR polycarbonate. UL94 HB rated. For high light reflectance. Extrudable and injection moldable.

## **TYPICAL PROPERTY VALUES**

Revision 20201125

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, yld, Type I, 50 mm/min	57	MPa	ASTM D638
Tensile Stress, brk, Type I, 50 mm/min	50	MPa	ASTM D638
Tensile Strain, yld, Type I, 50 mm/min	6	%	ASTM D638
Tensile Strain, brk, Type I, 50 mm/min	74	%	ASTM D638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	97	MPa	ASTM D790
Flexural Modulus, 1.3 mm/min, 50 mm span	2730	MPa	ASTM D790
IMPACT			
Izod Impact, unnotched, 23°C	2130	J/m	ASTM D4812
Izod Impact, notched, 23°C	640	J/m	ASTM D256
Izod Impact, notched, -30°C	135	J/m	ASTM D256
Instrumented Dart Impact Total Energy, 23°C	69	J	ASTM D3763
THERMAL			
Vicat Softening Temp, Rate B/50	147	°C	ASTM D1525
HDT, 0.45 MPa, 3.2 mm, unannealed	141	°C	ASTM D648
HDT, 1.82 MPa, 3.2mm, unannealed	129	°C	ASTM D648
CTE, -40°C to 40°C, flow	6.1E-05	1/°C	ASTM E831
CTE, -40°C to 40°C, xflow	6.4E-05	1/°C	ASTM E831
PHYSICAL			
Specific Gravity	1.34	-	ASTM D792
Mold Shrinkage, flow, 3.2 mm	0.8 – 1	%	SABIC method
Melt Flow Rate, 300°C/1.2 kgf	7.5	g/10 min	ASTM D1238
Density	1.34	g/cm³	ISO 1183
Water Absorption, (23°C/saturated)	0.35	%	ISO 62-1
Moisture Absorption (23°C / 50% RH)	0.15	%	ISO 62
FLAME CHARACTERISTICS			
UL Yellow Card Link	E121562-101056760	-	
UL Recognized, 94HB Flame Class Rating	1.5	mm	UL 94
Glow Wire Flammability Index 960°C, passes at	1.5 – 3	mm	IEC 60695-2-12
Glow Wire Ignitability Temperature, 1.5 mm	850	°C	IEC 60695-2-13
Glow Wire Ignitability Temperature, 3.0 mm	850	°C	IEC 60695-2-13
INJECTION MOLDING			
Drying Temperature	120	°C	
Drying Time	3 – 4	Hrs	
Drying Time (Cumulative)	48	Hrs	
Maximum Moisture Content	0.02	%	



PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Melt Temperature	310 – 330	°C	
Nozzle Temperature	305 – 325	°C	
Front - Zone 3 Temperature	310 – 330	°C	
Middle - Zone 2 Temperature	300 – 320	°C	
Rear - Zone 1 Temperature	290 – 310	°C	
Mold Temperature	80 – 115	°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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