

# LEXANTM RESIN LS2

#### **REGION ASIA**

## **DESCRIPTION**

LEXAN $^{\text{TM}}$  LS2 resin is a 11 MFR polycarbonate, MVR of 12. UV stabilized. UL94 HB rated. UL746C f1 rated. Medium viscosity. For Automotive lens applications. AMECA listed.

## **TYPICAL PROPERTY VALUES**

Revision 20201125

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, yld, Type I, 50 mm/min	62	MPa	ASTM D638
Tensile Strain, brk, Type I, 50 mm/min	130	%	ASTM D638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	96	MPa	ASTM D790
Flexural Modulus, 1.3 mm/min, 50 mm span	2340	MPa	ASTM D790
IMPACT			
Izod Impact, notched, 23°C	801	J/m	ASTM D256
Tensile Impact Strength, Type S	577	kJ/m²	ASTM D1822
Falling Dart Impact, 23°C	169	J	SABIC method
Instrumented Dart Impact Energy @ peak, 23°C	63	J	ASTM D3763
THERMAL			
HDT, 1.82 MPa, 6.4 mm, unannealed	132	°C	ASTM D648
Relative Temp Index, Elec	130	°C	UL 746B
Relative Temp Index, Mech w/impact	130	°C	UL 746B
Relative Temp Index, Mech w/o impact	130	°C	UL 746B
PHYSICAL			
Specific Gravity	1.2	-	ASTM D792
Water Absorption, (23°C/24hrs)	0.15	%	ASTM D570
Mold Shrinkage, flow, 3.2 mm	0.5 – 0.7	%	SABIC method
Melt Flow Rate, 300°C/1.2 kgf	11	g/10 min	ASTM D1238
OPTICAL			
Light Transmission, 2.54 mm	88	%	ASTM D1003
ELECTRICAL			
Hot Wire Ignition {PLC)	4	PLC Code	UL 746A
High Voltage Arc Track Rate {PLC}	2	PLC Code	UL 746A
High Ampere Arc Ign, surface {PLC}	1	PLC Code	UL 746A
Comparative Tracking Index (UL) {PLC}	2	PLC Code	UL 746A
FLAME CHARACTERISTICS			
UL Yellow Card Link	E207780-228443	-	
UL Yellow Card Link 2	E45587-236916	-	-
UL Recognized, 94HB Flame Class Rating	1.47	mm	UL 94
UV-light, water exposure/immersion	F1	-	UL 746C
INJECTION MOLDING			
Drying Temperature	120	°C	
Drying Time	3 – 4	Hrs	



PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
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	

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