

LEXANT™ RESIN LUX2289

REGION EUROPE

DESCRIPTION

LEXANT™ LUX2289 resin is a 17 MFR polycarbonate, MVR of 16. UV stabilized. UL94 V2 rated. High light reflectance. Injection moldable.

TYPICAL PROPERTY VALUES

Revision 20201125

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, yld, Type I, 50 mm/min	60	MPa	ASTM D638
Tensile Stress, brk, Type I, 50 mm/min	61	MPa	ASTM D638
Tensile Strain, yld, Type I, 50 mm/min	6	%	ASTM D638
Tensile Strain, brk, Type I, 50 mm/min	120	%	ASTM D638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	98	MPa	ASTM D790
Flexural Modulus, 1.3 mm/min, 50 mm span	2670	MPa	ASTM D790
Tensile Stress, yield, 50 mm/min	61	MPa	ISO 527
Tensile Stress, break, 50 mm/min	62	MPa	ISO 527
Tensile Strain, yield, 50 mm/min	6	%	ISO 527
Flexural Stress	70	MPa	ISO 178
Flexural Modulus	2500	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	2130	J/m	ASTM D4812
Izod Impact, notched, 23°C	648	J/m	ASTM D256
Izod Impact, notched, -30°C	165	J/m	ASTM D256
Instrumented Dart Impact Total Energy, 23°C	69	J	ASTM D3763
Izod Impact, unnotched 80*10*3 -30°C	160	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*3 +23°C	52	kJ/m²	ISO 180/1A
Izod Impact, notched 80*10*3 -30°C	13	kJ/m²	ISO 180/1A
Izod Impact, unnotched 80*10*4 +23°C	170	kJ/m²	ISO 180/1U
Charpy 23°C, V-notch Edgew 80*10*3 sp=62mm	67	kJ/m²	ISO 179/1eA
Charpy -30°C, V-notch Edgew 80*10*3 sp=62mm	12	kJ/m²	ISO 179/1eA
Charpy 23°C, Unnotch Edgew 80*10*3 sp=62mm	140	kJ/m²	ISO 179/1eU
Charpy -30°C, Unnotch Edgew 80*10*3 sp=62mm	140	kJ/m²	ISO 179/1eU
THERMAL			
Vicat Softening Temp, Rate B/50	142	°C	ASTM D1525
HDT, 0.45 MPa, 3.2 mm, unannealed	136	°C	ASTM D648
HDT, 1.82 MPa, 3.2mm, unannealed	124	°C	ASTM D648
CTE, -40°C to 40°C, flow	6.E-05	1/°C	ASTM E831
CTE, -40°C to 40°C, xflow	6.3E-05	1/°C	ASTM E831
Vicat Softening Temp, Rate A/50	144	°C	ISO 306
Vicat Softening Temp, Rate B/50	145	°C	ISO 306
HDT/Ae, 1.8 MPa Annealed 120°C, 2hrs	123	°C	ISO 75/Ae
PHYSICAL			
Specific Gravity	1.34	-	ASTM D792

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Mold Shrinkage, flow, 3.2 mm	0.5 – 0.7	%	SABIC method
Melt Flow Rate, 300°C/ 1.2 kgf	17	g/ 10 min	ASTM D1238
Density	1.31	g/cm ³	ISO 1183
Water Absorption, (23°C/saturated)	0.35	%	ISO 62-1
Moisture Absorption (23°C / 50% RH)	0.15	%	ISO 62
Melt Volume Rate, MVR at 300°C/ 1.2 kg	16	cm ³ /10 min	ISO 1133
FLAME CHARACTERISTICS			
UL Yellow Card Link	E45329-101527188	-	-
UL Recognized, 94HB Flame Class Rating	1	mm	UL 94
UL Recognized, 94V-2 Flame Class Rating	1.5	mm	UL 94
Glow Wire Flammability Index 960°C, passes at	1	mm	IEC 60695-2-12
Glow Wire Ignitability Temperature, 1.0 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	%	
Melt Temperature	280 – 305	°C	
Nozzle Temperature	275 – 300	°C	
Front - Zone 3 Temperature	280 – 305	°C	
Middle - Zone 2 Temperature	270 – 295	°C	
Rear - Zone 1 Temperature	260 – 280	°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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