LNP™ ELCRIN™ SLX2375RCC

45% PCR

DESCRIPTION

LNP ELCRIN SLX2375RCC is based on Polycarbonate (PC) copolymer resin that offers enhanced UV stabilization and weatherable performance with 45% post consumer recycle (PCR) polycarbonate content. This medium flow (13 MVR) resin provides good processability for injection molding with added mold release. Targeted for potential paint elimination through a wide range of high gloss opaque colors and is also available in transparent colors or tints. ER016332 is targeted for broad range of automotive, building and construction, electrical, consumer and electronics applications.

GENERAL INFORMATION	
Features	Colorable, IR Transparent, Sustainable (Mechanical Recycling), Transparent/Translucent, Weatherable/UV stable, No PFAS intentionally added, High gloss, Piano black
Fillers	Unreinforced
Polymer Types	Polycarbonate (PC)
Processing Techniques	Injection Molding

TYPICAL PROPERTY VALUES

Revision 20251120

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL [1]			
Tensile Modulus, 1 mm/min	2400	MPa	ISO 527
Tensile Stress, yield, 50 mm/min	62	MPa	ISO 527
Tensile Stress, break, 50 mm/min	69	MPa	ISO 527
Tensile Strain, break, 50 mm/min	>100	%	ISO 527
Flexural Modulus, 2 mm/min	2460	MPa	ISO 178
Flexural Stress, yield, 2 mm/min	101	MPa	ISO 178
Tensile Modulus, 50 mm/min	2400	MPa	ASTM D638
Tensile Stress, yld, Type I, 50 mm/min	65	MPa	ASTM D638
Tensile Stress, brk, Type I, 50 mm/min	64	MPa	ASTM D638
Tensile Strain, yld, Type I, 50 mm/min	6	%	ASTM D638
Tensile Strain, brk, Type I, 50 mm/min	>100	%	ASTM D638
Flexural Modulus, 1.3 mm/min, 50 mm span	2400	MPa	ASTM D790
Flexural Stress, yld, 1.3 mm/min, 50 mm span	103	MPa	ASTM D790
IMPACT [1]			
Izod Impact, notched 80*10*3 +23°C	63	kJ/m²	ISO 180/1A
Izod Impact, notched 80*10*3 -30°C	10	kJ/m²	ISO 180/1A
Izod Impact, unnotched 80*10*3 +23°C	NB	kJ/m²	ISO 180/1U
Charpy 23°C, V-notch Edgew 80*10*3 sp=62mm	62	kJ/m²	ISO 179/1eA
Charpy 23°C, Unnotch Edgew 80*10*3 sp=62mm	NB	kJ/m²	ISO 179/1eU
Izod Impact, notched, 23°C	730	J/m	ASTM D256
Izod Impact, notched, -30°C	100	J/m	ASTM D256
Multi-Axial Instrumented Impact Total Energy, 23°C [2]	93	J	ISO 6603-2
Multi-Axial Instrumented Impact Energy @ peak, 23°C [2]	90	J	ISO 6603-2
Instrumented Dart Impact Total Energy, 23°C [3]	57	J	ASTM D3763
THERMAL [1]			

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	119	°C	ISO 75/Af
HDT, 1.82 MPa, 3.2mm, unannealed	121	°C	ASTM D648
Vicat Softening Temp, Rate B/50	139	°C	ISO 306
Vicat Softening Temp, Rate B/120	138	°C	ISO 306
CTE, -40°C to 40°C, flow	7.1E-05	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	7.1E05	1/°C	ISO 11359-2
Ball Pressure Test, 125°C +/- 2°C	Passes	-	IEC 60695-10-2
PHYSICAL [1]			
Density	1.21	g/cm³	ISO 1183
Moisture Absorption (23°C / 50% RH)	0.1 – 0.2	%	ISO 62
Water Absorption, (23°C/saturated)	0.2 – 0.4	%	ISO 62-1
Mold Shrinkage, flow [4]	0.5 – 0.7	%	SABIC method
Mold Shrinkage, xflow [4]	0.5 – 0.7	%	SABIC method
Melt Volume Rate, MVR at 300°C/1.2 kg	13	cm³/10 min	ISO 1133
Specific Gravity	1.2	-	ASTM D792
OPTICAL			
Light Transmission			
Light Transmission (2.51 mm)	88	-	ASTM D1003
Haze (2.51 mm)	1.16	-	ASTM D1003
Refractive Index			
Refractive Index (589 nm)	1.59	-	SABIC method
INJECTION MOLDING [5]			
Drying Temperature	120	°C	
Drying Time	2 – 4	Hrs	
Maximum Moisture Content	0.02	%	
Melt Temperature	280 – 310	°C	
Rear - Zone 1 Temperature	260 – 280	°C	
Middle - Zone 2 Temperature	270 – 290	°C	
Front - Zone 3 Temperature	280 – 310	°C	
Nozzle Temperature	270 – 290	°C	
Mold Temperature	80 – 110	°C	
Back Pressure	0.3 – 0.7	MPa	
Screw speed (Circumferential speed)	0.15 – 0.25	m/s	

(1) The information stated on Technical Datasheets should be used as indicative only for material selection purposes and not be utilized as specification or used for part or tool design.
(2) Velocity = 4.4 m/s
(3) Velocity = 6.7 m/s
(4) Measurements made from laboratory test coupon. Actual shrinkage may vary outside of range due to differences in processing conditions, equipment, part geometry and tool design. It is recommended that mold shrinkage studies be performed with surrogate or legacy tooling prior to cutting tools for new molded article. The information stated on Technical Datasheets should be used as indicative only for material selection purposes and not be utilized as specification or used for part or tool design.
(5) Injection Molding parameters are only mentioned as general guidelines. These may not apply or may need adjustment in specific situations such as low shot sizes, large part molding, thin wall molding and gas-assist molding.

ADDITIONAL PRODUCT NOTES

No PFAS intentionally added: The grade listed in this document does not contain PFAS intentionally added during Seller's manufacturing process and is not expected to contain unintentional PFAS impurities. Each user is responsible for evaluating the presence of unintentional PFAS impurities.

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