

LNPTM ELCRINTM DX2361RC1

ER017026

DESCRIPTION

LNP ELCRIN DX2361RC1 compound is based on recycled polycarbonate (PC) resin containing a total of 70% recycled content with up to 40% post-consumer recycled (PCR) polycarbonate content and 30% pre-consumer recycled glass fiber content. No PFAS intentionally added. Added features of this grade include: high modulus, non-brominated and non-chlorinated flame retardant. UL 94 V0 rating at 0.75 mm. Available in black color.

GENERAL INFORMATION	
Features	Sustainable (Mechanical Recycling), Non Cl/Br flame retardant, High stiffness/Strength, No PFAS intentionally added
Fillers	Glass Fiber
Polymer Types	Polycarbonate (PC)
Processing Techniques	Injection Molding
Regional Availability	Global

TYPICAL PROPERTY VALUES

Revision 20250716

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL ⁽¹⁾			
Tensile Stress, break, 5 mm/min	114	MPa	ISO 527
Tensile Strain, break, 5 mm/min	2.1	%	ISO 527
Tensile Modulus, 1 mm/min	8750	MPa	ISO 527
Flexural Stress, break, 2 mm/min	171	MPa	ISO 178
Flexural Modulus, 2 mm/min	8600	MPa	ISO 178
Tensile Stress, brk, Type I, 5 mm/min	114	MPa	ASTM D638
Tensile Strain, brk, Type I, 5 mm/min	2.2	%	ASTM D638
Tensile Modulus, 5 mm/min	9080	MPa	ASTM D638
Flexural Stress, brk, 1.3 mm/min, 50 mm span	171	MPa	ASTM D790
Flexural Modulus, 1.3 mm/min, 50 mm span	8040	MPa	ASTM D790
IMPACT ⁽¹⁾			
Izod Impact, notched 80*10*4 +23°C	12	kJ/m ²	ISO 180/1A
Izod Impact, notched 80*10*4 -30°C	9	kJ/m ²	ISO 180/1A
Izod Impact, unnotched 80*10*4 +23°C	41	kJ/m ²	ISO 180/1U
Izod Impact, unnotched 80*10*4 -30°C	43	kJ/m ²	ISO 180/1U
Izod Impact, unnotched, 23°C	610	J/m	ASTM D4812
Izod Impact, unnotched, -30°C	650	J/m	ASTM D4812
Izod Impact, notched, 23°C	120	J/m	ASTM D256
Izod Impact, notched, -30°C	85	J/m	ASTM D256
Instrumented Impact Total Energy, 23°C	19	J	ASTM D3763
Charpy 23°C, V-notch Edgew 80*10*4 sp=62mm	12	kJ/m ²	ISO 179/1eA
Charpy -30°C, V-notch Edgew 80*10*4 sp=62mm	8	kJ/m ²	ISO 179/1eA
Charpy 23°C, Unnotch Edgew 80*10*4 sp=62mm	44	kJ/m ²	ISO 179/1eU
Charpy -30°C, Unnotch Edgew 80*10*4 sp=62mm	48	kJ/m ²	ISO 179/1eU
THERMAL ⁽¹⁾			

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	118	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	113	°C	ISO 75/Af
Vicat Softening Temp, Rate B/50	119	°C	ISO 306
Vicat Softening Temp, Rate B/120	121	°C	ISO 306
HDT, 0.45 MPa, 3.2 mm, unannealed	116	°C	ASTM D648
HDT, 1.82 MPa, 3.2mm, unannealed	112	°C	ASTM D648
CTE, -40°C to 40°C, flow	2.0E-05	1 /°C	ASTM E831
CTE, -40°C to 40°C, xflow	7.6E-05	1 /°C	ASTM E831
PHYSICAL ⁽¹⁾			
Density	1.44	g/cm³	ISO 1183
Moisture Absorption (23°C / 50% RH)	0.04	%	ISO 62
Melt Volume Rate, MVR at 300°C/1.2 kg	12	cm³/10 min	ISO 1133
Melt Volume Rate, MVR at 300°C/2.16 kg	23	cm³/10 min	ISO 1133
Specific Gravity	1.44	-	ASTM D792
Mold Shrinkage, flow ⁽²⁾	0.2 – 0.3	%	SABIC method
Mold Shrinkage, xflow ⁽²⁾	0.3 – 0.4	%	SABIC method
Melt Flow Rate, 300°C/1.2 kgf	15	g/10 min	ASTM D1238
Melt Flow Rate, 300°C/2.16 kgf	30	g/10 min	ASTM D1238
ELECTRICAL ⁽¹⁾			
Dissipation Factor			
1.1 GHz	0.007	-	SABIC method
2.5 GHz	0.007	-	SABIC method
5 GHz	0.007	-	SABIC method
10 GHz	0.008	-	SABIC method
Dielectric Constant			
1.1 GHz	3.45	-	SABIC method
2.5 GHz	3.42	-	SABIC method
5 GHz	3.41	-	SABIC method
10 GHz	3.41	-	SABIC method
FLAME CHARACTERISTICS ⁽³⁾			
UL Yellow Card Link	E207780-104656387	-	-
UL Recognized, 94V-2 Flame Class Rating	0.25	mm	UL 94
UL Recognized, 94V-0 Flame Class Rating	0.75	mm	UL 94
INJECTION MOLDING ⁽⁴⁾			
Drying Temperature	110	°C	
Drying Time	3 – 6	Hrs	
Maximum Moisture Content	0.02	%	
Melt Temperature	285 – 310	°C	
Nozzle Temperature	285 – 305	°C	
Front - Zone 3 Temperature	280 – 300	°C	
Middle - Zone 2 Temperature	270 – 290	°C	
Rear - Zone 1 Temperature	260 – 280	°C	
Mold Temperature	80 – 110	°C	
Back Pressure	0.1 – 0.3	MPa	
Screw Speed	50 – 90	rpm	

- (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) 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.
- (3) UL Ratings shown on the technical datasheet might not cover the full range of thicknesses and colors. For details, please see the UL Yellow Card.
- (4) 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

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