

LNPTM ELCRINTM N1000RCCG

(ER015921)

DESCRIPTION

LNP ELCRIN N1000RCCG compound is an unfilled polycarbonate (PC) and acrylonitrile butadiene styrene (ABS) blend medium heat plating grade containing 25% post-consumer recycled (PCR) PC, that also incorporates renewable feedstock through ISCC+ mass-balance certification.

GENERAL INFORMATION	
Features	Mechanical Recycling, Bio-Renewable, No PFAS intentionally added (PCR contains <50ppm total organic fluorine content)
Fillers	Unreinforced
Polymer Types	Polycarbonate + ABS (PC+ABS)
Processing Techniques	Injection Molding

INDUSTRY	SUB INDUSTRY
Consumer	Personal Accessory
Electrical and Electronics	Electronic Components
Industrial	Electrical

TYPICAL PROPERTY VALUES

Revision 20260908

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL ⁽¹⁾			
Tensile Stress, yield, 50 mm/min	49	MPa	ISO 527
Tensile Stress, break, 50 mm/min	42	MPa	ISO 527
Tensile Strain, yield, 50 mm/min	4.1	%	ISO 527
Tensile Strain, break, 50 mm/min	60	%	ISO 527
Tensile Modulus, 1 mm/min	2100	MPa	ISO 527
Flexural Stress, yield, 2 mm/min	77	MPa	ISO 178
Flexural Modulus, 2 mm/min	2100	MPa	ISO 178
Tensile Stress, yld, Type I, 50 mm/min	51	MPa	ASTM D638
Tensile Modulus, 50 mm/min	2000	MPa	ASTM D638
Tensile Stress, brk, Type I, 50 mm/min	47	MPa	ASTM D638
Tensile Strain, yld, Type I, 50 mm/min	4.2	%	ASTM D638
Tensile Strain, brk, Type I, 50 mm/min	80	%	ASTM D638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	78	MPa	ASTM D790
Flexural Modulus, 1.3 mm/min, 50 mm span	2100	MPa	ASTM D790
IMPACT ⁽¹⁾			
Izod Impact, notched 80*10*3 -30°C	27	kJ/m ²	ISO 180/1A
Instrumented Impact Total Energy, 23°C	57	J	ASTM D3763
Charpy 23°C, V-notch Edgew 80*10*3 sp=62mm	45	kJ/m ²	ISO 179/1eA
Charpy -30°C, V-notch Edgew 80*10*3 sp=62mm	26	kJ/m ²	ISO 179/1eA
Izod Impact, notched, 23°C	495	J/m	ASTM D256

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Izod Impact, notched, -30°C	390	J/m	ASTM D256
Izod Impact, notched 80*10*3 +23°C	41	kJ/m²	ISO 180/1A
THERMAL ⁽¹⁾			
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	120	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	98	°C	ISO 75/Af
Vicat Softening Temp, Rate B/120	113	°C	ASTM D1525
Vicat Softening Temp, Rate B/50	111	°C	ISO 306
Vicat Softening Temp, Rate B/120	112	°C	ISO 306
HDT, 0.45 MPa, 3.2 mm, unannealed	117	°C	ASTM D648
Vicat Softening Temp, Rate B/50	111	°C	ASTM D1525
HDT, 1.82 MPa, 3.2mm, unannealed	96	°C	ASTM D648
CTE, -40°C to 40°C, flow	1.0E-04	1/°C	ASTM E831
CTE, -40°C to 40°C, xflow	1.1E-04	1/°C	ASTM E831
PHYSICAL ⁽¹⁾			
Density	1.1	g/cm³	ISO 1183
Melt Volume Rate, MVR at 260°C/5.0 kg	12	cm³/10 min	ISO 1133
Mold Shrinkage, flow, 24 hrs ⁽²⁾	0.7 – 0.8	%	ASTM D955
Mold Shrinkage, xflow, 24 hrs ⁽²⁾	0.7 – 0.8	%	ASTM D955
Melt Flow Rate, 260°C/2.16 kgf	14	g/10 min	ASTM D1238
INJECTION MOLDING ⁽³⁾			
Drying Temperature	95 – 105	°C	
Drying Time	2 – 4	Hrs	
Maximum Moisture Content	0.02	%	
Melt Temperature	250 – 280	°C	
Nozzle Temperature	230 – 270	°C	
Front - Zone 3 Temperature	240 – 280	°C	
Middle - Zone 2 Temperature	240 – 280	°C	
Rear - Zone 1 Temperature	220 – 250	°C	
Mold Temperature	60 – 90	°C	

(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) 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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