

LNPT[™] ELCREST[™] CXL1521F5

DESCRIPTION

LNP ELCRES CXL1521F5 is a glass reinforced Polycarbonate (PC) copolymer / Polybutylene Terephthalate (PBT) blends. This compound offers high modulus and balanced ductility in combination with excellent chemical resistance.

GENERAL INFORMATION	
Features	Chemical Resistance, High Flow, High stiffness/Strength, Impact resistant
Fillers	Glass Fiber
Polymer Types	Polycarbonate + PBT (PC+PBT)
Processing Techniques	Injection Molding

INDUSTRY	SUB INDUSTRY
Electrical and Electronics	Mobile Phone - Computer - Tablets

TYPICAL PROPERTY VALUES

Revision 20261028

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL ⁽¹⁾			
Tensile Stress, brk, Type I, 5 mm/min	95	MPa	ASTM D638
Tensile Strain, brk, Type I, 5 mm/min	3.2	%	ASTM D638
Tensile Modulus, 5 mm/min	6900	MPa	ASTM D638
Flexural Strength, 1.3 mm/min, 50 mm span	150	MPa	ASTM D790
Flexural Modulus, 1.3 mm/min, 50 mm span	6000	MPa	ASTM D790
Tensile Stress, break, 5 mm/min	95	MPa	ISO 527
Tensile Strain, break, 5 mm/min	3.2	%	ISO 527
Tensile Modulus, 1 mm/min	6800	MPa	ISO 527
Flexural Strength, 2 mm/min	150	MPa	ISO 178
Flexural Modulus, 2 mm/min	5900	MPa	ISO 178
IMPACT ⁽¹⁾			
Izod impact, notched			
-20°C	120	J/m	ASTM D256
23°C	180	J/m	ASTM D256
80*10*4 +23°C	15	kJ/m ²	ISO 180/1A
Izod Impact, Unnotched			
23°C	840	kJ/m ²	ASTM D4812
Charpy 23°C, V-notch Edgew 80*10*4 sp=62mm	17	kJ/m ²	ISO 179/1eA
THERMAL ⁽¹⁾			
HDT, 1.82 MPa, 3.2mm, unannealed	180	°C	ASTM D648
HDT, 0.45 MPa, 3.2 mm, unannealed	214	°C	ASTM D648
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	177	°C	ISO 75/Af
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	212	°C	ISO 75/Bf
PHYSICAL ⁽¹⁾			

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Specific Gravity	1.42	-	ASTM D792
Density	1.42	g/cm ³	ISO 1183
Melt Volume Rate, MVR at 260°C/5.0 kg	14	cm ³ /10 min	ISO 1133
Mold Shrinkage, flow ⁽²⁾	0.1 – 0.3	%	SABIC method
Mold Shrinkage, xflow ⁽²⁾	0.3 – 0.5	%	SABIC method
INJECTION MOLDING ⁽³⁾			
Drying Temperature	110 – 120	°C	
Drying Time	3 – 4	Hrs	
Melt Temperature	250 – 275	°C	
Nozzle Temperature	245 – 275	°C	
Front - Zone 3 Temperature	250 – 270	°C	
Middle - Zone 2 Temperature	250 – 270	°C	
Rear - Zone 1 Temperature	240 – 260	°C	
Mold Temperature	50 – 100	°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.

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