

LNPT[™] ELCREST[™] SLX1462T

DESCRIPTION

LNP ELCRES SLX1462T is based on Polycarbonate (PC) copolymer resin. It is an injection moldable, weatherable product that offers enhanced UV stabilization, improved scratch resistance and chemical resistance performance. Targeted for potential paint elimination through a wide range of transparent or opaque colors. SLX1462T is targeted for a broad range of automotive, electrical, consumer, and electronics applications.

GENERAL INFORMATION	
Features	Chemical Resistance, UV-C resistant, Scratch Resistance, No PFAS intentionally added
Fillers	Unreinforced
Polymer Types	Polycarbonate (PC)
Processing Techniques	Injection Molding

INDUSTRY	SUB INDUSTRY
Automotive	Automotive Interiors
Industrial	Electrical, Material Handling

TYPICAL PROPERTY VALUES

Revision 20241030

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL ⁽¹⁾			
Tensile Stress, brk, Type I, 50 mm/min	65	MPa	ASTM D638
Tensile Strain, brk, Type I, 50 mm/min	66	%	ASTM D638
Tensile Modulus, 50 mm/min	2366	MPa	ASTM D638
Flexural Strength, 1.3 mm/min, 50 mm span	114	MPa	ASTM D790
Flexural Modulus, 1.3 mm/min, 50 mm span	2440	MPa	ASTM D790
Tensile Stress, break, 50 mm/min	70	MPa	ISO 527
Tensile Strain, break, 50 mm/min	84	%	ISO 527
Tensile Modulus, 1 mm/min	2366	MPa	ISO 527
Flexural Strength, 2 mm/min	105	MPa	ISO 178
Flexural Modulus, 2 mm/min	2436	MPa	ISO 178
IMPACT ⁽¹⁾			
Izod Impact, notched, 23°C	688	J/m	ASTM D256
Izod Impact, unnotched, 23°C	2130	J/m	ASTM D4812
Izod Impact, notched 80*10*3 +23°C	19.1	kJ/m ²	ISO 180/1A
Izod Impact, unnotched 80*10*3 +23°C	141.7	kJ/m ²	ISO 180/1U
Charpy 23°C, V-notch Edgew 80*10*3 sp=62mm	28	kJ/m ²	ISO 179/1eA
Charpy 23°C, Unnotch Edgew 80*10*3 sp=62mm	102.5	kJ/m ²	ISO 179/1eU
THERMAL ⁽¹⁾			
HDT, 0.45 MPa, 3.2 mm, unannealed	126	°C	ASTM D648
HDT, 1.82 MPa, 3.2mm, unannealed	114	°C	ASTM D648
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	126.1	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	113.6	°C	ISO 75/Af

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
CTE, -40°C to 40°C, flow	7.1E-05	1/°C	ASTM E831
CTE, -40°C to 40°C, xflow	7.2E-05	1/°C	ASTM E831
CTE, -40°C to 40°C, flow	7.0E-05	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	7.0E-05	1/°C	ISO 11359-2
Vicat Softening Temp, Rate B/50	140	°C	ASTM D1525
Vicat Softening Temp, Rate B/50	133	°C	ISO 306
PHYSICAL ⁽¹⁾			
Specific Gravity	1.31	-	ASTM D792
Density	1.31	g/cm ³	ISO 1183
Melt Flow Rate, 300°C/1.2 kgf	12	g/10 min	ASTM D1238
Melt Volume Rate, MVR at 300°C/1.2 kg	11	cm ³ /10 min	ISO 1133
Mold Shrinkage, flow ⁽²⁾	0.59	%	SABIC method
Mold Shrinkage, xflow ⁽²⁾	0.55	%	SABIC method
OPTICAL ⁽¹⁾			
Haze, 1.0 mm	0.5	%	ASTM D1003
Haze, 2.0 mm	1	%	ASTM D1003
Luminous Transmittance, clear transparent			
1 mm	90	%	ASTM D1003
2 mm	88.8	%	ASTM D1003
INJECTION MOLDING ⁽³⁾			
Drying Temperature	100 – 110	°C	
Drying Time	4 – 6	Hrs	
Melt Temperature	280 – 320	°C	
Nozzle Temperature	280 – 320	°C	
Front - Zone 3 Temperature	280 – 320	°C	
Middle - Zone 2 Temperature	270 – 310	°C	
Rear - Zone 1 Temperature	260 – 300	°C	
Mold Temperature	50 – 110	°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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