

Product Texts

LNP ELCRES HR156R is a compound based on Copolymer Polycarbonate resin. This resin has higher RTI, better scratch resistance and higher modulus than standard PC. It offers excellent heat resistance performance, good processability and available for opaque or limited transparent colors.

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	42	cm ³ /10min	ISO 1133
Temperature	330	°C	-
Load	2.16	kg	-
ASTM Data			
Melt Flow Index, MFI	45	g/10min	ASTM D 1238
Temperature	330	°C	-
Load	2.16	kg	-
Mold Shrinkage, MD	0.0075	mm/mm	ASTM D 955

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	2650	MPa	ISO 527
Yield stress	72	MPa	ISO 527
Yield strain	6.5	%	ISO 527
Stress at break	62	MPa	ISO 527
Strain at break	90	%	ISO 527
Flexural modulus, 23°C	2500	MPa	ISO 178
Flexural strength	102	MPa	ISO 178
Charpy impact strength, +23°C	N	kJ/m ²	ISO 179/1eU
Charpy impact strength, -30°C	N	kJ/m ²	ISO 179/1eU
Charpy notched impact strength, +23°C	12	kJ/m ²	ISO 179/1eA
Charpy notched impact strength, -30°C	10	kJ/m ²	ISO 179/1eA
Izod impact strength, +23°C	N	kJ/m ²	ISO 180/1U
Izod notched impact strength, +23°C	11	kJ/m ²	ISO 180/1A
Izod notched impact strength	10	kJ/m ²	ISO 180/1A
Temperature	-30	°C	-
ASTM Data			
Tensile Modulus	2620	MPa	ASTM D 638
Tensile Strength at Yield	72	MPa	ASTM D 638
Tensile Strength at Break	62	MPa	ASTM D 638
Elongation at Yield	6.5	%	ASTM D 638
Elongation at Break	90	%	ASTM D 638
Flexural Modulus	2600	MPa	ASTM D 790
Flexural Strength	111	MPa	ASTM D 790
Izod Impact notched, 1/8 in	113	J/m	ASTM D 256
Izod Impact notched, Low-Temperature	73	J/m	ASTM D 256
Temperature	-30	°C	-

Thermal properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load, 1.80 MPa	142	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	155	°C	ISO 75-1/-2
Vicat softening temperature, B	160	°C	ISO 306
Coeff. of linear therm. expansion, parallel	60	E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion, normal	60	E-6/K	ISO 11359-1/-2
ASTM Data			
Coefficient of Thermal Expansion, MD	60	E-6/K	ASTM D 696
Coefficient of Thermal Expansion, TD	60	E-6/K	ASTM D 696
DTUL @ 66 psi	155	°C	ASTM D 648
DTUL @ 264 psi	145	°C	ASTM D 648
Vicat Temperature	160	°C	ASTM D 1525

Other properties	Value	Unit	Test Standard
Water absorption	0.3	%	Sim. to ISO 62
Humidity absorption	0.23	%	Sim. to ISO 62
Density	1200	kg/m ³	ISO 1183
Density	1200	kg/m ³	ASTM D 792

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	125	°C	-
Pre-drying - Time	4 - 6	h	-
Processing humidity	≤0.02	%	-
Melt temperature	290 - 350	°C	-
Mold temperature	85 - 130	°C	-
Zone 1	270 - 330	°C	-
Zone 2	280 - 340	°C	-
Zone 3	290 - 350	°C	-
Nozzle temperature	285 - 345	°C	-
Screw speed	40 - 90	rpm	-
Back pressure	0.3 - 0.7	MPa	-

Characteristics

Processing

Injection Molding

Additives

Release agent

Special Characteristics

Heat stabilized or stable to heat, Transparent, Opaque

Features

Scratch Resistant, Copolymer

Applications

Electrical and Electronical

Regional Availability

North America, Europe, Asia Pacific, South and Central America