

Product Texts

LNP ELCRES SLX2471MT is an amorphous Polycarbonate (PC) copolymer resin. It is an injection moldable, weatherable product that offers enhanced UV stabilization. This medium flow (16 MVR) resin provides good processability with added mold release. This halogen-free flame retardant resin is EN45545 R4 HL3 and R27 HL3 compliant and an ideal candidate for transparent train applications.

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	16	cm ³ /10min	ISO 1133
Temperature	300	°C	-
Load	2.16	kg	-
ASTM Data			
Melt Flow Index, MFI	16	g/10min	ASTM D 1238
Temperature	300	°C	-
Load	2.16	kg	-
Mold Shrinkage, MD	0.0065	mm/mm	ASTM D 955
Mold Shrinkage, TD	0.005	mm/mm	ASTM D 955

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	2350	MPa	ISO 527
Yield stress	65	MPa	ISO 527
Yield strain	100	%	ISO 527
Flexural modulus, 23°C	2350	MPa	ISO 178
Charpy impact strength, +23°C, 3mm	N	kJ/m ²	ISO 179/1eU
Charpy impact strength, -30°C, 3mm	N	kJ/m ²	ISO 179/1eU
Charpy notched impact strength, +23°C, 3mm	67	kJ/m ²	ISO 179/1eA
Charpy notched impact strength, -30°C, 3mm	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	87	kJ/m ²	ISO 180/1A
Izod notched impact strength	14	kJ/m ²	ISO 180/1A
Temperature	-30	°C	-
ASTM Data			
Tensile Modulus	2350	MPa	ASTM D 638
Tensile Strength at Yield	64	MPa	ASTM D 638
Tensile Strength at Break	74	MPa	ASTM D 638
Elongation at Yield	100	%	ASTM D 638
Flexural Modulus	2350	MPa	ASTM D 790
Izod Impact notched, 1/8 in	840	J/m	ASTM D 256
Izod Impact notched, Low-Temperature	100	J/m	ASTM D 256
Temperature	-30	°C	-
Izod Impact unnotched, 1/8 in	N	J/m	ASTM D 256

Thermal properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load, 1.80 MPa	122	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	133	°C	ISO 75-1/-2
Vicat softening temperature, B	135	°C	ISO 306
Coeff. of linear therm. expansion, parallel	80	E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion, normal	80	E-6/K	ISO 11359-1/-2
ASTM Data			
Coefficient of Thermal Expansion, MD	80	E-6/K	ASTM D 696
Coefficient of Thermal Expansion, TD	80	E-6/K	ASTM D 696
DTUL @ 66 psi	130	°C	ASTM D 648
DTUL @ 264 psi	120	°C	ASTM D 648
Vicat Temperature	136	°C	ASTM D 1525

Optical properties	Value	Unit	Test Standard
ASTM Data			

Haze	0.8	%	ASTM D 1003
Light Transmittance	88	%	ASTM D 1003

Other properties	Value	Unit	Test Standard
Water absorption	0.35	%	Sim. to ISO 62
Density	1210	kg/m ³	ISO 1183
Density	1210	kg/m ³	ASTM D 792

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	100 - 120	°C	-
Pre-drying - Time	2 - 4	h	-
Processing humidity	≤0.02	%	-
Melt temperature	280 - 310	°C	-
Mold temperature	70 - 100	°C	-
Zone 1	255 - 280	°C	-
Zone 2	265 - 290	°C	-
Zone 3	280 - 310	°C	-
Nozzle temperature	275 - 295	°C	-
Screw speed	40 - 60	rpm	-
Back pressure	0.3 - 0.7	MPa	-

Characteristics

Processing

Injection Molding

Additives

Release agent

Special Characteristics

Flame retardant, Halogen-free, U.V. stabilized or stable to weather, Heat stabilized or stable to heat, Transparent, Translucent

Features

Amorphous, Copolymer

Applications

Automotive, Building Construction, Electrical and Electronical

Regional Availability

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