

**Product Texts**

LNP ELCRES EXL1213T is a transparent injection molding grade based on Polycarbonate (PC) siloxane copolymer resin. This grade offers extreme low temperature ductility in combination with high flow characteristics, excellent processability and good chemical resistance. It is a general purpose product available in transparent and opaque colors and is an excellent candidate for a broad range of applications.

UL Yellow Card Link [E207780-104423784](https://www.ulprospector.com/PC/properties/207780-104423784)

Processing/Physical Characteristics	Value	Unit	Test Standard
<b>ISO Data</b>			
Melt volume-flow rate, MVR	13.3	cm <sup>3</sup> /10min	ISO 1133
Temperature	300	°C	-
Load	1.2	kg	-
<b>ASTM Data</b>			
Melt Flow Index, MFI	14.7	g/10min	ASTM D 1238
Temperature	300	°C	-
Load	1.2	kg	-

Mechanical properties	Value	Unit	Test Standard
<b>ISO Data</b>			
Tensile Modulus	2080	MPa	ISO 527
Yield stress	56	MPa	ISO 527
Yield strain	5	%	ISO 527
Stress at break	56	MPa	ISO 527
Strain at break	50	%	ISO 527
Flexural modulus	1950	MPa	ISO 178
Charpy impact strength, +23°C, 3mm	94	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy impact strength, -30°C, 3mm	95	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy notched impact strength, +23°C, 3mm	53	kJ/m <sup>2</sup>	ISO 179/1eA
Charpy notched impact strength, -30°C, 3mm	21	kJ/m <sup>2</sup>	ISO 179/1eA
Izod impact strength, +23°C	132	kJ/m <sup>2</sup>	ISO 180/1U
Izod notched impact strength, +23°C, 3mm	53	kJ/m <sup>2</sup>	ISO 180/1A
Izod notched impact strength, -30°C, 3mm	19	kJ/m <sup>2</sup>	ISO 180/1A
<b>ASTM Data</b>			
Tensile Modulus	2060	MPa	ASTM D 638
Tensile Strength at Yield	56	MPa	ASTM D 638
Tensile Strength at Break	53	MPa	ASTM D 638
Elongation at Yield	5.8	%	ASTM D 638
Elongation at Break	90	%	ASTM D 638
Flexural Modulus	2080	MPa	ASTM D 790
Izod Impact notched, 1/8 in	830	J/m	ASTM D 256
Izod Impact notched, Low-Temperature	620	J/m	ASTM D 256
Temperature	-30	°C	-

Thermal properties	Value	Unit	Test Standard
<b>ISO Data</b>			
Temp. of deflection under load, 1.80 MPa	121	°C	ISO 75-1/-2
Vicat softening temperature, B	140	°C	ISO 306
Vicat softening temperature, 120°C/h 50N	141	°C	ISO 306
Burning behav. at thickness h	HB	class	IEC 60695-11-10
Thickness tested	0.7	mm	-
<b>ASTM Data</b>			
DTUL @ 264 psi	119	°C	ASTM D 648
Vicat Temperature	147	°C	ASTM D 1525

Other properties	Value	Unit	Test Standard
Humidity absorption	0.05	%	Sim. to ISO 62
Density	1180	kg/m <sup>3</sup>	ISO 1183
Density	1180	kg/m <sup>3</sup>	ASTM D 792

<b>Processing Recommendation Injection Molding</b>	<b>Value</b>	<b>Unit</b>	<b>Test Standard</b>
Pre-drying - Temperature	<b>120</b>	°C	-
Pre-drying - Time	<b>3 - 4</b>	h	-
Melt temperature	<b>290 - 320</b>	°C	-
Mold temperature	<b>80 - 115</b>	°C	-
Zone 1	<b>280 - 295</b>	°C	-
Zone 2	<b>285 - 305</b>	°C	-
Zone 3	<b>295 - 320</b>	°C	-
Screw speed	<b>40 - 70</b>	rpm	-
Back pressure	<b>0.3 - 0.7</b>	MPa	-

**Characteristics**

**Processing**

Injection Molding

**Chemical Resistance**

General Chemical Resistance

**Special Characteristics**

Transparent

**Regional Availability**

North America, Europe, Asia Pacific