

**Product Texts**

LEXAN EXL1890T polycarbonate (PC) siloxane copolymer resin is a transparent injection molding grade for food contact applications. This resin offers cold temperature (0 °C) ductility in combination with very high flow characteristics and excellent processability with opportunities for shorter IM cycle times compared to standard PC resin. LEXAN EXL1890T resin offers enhanced release performance and is available in transparent colors and is an excellent candidate for a broad range of applications in food handling or food preparation markets.

UL Yellow Card Link [E121562-455392](https://www.ul.com/yellow-card/E121562-455392)

Processing/Physical Characteristics	Value	Unit	Test Standard
<b>ISO Data</b>			
Melt volume-flow rate, MVR	33	cm <sup>3</sup> /10min	ISO 1133
Temperature	300	°C	-
Load	1.2	kg	-
<b>ASTM Data</b>			
Melt Flow Index, MFI	35	g/10min	ASTM D 1238
Temperature	300	°C	-
Load	1.2	kg	-

Mechanical properties	Value	Unit	Test Standard
<b>ISO Data</b>			
Tensile Modulus	2400	MPa	ISO 527
Yield stress	59	MPa	ISO 527
Yield strain	5.4	%	ISO 527
Stress at break	56	MPa	ISO 527
Strain at break	50	%	ISO 527
Flexural modulus	2250	MPa	ISO 178
Charpy impact strength, +23°C, 3mm	N	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy impact strength, -30°C, 3mm	N	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy notched impact strength, +23°C, 3mm	65	kJ/m <sup>2</sup>	ISO 179/1eA
Charpy notched impact strength, -30°C, 3mm	40	kJ/m <sup>2</sup>	ISO 179/1eA
Izod impact strength, +23°C	N	kJ/m <sup>2</sup>	ISO 180/1U
Izod notched impact strength, +23°C, 3mm	60	kJ/m <sup>2</sup>	ISO 180/1A
Izod notched impact strength, -30°C, 3mm	30	kJ/m <sup>2</sup>	ISO 180/1A
<b>ASTM Data</b>			
Tensile Modulus	2360	MPa	ASTM D 638
Tensile Strength at Yield	59	MPa	ASTM D 638
Tensile Strength at Break	58	MPa	ASTM D 638
Elongation at Yield	5.7	%	ASTM D 638
Elongation at Break	119	%	ASTM D 638
Flexural Modulus	2350	MPa	ASTM D 790
Rockwell Hardness	L90	-	ASTM D 785
Izod Impact notched, 1/8 in	702	J/m	ASTM D 256
Izod Impact notched, Low-Temperature	220	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	117	°C	ISO 75-1/-2
Vicat softening temperature, B	137	°C	ISO 306
Vicat softening temperature, 120°C/h 50N	140	°C	ISO 306
Burning behav. at 1.5 mm nom. thickn.	HB	class	IEC 60695-11-10
Thickness tested	1.5	mm	-
Glow Wire Flammability Index (GWFI)	960	°C	IEC 60695-2-12
Glow Wire Ignition Temperature (GWIT)	850	°C	IEC 60695-2-13
GWIT - thickness tested (3)	3	mm	-
<b>ASTM Data</b>			
DTUL @ 264 psi	120	°C	ASTM D 648
Vicat Temperature	138	°C	ASTM D 1525

Electrical properties	Value	Unit	Test Standard
<b>ASTM Data</b>			
Surface Resistivity	<b>1E15</b>	Ohm	ASTM D 257
Volume Resistivity	<b>1E15</b>	Ohm*cm	ASTM D 257

Other properties	Value	Unit	Test Standard
Water absorption	<b>0.12</b>	%	Sim. to ISO 62
Humidity absorption	<b>0.09</b>	%	Sim. to ISO 62
Density	<b>1190</b>	kg/m <sup>3</sup>	ISO 1183
Density	<b>1190</b>	kg/m <sup>3</sup>	ASTM D 792

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	<b>120</b>	°C	-
Pre-drying - Time	<b>3 - 4</b>	h	-
Processing humidity	<b>≤0.02</b>	%	-
Melt temperature	<b>295 - 315</b>	°C	-
Mold temperature	<b>70 - 95</b>	°C	-
Zone 1	<b>270 - 295</b>	°C	-
Zone 2	<b>280 - 305</b>	°C	-
Zone 3	<b>295 - 315</b>	°C	-
Screw speed	<b>40 - 70</b>	rpm	-
Back pressure	<b>0.3 - 0.7</b>	MPa	-

## Characteristics

### Processing

Injection Molding

### Certifications

Food contact

### Special Characteristics

Transparent

### Regional Availability

North America