

Product Texts

LEXAN EXL1112T polycarbonate (PC) siloxane copolymer resin is a transparent injection molding (IM) grade. This resin offers good low temperature (-20 C) ductility in combination with high flow characteristics and excellent processability with opportunities for shorter IM cycle times compared to standard PC resins. LEXAN EXL1112T resin is a general purpose product available in transparent and opaque coLEXAN EXL1112T polycarbonate (PC) siloxane copolymer resin is a transparent injection molding (IM) grade. This resin offers good low temperature (-20 C) ductility in combination with high flow characteristics and excellent processability with opportunities for shorter IM cycle times compared to

UL Yellow Card Link [E121562-256640](https://www.ul.com/yellow-card/E121562-256640)

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	19	cm ³ /10min	ISO 1133
Temperature	300	°C	-
Load	1.2	kg	-
Density of melt	1050	kg/m ³	-
Thermal conductivity of melt	0.24	W/(m K)	-
Spec. heat capacity of melt	2440	J/(kg K)	-
Ejection temperature	138	°C	-
ASTM Data			
Melt Flow Index, MFI	20	g/10min	ASTM D 1238
Temperature	300	°C	-
Load	1.2	kg	-

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	2340	MPa	ISO 527
Yield stress	57	MPa	ISO 527
Yield strain	5.4	%	ISO 527
Stress at break	56	MPa	ISO 527
Strain at break	50	%	ISO 527
Flexural modulus	2140	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	65	kJ/m ²	ISO 179/1eA
Charpy notched impact strength, -30°C, 3mm	45	kJ/m ²	ISO 179/1eA
Izod impact strength, +23°C	N	kJ/m ²	ISO 180/1U
Izod notched impact strength, +23°C, 3mm	65	kJ/m ²	ISO 180/1A
Izod notched impact strength, -30°C, 3mm	55	kJ/m ²	ISO 180/1A
Rockwell hardness	L89	-	ISO 2039-2
ASTM Data			
Tensile Modulus	2260	MPa	ASTM D 638
Tensile Strength at Yield	58	MPa	ASTM D 638
Tensile Strength at Break	57	MPa	ASTM D 638
Elongation at Yield	5.7	%	ASTM D 638
Elongation at Break	118	%	ASTM D 638
Flexural Modulus	2240	MPa	ASTM D 790
Izod Impact notched, 1/8 in	736	J/m	ASTM D 256
Izod Impact notched, Low-Temperature	618	J/m	ASTM D 256
Temperature	-30	°C	-

Thermal properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load, 1.80 MPa	116	°C	ISO 75-1/-2
Vicat softening temperature, B	138	°C	ISO 306
Vicat softening temperature, 120°C/h 50N	139	°C	ISO 306
Coeff. of linear therm. expansion, parallel	67	E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion, normal	84	E-6/K	ISO 11359-1/-2
Burning behav. at thickness h	HB	class	IEC 60695-11-10
Thickness tested	0.5	mm	-

LEXAN™ Copolymer EXL1112T - Americas

PC

Saudi Basic Industries Corporation (SABIC)

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	-
ASTM Data			
DTUL @ 264 psi	121	°C	ASTM D 648
Vicat Temperature	138	°C	ASTM D 1525

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

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

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

Characteristics**Processing**

Injection Molding

Regional Availability

North America

Special Characteristics

Transparent