

Product Texts

LEXAN EXL1112 polycarbonate (PC) siloxane copolymer resin is a high flow opaque injection molding (IM) grade. This resin offers good low temperature (-20 C) ductility in combination with excellent processability and release with opportunities for shorter IM cycle times compared to standard PC. LEXAN EXL1112 resin is a product available in wide range of opaque colors and may be an excellent candidate for a wide variety of applications.

UL Yellow Card Link [E121562-575793](https://www.ul.com/yellow-card/lexan-exl1112)

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	16	cm ³ /10min	ISO 1133
Temperature	300	°C	-
Load	1.2	kg	-
ASTM Data			
Melt Flow Index, MFI	17	g/10min	ASTM D 1238
Temperature	300	°C	-
Load	1.2	kg	-

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	2150	MPa	ISO 527
Yield stress	57	MPa	ISO 527
Yield strain	5	%	ISO 527
Stress at break	55	MPa	ISO 527
Strain at break	50	%	ISO 527
Flexural modulus	2240	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	60	kJ/m ²	ISO 179/1eA
Charpy notched impact strength, -30°C, 3mm	25	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	55	kJ/m ²	ISO 180/1A
Izod notched impact strength, -30°C, 3mm	20	kJ/m ²	ISO 180/1A
Ball indentation hardness	95	MPa	ISO 2039-1
ASTM Data			
Tensile Modulus	2280	MPa	ASTM D 638
Tensile Strength at Yield	58	MPa	ASTM D 638
Tensile Strength at Break	58	MPa	ASTM D 638
Elongation at Yield	5.8	%	ASTM D 638
Elongation at Break	109	%	ASTM D 638
Flexural Modulus	2320	MPa	ASTM D 790
Izod Impact notched, 1/8 in	747	J/m	ASTM D 256
Izod Impact notched, Low-Temperature	667	J/m	ASTM D 256
Temperature	-30	°C	-

Thermal properties	Value	Unit	Test Standard
ISO Data			
Vicat softening temperature, B	144	°C	ISO 306
Vicat softening temperature, 120°C/h 50N	145	°C	ISO 306
Burning behav. at thickness h	HB	class	IEC 60695-11-10
Thickness tested	0.5	mm	-
Glow Wire Flammability Index (GWFI)	960	°C	IEC 60695-2-12
Glow Wire Flammability Index (GWFI)	960	°C	IEC 60695-2-12
Glow Wire Ignition Temperature (GWIT)	875	°C	IEC 60695-2-13
GWIT - thickness tested (1)	1	mm	-
Glow Wire Ignition Temperature (GWIT)	875	°C	IEC 60695-2-13
GWIT - thickness tested (3)	3	mm	-
ASTM Data			
DTUL @ 66 psi	136	°C	ASTM D 648
DTUL @ 264 psi	123	°C	ASTM D 648

LEXAN™ Copolymer EXL1112 - Americas

PC

Saudi Basic Industries Corporation (SABIC)

Vicat Temperature	144	°C	ASTM D 1525
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Other properties	Value	Unit	Test Standard
Water absorption	0.35	%	Sim. to ISO 62
Humidity absorption	0.15	%	Sim. to ISO 62
Density	1190	kg/m ³	ISO 1183
Density	1180	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

Applications

Automotive