

Product Texts

LEXAN EXL9414P polycarbonate (PC) siloxane copolymer resin is a medium flow, non-chlorinated, non-brominated flame retardant opaque injection molding (IM) grade. This resin offers low temperature ductility, thin wall flame retardant capability, and in combination with excellent processability and release with opportunities for shorter IM cycle times compared to standard PC. LEXAN EXL9414P copolymer resin is a product available in wide range of opaque colors and may be an excellent candidate for a wide variety of applications, especially the housing of fast-charging mobile phones.

UL Yellow Card Link [E207780-104263177](https://www.ul.com/yellowcard/E207780-104263177)

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	12	cm ³ /10min	ISO 1133
Temperature	300	°C	-
Load	1.2	kg	-
ASTM Data			
Melt Flow Index, MFI	13.5	g/10min	ASTM D 1238
Temperature	300	°C	-
Load	1.2	kg	-

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	2110	MPa	ISO 527
Yield stress	56	MPa	ISO 527
Yield strain	4.9	%	ISO 527
Strain at break	50	%	ISO 527
Flexural modulus	2180	MPa	ISO 178
Charpy notched impact strength, +23°C, 3mm	81	kJ/m ²	ISO 179/1eA
Charpy notched impact strength, -30°C, 3mm	48	kJ/m ²	ISO 179/1eA
Izod notched impact strength, +23°C, 3mm	77	kJ/m ²	ISO 180/1A
Izod notched impact strength, -30°C, 3mm	51	kJ/m ²	ISO 180/1A
ASTM Data			
Tensile Modulus	2117	MPa	ASTM D 638
Tensile Strength at Yield	55	MPa	ASTM D 638
Elongation at Yield	5.3	%	ASTM D 638
Elongation at Break	89	%	ASTM D 638
Flexural Modulus	2200	MPa	ASTM D 790
Izod Impact notched, 1/8 in	962	J/m	ASTM D 256
Izod Impact notched, Low-Temperature	670	J/m	ASTM D 256
Temperature	-30	°C	-

Thermal properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load, 1.80 MPa	111	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	124	°C	ISO 75-1/-2
Vicat softening temperature, B	137	°C	ISO 306
Vicat softening temperature, 120°C/h 50N	138	°C	ISO 306
Burning behav. at thickness h	V-0	class	IEC 60695-11-10
Thickness tested	0.8	mm	-
Glow Wire Ignition Temperature (GWIT)	825	°C	IEC 60695-2-13
GWIT - thickness tested (1)	1	mm	-
ASTM Data			
DTUL @ 66 psi	123	°C	ASTM D 648
DTUL @ 264 psi	110	°C	ASTM D 648

Other properties	Value	Unit	Test Standard
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

Special Characteristics

Flame retardant

Additives

Flame retarding agent

Regional Availability

North America, Europe, Asia Pacific