

Product Texts

LEXAN EXL9414 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 EXL9414 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 [E207780-102896543](https://www.ul.com/yellowcard/E207780-102896543)

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	10	cm ³ /10min	ISO 1133
Temperature	300	°C	-
Load	1.2	kg	-
ASTM Data			
Melt Flow Index, MFI	11.5	g/10min	ASTM D 1238
Temperature	300	°C	-
Load	1.2	kg	-

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	2140	MPa	ISO 527
Yield stress	57	MPa	ISO 527
Yield strain	5.6	%	ISO 527
Stress at break	60	MPa	ISO 527
Strain at break	50	%	ISO 527
Flexural modulus	2180	MPa	ISO 178
Charpy notched impact strength, +23°C, 3mm	75	kJ/m ²	ISO 179/1eA
Charpy notched impact strength, -30°C, 3mm	29	kJ/m ²	ISO 179/1eA
Izod notched impact strength, +23°C, 3mm	69	kJ/m ²	ISO 180/1A
Izod notched impact strength, -30°C, 3mm	46	kJ/m ²	ISO 180/1A
ASTM Data			
Tensile Modulus	2110	MPa	ASTM D 638
Tensile Strength at Yield	56	MPa	ASTM D 638
Tensile Strength at Break	62	MPa	ASTM D 638
Elongation at Yield	5.8	%	ASTM D 638
Elongation at Break	107	%	ASTM D 638
Flexural Modulus	2190	MPa	ASTM D 790
Rockwell Hardness	R 117	-	ASTM D 785
Izod Impact notched, 1/8 in	880	J/m	ASTM D 256
Izod Impact notched, Low-Temperature	660	J/m	ASTM D 256
Temperature	-30	°C	-

Thermal properties	Value	Unit	Test Standard
ISO Data			
Vicat softening temperature, B	136	°C	ISO 306
Vicat softening temperature, 120°C/h 50N	138	°C	ISO 306
Burning behav. at thickness h	V-2	class	IEC 60695-11-10
Thickness tested	0.5	mm	-
Burning behav. 5V at thickness h	5VB	class	IEC 60695-11-20
Thickness tested	1.5	mm	-
Glow Wire Flammability Index (GWFI)	960	°C	IEC 60695-2-12
GWFI - thickness tested (3)	1	mm	-
ASTM Data			
DTUL @ 66 psi	134	°C	ASTM D 648
DTUL @ 264 psi	118	°C	ASTM D 648

Electrical properties	Value	Unit	Test Standard
ASTM Data			

LEXAN™ Copolymer EXL9414 - Americas

PC

Saudi Basic Industries Corporation (SABIC)

Dielectric Strength, Short Time	13	kV/mm	ASTM D 149
Surface Resistivity	>1E15	Ohm	ASTM D 257
Volume Resistivity	>1E15	Ohm*cm	ASTM D 257

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