

**Product Texts**

LEXAN EXL8414 is a PC/siloxane copolymer resin with medium flow, excellent low temperature impact and up to 25% post consumer recycle content. Availability of resin is restricted and lead times are longer due to limited manufacturing capability. Higher color variability and contamination risks including black specs needs to be considered before approval for use in applications. Contact your technical sales representative with questions.

UL Yellow Card Link [E121562-100150790](https://www.ul.com/yellowcard/E121562-100150790)

Processing/Physical Characteristics	Value	Unit	Test Standard
<b>ISO Data</b>			
Melt volume-flow rate, MVR	8	cm <sup>3</sup> /10min	ISO 1133
Temperature	300	°C	-
Load	1.2	kg	-
<b>ASTM Data</b>			
Melt Flow Index, MFI	9.2	g/10min	ASTM D 1238
Temperature	300	°C	-
Load	1.2	kg	-

Mechanical properties	Value	Unit	Test Standard
<b>ISO Data</b>			
Tensile Modulus	2360	MPa	ISO 527
Yield stress	57	MPa	ISO 527
Yield strain	6	%	ISO 527
Stress at break	58	MPa	ISO 527
Strain at break	50	%	ISO 527
Flexural modulus	2170	MPa	ISO 178
Charpy notched impact strength, +23°C	82	kJ/m <sup>2</sup>	ISO 179/1eA
Izod notched impact strength, +23°C, 4mm	67	kJ/m <sup>2</sup>	ISO 180/1A
Izod notched impact strength, -30°C, 4mm	56	kJ/m <sup>2</sup>	ISO 180/1A
<b>ASTM Data</b>			
Tensile Modulus	2150	MPa	ASTM D 638
Tensile Strength at Yield	57	MPa	ASTM D 638
Tensile Strength at Break	60	MPa	ASTM D 638
Elongation at Yield	6	%	ASTM D 638
Elongation at Break	113	%	ASTM D 638
Flexural Modulus	2210	MPa	ASTM D 790
Izod Impact notched, 1/8 in	852	J/m	ASTM D 256
Izod Impact notched, Low-Temperature	741	J/m	ASTM D 256
Temperature	-30	°C	-

Thermal properties	Value	Unit	Test Standard
<b>ISO Data</b>			
Vicat softening temperature, B	143	°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	0.8	mm	-
Glow Wire Flammability Index (GWFI)	825	°C	IEC 60695-2-12
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 (1)	1	mm	-
Glow Wire Ignition Temperature (GWIT)	875	°C	IEC 60695-2-13
GWIT - thickness tested (3)	3	mm	-
<b>ASTM Data</b>			
DTUL @ 66 psi	138	°C	ASTM D 648
DTUL @ 264 psi	126	°C	ASTM D 648
Vicat Temperature	143	°C	ASTM D 1525

Other properties	Value	Unit	Test Standard
Water absorption	0.35	%	Sim. to ISO 62

**LEXAN™ Copolymer EXL8414 - Americas**

PC

Saudi Basic Industries Corporation (SABIC)

Humidity absorption	<b>0.15</b>	%	Sim. to ISO 62
Density	<b>1190</b>	kg/m <sup>3</sup>	ISO 1183
Density	<b>1180</b>	kg/m <sup>3</sup>	ASTM D 792

<b>Processing Recommendation Injection Molding</b>	<b>Value</b>	<b>Unit</b>	<b>Test Standard</b>
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

**Regional Availability**

North America

**Certifications**

Recycled Resin Content