

Product Texts

LEXAN EXL1443T polycarbonate (PC) siloxane copolymer resin is an injection molding grade with FDA and EU food contact compliance. This resin offers excellent low temperature (-30 C) ductility in combination with medium flow characteristics and excellent processability with opportunities for shorter IM cycle times compared to standard PC. LEXAN EXL1443T resin is available in transparent and opaque colors and is an excellent candidate for a broad range of food contact applications.

UL Yellow Card Link [E121562-455391](https://www.ul.com/yellowcard/E121562-455391)

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	9	cm ³ /10min	ISO 1133
Temperature	300	°C	-
Load	1.2	kg	-
ASTM Data			
Melt Flow Index, MFI	10	g/10min	ASTM D 1238
Temperature	300	°C	-
Load	1.2	kg	-

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	2350	MPa	ISO 527
Yield stress	57	MPa	ISO 527
Yield strain	5.5	%	ISO 527
Stress at break	61	MPa	ISO 527
Strain at break	50	%	ISO 527
Flexural modulus	2150	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	70	kJ/m ²	ISO 179/1eA
Charpy notched impact strength, -30°C, 3mm	50	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	45	kJ/m ²	ISO 180/1A
ASTM Data			
Tensile Modulus	2210	MPa	ASTM D 638
Tensile Strength at Yield	58	MPa	ASTM D 638
Tensile Strength at Break	64	MPa	ASTM D 638
Elongation at Yield	5.8	%	ASTM D 638
Elongation at Break	131	%	ASTM D 638
Flexural Modulus	2210	MPa	ASTM D 790
Rockwell Hardness	L89	-	ASTM D 785
Izod Impact notched, 1/8 in	890	J/m	ASTM D 256
Izod Impact notched, Low-Temperature	795	J/m	ASTM D 256
Temperature	-30	°C	-

Thermal properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load, 1.80 MPa	118	°C	ISO 75-1/-2
Vicat softening temperature, B	141	°C	ISO 306
Vicat softening temperature, 120°C/h 50N	142	°C	ISO 306
Burning behav. at 1.5 mm nom. thickn.	HB	class	IEC 60695-11-10
Thickness tested	1.5	mm	-
Burning behav. at thickness h	V-2	class	IEC 60695-11-10
Thickness tested	3.0	mm	-
Glow Wire Flammability Index (GWFI)	960	°C	IEC 60695-2-12
Glow Wire Ignition Temperature (GWIT)	825	°C	IEC 60695-2-13
GWIT - thickness tested (3)	3	mm	-
ASTM Data			
DTUL @ 264 psi	124	°C	ASTM D 648
Vicat Temperature	141	°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

Special Characteristics

Transparent

Certifications

Food contact, Food approval FDA 21 CFR

Regional Availability

North America