

Product Texts

LEXAN EXL9414TRC resin grade is a 21% PCR(Post Consumer Recycle) contain halogen-free flame retardant polycarbonate featuring transparency, -40 degree C ductility and UL-94 V0 rating for injection molding applications. Excellent impact combined with good flow, all transparent colorability for aesthetics and thin wall flame retardant makes this product an excellent candidate for thin wall applications.

UL Yellow Card Link [E207780-103258548](https://www.ul.com/yellow-card/lexan-exl9414trc)

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	11	cm ³ /10min	ISO 1133
Temperature	300	°C	-
Load	1.2	kg	-
ASTM Data			
Melt Flow Index, MFI	12	g/10min	ASTM D 1238
Temperature	300	°C	-
Load	1.2	kg	-

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	2170	MPa	ISO 527
Yield stress	56	MPa	ISO 527
Yield strain	5.4	%	ISO 527
Stress at break	54	MPa	ISO 527
Strain at break	50	%	ISO 527
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	64	kJ/m ²	ISO 179/1eA
Charpy notched impact strength, -30°C, 3mm	24	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	58	kJ/m ²	ISO 180/1A
Izod notched impact strength, -30°C, 3mm	34	kJ/m ²	ISO 180/1A
ASTM Data			
Tensile Modulus	2110	MPa	ASTM D 638
Tensile Strength at Yield	55	MPa	ASTM D 638
Tensile Strength at Break	56	MPa	ASTM D 638
Elongation at Yield	5.6	%	ASTM D 638
Elongation at Break	96	%	ASTM D 638
Flexural Modulus	2160	MPa	ASTM D 790
Izod Impact notched, 1/8 in	785	J/m	ASTM D 256
Izod Impact notched, Low-Temperature	311	J/m	ASTM D 256
Temperature	-30	°C	-

Thermal properties	Value	Unit	Test Standard
ISO Data			
Vicat softening temperature, B	129	°C	ISO 306
Burning behav. at 1.5 mm nom. thickn.	V-0	class	IEC 60695-11-10
Thickness tested	1.5	mm	-
Burning behav. at thickness h	V-2	class	IEC 60695-11-10
Thickness tested	1.0	mm	-
ASTM Data			
DTUL @ 264 psi	110	°C	ASTM D 648
Vicat Temperature	135	°C	ASTM D 1525

Other properties	Value	Unit	Test Standard
Water absorption	0.09	%	Sim. to ISO 62
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 - 110	°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

Certifications

Recycled Resin Content

Additives

Flame retarding agent

Regional Availability

Asia Pacific

Special Characteristics

Flame retardant, Transparent