

Product Texts

LEXAN EXL9414T resin grade is a 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 retrandancy makes this product an excellent candidate for thin wall applications.

UL Yellow Card Link [F207780-100120434](https://www.ul.com/yellow-card-link/F207780-100120434)

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	g/10min	ASTM D 1238
Temperature	300	°C	-
Load	1.2	kg	-

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	2300	MPa	ISO 527
Yield stress	56	MPa	ISO 527
Yield strain	5.4	%	ISO 527
Stress at break	55	MPa	ISO 527
Strain at break	50	%	ISO 527
Flexural modulus	2120	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	60	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	55	kJ/m ²	ISO 180/1A
ASTM Data			
Tensile Modulus	2180	MPa	ASTM D 638
Tensile Strength at Yield	57	MPa	ASTM D 638
Tensile Strength at Break	59	MPa	ASTM D 638
Elongation at Yield	5.6	%	ASTM D 638
Elongation at Break	124	%	ASTM D 638
Flexural Modulus	2180	MPa	ASTM D 790
Izod Impact notched, 1/8 in	824	J/m	ASTM D 256
Izod Impact notched, Low-Temperature	712	J/m	ASTM D 256
Temperature	-30	°C	-

Thermal properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load, 1.80 MPa	116	°C	ISO 75-1/-2
Vicat softening temperature, B	138	°C	ISO 306
Vicat softening temperature, 120°C/h 50N	139	°C	ISO 306
Burning behav. at 1.5 mm nom. thickn.	V-1	class	IEC 60695-11-10
Thickness tested	1.5	mm	-
Burning behav. at thickness h	V-2	class	IEC 60695-11-10
Thickness tested	1.2	mm	-
Glow Wire Flammability Index (GWFI)	930	°C	IEC 60695-2-12
Glow Wire Flammability Index (GWFI)	960	°C	IEC 60695-2-12
Glow Wire Flammability Index (GWFI)	960	°C	IEC 60695-2-12
Glow Wire Ignition Temperature (GWIT)	875	°C	IEC 60695-2-13
GWIT - thickness tested (1)	1	mm	-
Glow Wire Ignition Temperature (GWIT)	850	°C	IEC 60695-2-13
GWIT - thickness tested (2)	2	mm	-
Glow Wire Ignition Temperature (GWIT)	850	°C	IEC 60695-2-13

LEXAN™ Copolymer EXL9414T - Europe

PC

Saudi Basic Industries Corporation (SABIC)

GWIT - thickness tested (3)	3	mm	-
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ASTM Data

DTUL @ 264 psi	120	°C	ASTM D 648
Vicat Temperature	138	°C	ASTM D 1525

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

Flame retardant, Transparent

Additives

Flame retarding agent

Regional Availability

Europe