

**Product Texts**

LEXAN FXD121R compound is based on Polycarbonate (PC) resin. Added features of this grade include: Mold release, Transparent/Translucent, and Low Viscosity grade for Light Diffusion Special Effects. Color package may affect performance.

Processing/Physical Characteristics	Value	Unit	Test Standard
<b>ISO Data</b>			
Melt volume-flow rate, MVR	21	cm <sup>3</sup> /10min	ISO 1133
Temperature	300	°C	-
Load	1.2	kg	-
<b>ASTM Data</b>			
Melt Flow Index, MFI	18.2	g/10min	ASTM D 1238
Temperature	300	°C	-
Load	1.2	kg	-

Mechanical properties	Value	Unit	Test Standard
<b>ISO Data</b>			
Tensile Modulus	2350	MPa	ISO 527
Yield stress	63	MPa	ISO 527
Yield strain	6	%	ISO 527
Stress at break	65	MPa	ISO 527
Strain at break	100	%	ISO 527
Flexural modulus, 23°C	2300	MPa	ISO 178
Flexural strength	90	MPa	ISO 178
Charpy impact strength, +23°C	N	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy impact strength, -30°C	N	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy notched impact strength, +23°C	65	kJ/m <sup>2</sup>	ISO 179/1eA
Charpy notched impact strength, -30°C	12	kJ/m <sup>2</sup>	ISO 179/1eA
Izod impact strength, +23°C	N	kJ/m <sup>2</sup>	ISO 180/1U
Izod notched impact strength, +23°C	65	kJ/m <sup>2</sup>	ISO 180/1A
Izod notched impact strength	11	kJ/m <sup>2</sup>	ISO 180/1A
Temperature	-30	°C	-
Ball indentation hardness	95	MPa	ISO 2039-1
<b>ASTM Data</b>			
Tensile Modulus	2390	MPa	ASTM D 638
Tensile Strength at Yield	61	MPa	ASTM D 638
Tensile Strength at Break	64	MPa	ASTM D 638
Elongation at Yield	6.2	%	ASTM D 638
Elongation at Break	125	%	ASTM D 638
Flexural Modulus	2370	MPa	ASTM D 790
Izod Impact notched, 1/8 in	747	J/m	ASTM D 256

Thermal properties	Value	Unit	Test Standard
<b>ISO Data</b>			
Temp. of deflection under load, 1.80 MPa	122	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	133	°C	ISO 75-1/-2
Vicat softening temperature, B	140	°C	ISO 306
Coeff. of linear therm. expansion, parallel	70	E-6/K	ISO 11359-1/-2
Burning behav. at thickness h	HB	class	IEC 60695-11-10
Thickness tested	0.7	mm	-
Yellow Card available	yes	-	-
<b>ASTM Data</b>			
DTUL @ 66 psi	135	°C	ASTM D 648
DTUL @ 264 psi	123	°C	ASTM D 648

Electrical properties	Value	Unit	Test Standard
<b>ISO Data</b>			
Comparative tracking index	325	-	IEC 60112

Other properties	Value	Unit	Test Standard
Water absorption	0.35	%	Sim. to ISO 62
Humidity absorption	0.15	%	Sim. to ISO 62
Density	1200	kg/m <sup>3</sup>	ISO 1183
Water Absorption, Equilibrium	0.13	%	ASTM D 570
Density	1190	kg/m <sup>3</sup>	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	280 - 305	°C	-
Mold temperature	70 - 95	°C	-
Zone 1	260 - 280	°C	-
Zone 2	270 - 295	°C	-
Zone 3	280 - 305	°C	-
Nozzle temperature	275 - 300	°C	-
Screw speed	40 - 70	rpm	-
Back pressure	0.3 - 0.7	MPa	-

## Characteristics

### Processing

Injection Molding

### Additives

Release agent

### Special Characteristics

Transparent, Translucent

### Features

Light Diffusing

### Applications

Automotive, Electrical and Electronical, Sports Equipment

### Regional Availability

North America, Europe, Asia Pacific, South and Central America