

**Product Texts**

LEXAN CFR9131 Polycarbonate (PC) resin is a non-filled, injection moldable grade. This non-chlorinated, non-brominated flame retardant PC has an UL-94 V0 rating at 1.5 mm, high flow capability and is UV stabilized providing additional weathering capability. LEXAN CFR9131 is available in clear transparent and tinted color options that is an excellent candidate for a wide variety of applications.

UL Yellow Card Link [E45329-101047385](https://www.ul.com/yellowcard/E45329-101047385)

Processing/Physical Characteristics	Value	Unit	Test Standard
<b>ISO Data</b>			
Melt volume-flow rate, MVR	17	cm <sup>3</sup> /10min	ISO 1133
Temperature	300	°C	-
Load	1.2	kg	-
<b>ASTM Data</b>			
Melt Flow Index, MFI	18	g/10min	ASTM D 1238
Temperature	300	°C	-
Load	1.2	kg	-

Mechanical properties	Value	Unit	Test Standard
<b>ISO Data</b>			
Tensile Modulus	2300	MPa	ISO 527
Yield stress	63	MPa	ISO 527
Yield strain	6	%	ISO 527
Stress at break	57	MPa	ISO 527
Strain at break	50	%	ISO 527
Flexural modulus	2400	MPa	ISO 178
Charpy impact strength, +23°C, 3mm	N	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy impact strength, -30°C, 3mm	N	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy notched impact strength, +23°C, 3mm	10	kJ/m <sup>2</sup>	ISO 179/1eA
Charpy notched impact strength, -30°C, 3mm	9	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, 3mm	10	kJ/m <sup>2</sup>	ISO 180/1A
Izod notched impact strength, -30°C, 3mm	9	kJ/m <sup>2</sup>	ISO 180/1A
<b>ASTM Data</b>			
Tensile Modulus	2400	MPa	ASTM D 638
Tensile Strength at Yield	67	MPa	ASTM D 638
Tensile Strength at Break	54	MPa	ASTM D 638
Elongation at Yield	6	%	ASTM D 638
Elongation at Break	80	%	ASTM D 638
Flexural Modulus	2400	MPa	ASTM D 790
Izod Impact notched, 1/8 in	100	J/m	ASTM D 256
Izod Impact notched, Low-Temperature	85	J/m	ASTM D 256
Temperature	-30	°C	-
Izod Impact unnotched, 1/8 in	N	J/m	ASTM D 256

Thermal properties	Value	Unit	Test Standard
<b>ISO Data</b>			
Vicat softening temperature, B	139	°C	ISO 306
Vicat softening temperature, 120°C/h 50N	140	°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	0.4	mm	-
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 (3)	3	mm	-
<b>ASTM Data</b>			
DTUL @ 66 psi	130	°C	ASTM D 648
DTUL @ 264 psi	120	°C	ASTM D 648
Vicat Temperature	136	°C	ASTM D 1525

Other properties	Value	Unit	Test Standard
Water absorption	<b>0.13</b>	%	Sim. to ISO 62
Humidity absorption	<b>0.11</b>	%	Sim. to ISO 62
Density	<b>1200</b>	kg/m <sup>3</sup>	ISO 1183
Density	<b>1190</b>	kg/m <sup>3</sup>	ASTM D 792

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	<b>120</b>	°C	-
Pre-drying - Time	<b>3 - 4</b>	h	-
Processing humidity	<b>≤0.02</b>	%	-
Melt temperature	<b>280 - 305</b>	°C	-
Mold temperature	<b>70 - 95</b>	°C	-
Zone 1	<b>260 - 280</b>	°C	-
Zone 2	<b>270 - 295</b>	°C	-
Zone 3	<b>280 - 305</b>	°C	-
Screw speed	<b>40 - 70</b>	rpm	-
Back pressure	<b>0.3 - 0.7</b>	MPa	-

**Characteristics****Processing**

Injection Molding

**Special Characteristics**

Flame retardant, Transparent

**Additives**

Flame retarding agent

**Regional Availability**

Europe