

**Product Texts**

LEXAN CFR9712 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 2.0 mm and high flow capability. LEXAN CFR9712 is available in clear transparent and tinted color options that is an excellent candidate for a wide variety of applications.

UL Yellow Card Link [F45329-100919721](https://www.ul.com/yellow-card/F45329-100919721)

Processing/Physical Characteristics	Value	Unit	Test Standard
<b>ISO Data</b>			
Melt volume-flow rate, MVR	29	cm <sup>3</sup> /10min	ISO 1133
Temperature	300	°C	-
Load	1.2	kg	-

<b>ASTM Data</b>			
Melt Flow Index, MFI	30	g/10min	ASTM D 1238
Temperature	300	°C	-
Load	1.2	kg	-

Mechanical properties	Value	Unit	Test Standard
<b>ISO Data</b>			
Tensile Modulus	2200	MPa	ISO 527
Yield stress	63	MPa	ISO 527
Yield strain	6	%	ISO 527
Stress at break	56	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	30	kJ/m <sup>2</sup>	ISO 179/1eA
Charpy notched impact strength, -30°C, 3mm	10	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	10	kJ/m <sup>2</sup>	ISO 180/1A

<b>ASTM Data</b>			
Tensile Modulus	2450	MPa	ASTM D 638
Tensile Strength at Yield	66	MPa	ASTM D 638
Tensile Strength at Break	51	MPa	ASTM D 638
Elongation at Yield	6	%	ASTM D 638
Elongation at Break	55	%	ASTM D 638
Flexural Modulus	2370	MPa	ASTM D 790
Izod Impact notched, 1/8 in	100	J/m	ASTM D 256
Izod Impact notched, Low-Temperature	90	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	138	°C	ISO 306
Vicat softening temperature, 120°C/h 50N	140	°C	ISO 306
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 Flammability Index (GWFI)	960	°C	IEC 60695-2-12
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
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>0.14</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