

**Product Texts**

LEXAN CFR5630D Polycarbonate (PC) is a non-filled resin, suitable for injection molding and extrusion. This non-chlorinated, non-brominated flame retardant PC resin meets FAR25.853 smoke density and 60 second vertical burn and OEM toxicity requirements. LEXAN CFR5630D resin is available in 5 prematched diffusion colors.

UL Yellow Card Link [E121562-101088456](https://www.ul.com/Products/Plastics/Polycarbonate/LEXAN-CFR5630D)

<b>Processing/Physical Characteristics</b>	<b>Value</b>	<b>Unit</b>	<b>Test Standard</b>
<b>ISO Data</b>			
Melt volume-flow rate, MVR	5	cm <sup>3</sup> /10min	ISO 1133
Temperature	300	°C	-
Load	1.2	kg	-
<b>ASTM Data</b>			
Melt Flow Index, MFI	5	g/10min	ASTM D 1238
Temperature	300	°C	-
Load	1.2	kg	-
<b>Mechanical properties</b>			
<b>ISO Data</b>			
Tensile Modulus	2400	MPa	ISO 527
Yield stress	67	MPa	ISO 527
Yield strain	6	%	ISO 527
Stress at break	52	MPa	ISO 527
Strain at break	23	%	ISO 527
Flexural modulus	2500	MPa	ISO 178
Charpy impact strength, +23°C, 3mm	132	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy impact strength, -30°C, 3mm	129	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	2500	MPa	ASTM D 638
Tensile Strength at Yield	68	MPa	ASTM D 638
Tensile Strength at Break	52	MPa	ASTM D 638
Elongation at Yield	6	%	ASTM D 638
Elongation at Break	51	%	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
<b>Thermal properties</b>			
<b>ISO Data</b>			
Vicat softening temperature, B	137	°C	ISO 306
Vicat softening temperature, 120°C/h 50N	139	°C	ISO 306
Burning behav. at thickness h	V-2	class	IEC 60695-11-10
Thickness tested	0.4	mm	-
Burning behav. 5V at thickness h	5VA	class	IEC 60695-11-20
Thickness tested	3.0	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)	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 (3)	3	mm	-
<b>ASTM Data</b>			
DTUL @ 66 psi	131	°C	ASTM D 648

**LEXAN™ Copolymer CFR5630D - Americas**

PC

Saudi Basic Industries Corporation (SABIC)

DTUL @ 264 psi	<b>120</b>	°C	ASTM D 648
Vicat Temperature	<b>136</b>	°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>290 - 310</b>	°C	-
Mold temperature	<b>70 - 95</b>	°C	-
Zone 1	<b>265 - 290</b>	°C	-
Zone 2	<b>275 - 300</b>	°C	-
Zone 3	<b>290 - 310</b>	°C	-
Screw speed	<b>40 - 70</b>	rpm	-
Back pressure	<b>0.3 - 0.7</b>	MPa	-

**Characteristics****Processing**

Injection Molding

**Additives**

Flame retarding agent

**Special Characteristics**

Flame retardant

**Applications**

Automotive

**Regional Availability**

North America