

Product Texts

LEXAN BFL4000U Polycarbonate (PC) is an injection moldable non-chlorinated/brominated, unfilled, flame retardant grade with high flow. It is UV stabilized, light reflective and has an MVR of 22 (300°C/1.2kg) and a UL94 V0@1.5mm.

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	22	cm ³ /10min	ISO 1133
Temperature	300	°C	-
Load	1.2	kg	-
ASTM Data			
Melt Flow Index, MFI	24	g/10min	ASTM D 1238
Temperature	300	°C	-
Load	1.2	kg	-

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	2040	MPa	ISO 527
Yield stress	50	MPa	ISO 527
Yield strain	6	%	ISO 527
Stress at break	44	MPa	ISO 527
Strain at break	50	%	ISO 527
Flexural modulus	2170	MPa	ISO 178
Charpy notched impact strength, +23°C	30	kJ/m ²	ISO 179/1eA
Izod notched impact strength, +23°C, 4mm	30	kJ/m ²	ISO 180/1A
Izod notched impact strength, -30°C, 4mm	20	kJ/m ²	ISO 180/1A
ASTM Data			
Tensile Modulus	2240	MPa	ASTM D 638
Tensile Strength at Yield	54	MPa	ASTM D 638
Tensile Strength at Break	47	MPa	ASTM D 638
Elongation at Yield	5	%	ASTM D 638
Elongation at Break	56	%	ASTM D 638
Flexural Modulus	2050	MPa	ASTM D 790
Izod Impact notched, 1/8 in	470	J/m	ASTM D 256
Izod Impact notched, Low-Temperature	240	J/m	ASTM D 256
Temperature	-30	°C	-

Thermal properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load, 1.80 MPa	115	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	130	°C	ISO 75-1/-2
Vicat softening temperature, B	137	°C	ISO 306
Vicat softening temperature, 120°C/h 50N	139	°C	ISO 306
ASTM Data			
DTUL @ 66 psi	131	°C	ASTM D 648
Vicat Temperature	136	°C	ASTM D 1525

Other properties	Value	Unit	Test Standard
Water absorption	0.35	%	Sim. to ISO 62
Humidity absorption	0.15	%	Sim. to ISO 62
Density	1380	kg/m ³	ISO 1183
Density	1380	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	270 - 295	°C	-
Mold temperature	70 - 95	°C	-
Zone 1	250 - 270	°C	-

Zone 2	260 - 280	°C	-
Zone 3	270 - 295	°C	-
Screw speed	40 - 70	rpm	-
Back pressure	0.3 - 0.7	MPa	-

Characteristics**Processing**

Injection Molding

Additives

Flame retarding agent

Special Characteristics

Flame retardant

Applications

Automotive

Regional Availability

North America