

SABIC LEXAN™ FR1723

High flow, UV stabilized polycarbonate resin with mold release. Available in limited transparent tints, limited package types, and must meet minimum order quantity requirements.
Information provided by SABIC

Physical Properties	Metric	English	Comments
Specific Gravity	1.20 g/cc	1.20 g/cc	ASTM D792
Linear Mold Shrinkage, Flow	0.0050 - 0.0070 cm/cm @Thickness 3.20 mm	0.0050 - 0.0070 in/in @Thickness 0.126 in	SABIC method
Melt Flow	25 g/10 min @Load 1.20 kg, Temperature 300 °C	25 g/10 min @Load 2.65 lb, Temperature 572 °F	ASTM D1238

Mechanical Properties	Metric	English	Comments
Tensile Strength at Break	65.0 MPa	9430 psi	50 mm/min; ASTM D638
Tensile Strength, Yield	62.0 MPa	8990 psi	50 mm/min; ASTM D638
Elongation at Break	110 %	110 %	50 mm/min; ASTM D638
Flexural Yield Strength	93.0 MPa	13500 psi	1.3 mm/min, 50 mm span; ASTM D790
Flexural Modulus	2.30 GPa	334 ksi	1.3 mm/min, 50 mm span; ASTM D790
Izod Impact, Notched	6.40 J/cm	12.0 ft-lb/in	ASTM D256
Tensile Impact Strength	378 kJ/m ²	180 ft-lb/in ²	ASTM D1822
Dart Drop, Total Energy	54.0 J	39.8 ft-lb	peak; ASTM D3763

Thermal Properties	Metric	English	Comments
Deflection Temperature at 1.8 MPa (264 psi)	126 °C @Thickness 6.40 mm	259 °F @Thickness 0.252 in	unannealed; ASTM D648
UL RTI, Electrical	130 °C	266 °F	UL 746B
UL RTI, Mechanical with Impact	130 °C	266 °F	UL 746B
UL RTI, Mechanical without Impact	130 °C	266 °F	UL 746B
Flammability, UL94	V-2 @Thickness 1.20 mm	V-2 @Thickness 0.0472 in	UL 94

Optical Properties	Metric	English	Comments
Haze	1.0 % @Thickness 2.54 mm	1.0 % @Thickness 0.100 in	ASTM D1003
Transmission, Visible	88 % @Thickness 2.54 mm	88 % @Thickness 0.100 in	ASTM D1003

Processing Properties	Metric	English	Comments
Nozzle Temperature	265 - 290 °C	509 - 554 °F	Injection Molding
Zone 1	250 - 270 °C	482 - 518 °F	
Zone 2	260 - 280 °C	500 - 536 °F	
Zone 3	270 - 295 °C	518 - 563 °F	

Melt Temperature	270 - 295 °C	518 - 563 °F	
Mold Temperature	70.0 - 95.0 °C	158 - 203 °F	
Drying Temperature	120 °C	248 °F	Injection Molding
Dry Time	3.00 - 4.00 hour	3.00 - 4.00 hour	Injection Molding
	48.0 hour	48.0 hour	Cumulative; Injection Molding
Moisture Content	0.020 %	0.020 %	
Back Pressure	0.300 - 0.700 MPa	43.5 - 102 psi	
Shot Size	40 - 60 %	40 - 60 %	
Vent Depth	0.00250 - 0.00760 cm	0.000984 - 0.00299 in	
Screw Speed	40 - 70 rpm	40 - 70 rpm	