

SABIC LEXAN™ EX1632T

LEXAN EX1632T polycarbonate resin is designed for use in multi-wall sheet or profile extrusion applications. It contains branched polycarbonate resin, release, and UV stabilizer. It is available in a limited number of colors. Information provided by SABIC

Physical Properties	Metric	English	Comments
Density	1.19 g/cc	0.0430 lb/in ³	ISO 1183
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	6.0 g/10 min @Load 1.20 kg, Temperature 300 °C	6.0 g/10 min @Load 2.65 lb, Temperature 572 °F	ASTM D1238

Mechanical Properties	Metric	English	Comments
Tensile Strength at Break	57.0 MPa	8270 psi	50 mm/min; ASTM D638
Tensile Strength, Yield	61.0 MPa	8850 psi	50 mm/min; ASTM D638
Elongation at Break	98.8 %	98.8 %	50 mm/min; ASTM D638
Elongation at Yield	6.3 %	6.3 %	50 mm/min; ASTM D638
Tensile Modulus	2.21 GPa	321 ksi	5 mm/min; ASTM D638
Flexural Yield Strength	99.0 MPa	14400 psi	1.3 mm/min, 50 mm span; ASTM D790
Flexural Modulus	2.37 GPa	344 ksi	1.3 mm/min, 50 mm span; ASTM D790
Izod Impact, Notched	8.00 J/cm	15.0 ft-lb/in	ASTM D256
	1.52 J/cm @Temperature -30.0 °C	2.85 ft-lb/in @Temperature -22.0 °F	ASTM D256
Dart Drop, Total Energy	74.0 J	54.6 ft-lb	ASTM D3763

Thermal Properties	Metric	English	Comments
CTE, linear, Parallel to Flow	65.0 µm/m-°C @Temperature -40.0 - 40.0 °C	36.1 µin/in-°F @Temperature -40.0 - 104 °F	ASTM E831
CTE, linear, Transverse to Flow	66.0 µm/m-°C @Temperature -40.0 - 40.0 °C	36.7 µin/in-°F @Temperature -40.0 - 104 °F	ASTM E831
Deflection Temperature at 0.46 MPa (66 psi)	140 °C @Thickness 3.20 mm	284 °F @Thickness 0.126 in	unannealed; ASTM D648

Deflection Temperature at 1.8 MPa (264 psi)	130 °C @Thickness 3.20 mm	266 °F @Thickness 0.126 in	unannealed; ASTM D648
Vicat Softening Point	145 °C	293 °F	Rate B/50; ASTM D1525
	147 °C	297 °F	Rate B/120; ISO 306
Flammability, UL94	HB @Thickness 0.800 mm	HB @Thickness 0.0315 in	UL 94 by SABIC-IP

Processing Properties	Metric	English	Comments
Processing Temperature	100 - 120 °C	212 - 248 °F	Hopper Temperature
Zone 1	240 - 270 °C	464 - 518 °F	Multiwall Sheet Extrusion
Zone 2	240 - 270 °C	464 - 518 °F	Multiwall Sheet Extrusion
Zone 3	240 - 270 °C	464 - 518 °F	Multiwall Sheet Extrusion
Adapter Temperature	220 - 260 °C	428 - 500 °F	Multiwall Sheet Extrusion
Die Temperature	220 - 280 °C	428 - 536 °F	Multiwall Sheet Extrusion
Melt Temperature	220 - 280 °C	428 - 536 °F	
Drying Temperature	120 °C	248 °F	Multiwall Sheet Extrusion
Dry Time	2.00 - 4.00 hour	2.00 - 4.00 hour	Multiwall Sheet Extrusion
Precipitation Temperature	50.0 - 100 °C	122 - 212 °F	Calibrator