

SABIC Innovative Plastics Lexan® FXE154 PC

Category : Polymer , Thermoplastic , Polycarbonate (PC)

Material Notes:

FDA compliant (color limited) PC. 2.5 MFR. Potable water/extrusion blowmoldable. ILLUMINATE special effects (fluorescent/edge glow colors).

Order this product through the following link:

http://www.lookpolymers.com/polymer_SABIC-Innovative-Plastics-Lexan-FXE154-PC.php

Physical Properties	Metric	English	Comments
Specific Gravity	1.20 g/cc	1.20 g/cc	ASTM D792
Density	1.19 g/cc	0.0430 lb/in ³	ASTM D792
Water Absorption	0.15 % @Time 86400 sec	0.15 % @Time 24.0 hour	ASTM D570
Moisture Absorption at Equilibrium	0.35 %	0.35 %	ASTM D570
	0.58 % @Temperature 100 °C	0.58 % @Temperature 212 °F	ASTM D570
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	2.5 g/10 min @Load 1.20 kg, Temperature 300 °C	2.5 g/10 min @Load 2.65 lb, Temperature 572 °F	ASTM D1238

Mechanical Properties	Metric	English	Comments
Hardness, Rockwell R	118	118	ASTM D785
Tensile Strength at Break	65.0 MPa	9430 psi	Type I, 50 mm/min; ASTM D638
Tensile Strength, Yield	62.0 MPa	8990 psi	Type I, 50 mm/min; ASTM D638
Elongation at Break	110 %	110 %	Type I, 50 mm/min; ASTM D638
Elongation at Yield	7.0 %	7.0 %	Type I, 50 mm/min; ASTM D638
Flexural Yield Strength	93.0 MPa	13500 psi	1.3 mm/min, 50 mm span; ASTM D790
Flexural Modulus	2.34 GPa	339 ksi	1.3 mm/min, 50 mm span; ASTM D790
Izod Impact, Notched	7.47 J/cm	14.0 ft-lb/in	ASTM D256

Impact, Unnotched Mechanical Properties	Metric	English	ASTM D4812 Comments
Dart Drop, Total Energy	169 J	125 ft-lb	ASTM D3029
Taber Abrasion, mg/1000 Cycles	10	10	CS-17, 1 kg; ASTM D1044

Thermal Properties	Metric	English	Comments
CTE, linear, Parallel to Flow	68.4 $\mu\text{m}/\text{m}\cdot^{\circ}\text{C}$	38.0 $\mu\text{in}/\text{in}\cdot^{\circ}\text{F}$	ASTM E 831
	@Temperature -40.0 - 95.0 $^{\circ}\text{C}$	@Temperature -40.0 - 203 $^{\circ}\text{F}$	
Specific Heat Capacity	1.25 J/g- $^{\circ}\text{C}$	0.299 BTU/lb- $^{\circ}\text{F}$	ASTM C351
Thermal Conductivity	0.190 W/m-K	1.32 BTU-in/hr-ft ² - $^{\circ}\text{F}$	ASTM C177
Deflection Temperature at 0.46 MPa (66 psi)	137 $^{\circ}\text{C}$	279 $^{\circ}\text{F}$	unannealed; ASTM D648
	@Thickness 6.40 mm	@Thickness 0.252 in	
Deflection Temperature at 1.8 MPa (264 psi)	132 $^{\circ}\text{C}$	270 $^{\circ}\text{F}$	unannealed; ASTM D648
	@Thickness 6.40 mm	@Thickness 0.252 in	
Vicat Softening Point	157 $^{\circ}\text{C}$	315 $^{\circ}\text{F}$	Rate B/50; ASTM D1525

Optical Properties	Metric	English	Comments
Refractive Index	1.586	1.586	ASTM D542
Haze	1.0 %	1.0 %	ASTM D1003
	@Thickness 2.54 mm	@Thickness 0.100 in	
Transmission, Visible	88 %	88 %	2.54 mm; ASTM D1003

Descriptive Properties	Value	Comments
Specific Volume	0.83cm ³ /g	ASTM D792

Contact Songhan Plastic Technology Co.,Ltd.

Website : www.lookpolymers.com

Email : sales@lookpolymers.com

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

Address : United North Road 215,Fengxian District, Shanghai City,China